LEVEL 3 COMMUNICATIONS, LLC POLLUTION PREVENTION PLAN FOR

GENERAL NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) PERMIT FOR DISCHARGES FROM UTILITY VAULTS AND UNDERGROUND STRUCTURES TO SURFACE WATERS

ORDER NO. 2006-0008-DWQ
NPDES NO. CAG990002

JUNE 2014

Primarily prepared and edited by

Tait Environmental Services, Inc.
In Cooperation with
Level 3 Communications, LLC

Level 3 Communications, LLC

General Permit Order No. 2006-0008-DWQ
NPDES No. CAG990002
Pollution Prevention Plan

Amendments

Regional Water Quality Board:	
Plan Location Address: Street: City: State: Zip Code:	

Description of Amendment	Page No.	Date	Preparer

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1.0 PLAN OVERVIEW

The State of California Water Resources Control Board (SWRCB) is the regulatory authority over the Discharge of Waters from Utility Vaults and Underground Structures to Surface Waters under Order No. 2006-0008-DWQ, and National Pollutant Discharge Elimination System (NPDES) CAG990002. The SWRCB is responsible for these discharges under the Federal Clean Water Act of 1972. Under this General Permit, a discharger must submit a separate enrollment for discharges to the SWRCB and to each of the individual Regional Water Boards where these discharges will occur.

This Pollution Prevention Plan (PPP) will cover all areas where Level 3 Communications, LLC (Level 3) discharges are a result of normal routine maintenance and operations with respect to utility vaults, manholes, and other underground structures. These discharges include inflow of seepage into these structures, storm water inflow, and condensate within the structures.

1.1 Purpose of the Plan

The PPP is designed to cover intermittent discharges from the removal of water from utility vaults, manholes, and other underground structures (henceforth referred to as "vaults") through discharge to the receiving waters of the United States and the State of California and ensure that pollutant concentrations in the discharged water do not cause, have a reasonable potential to cause or contribute to, an excursion above Federal, SWRCB and Regional Water Board water quality objectives. No discharges will cause acute or chronic toxicity to the receiving waters.

1.2 Description of the Plan

The PPP will cover the procedures involved with the evaluation of the intermittent water discharges from Level 3 utility vaults and underground structures to allow for the discharge of the waters within the water quality objectives. This plan will describe and contain the following:

- Level 3 Pollution Prevention Team
- Employee Training
- Potential Pollutant Sources
- Types and Schedules of Discharges
- Procedures for Discharge Water Evaluation
- Pollution Control Measures
- Monitoring and Reporting Plan
- Comprehensive PPP Revisions and Evaluation
- Certifications and Signatures

The PPP will be signed and certified by the Level 3 person responsible for the implementation of the PPP.

2.0 PLAN ADMINISTRATION

The PPP will be administered by Level 3 in all Water Board Regions where discharges from vaults may occur. The PPP will comply with the Best Available Technology/Best

Control Technology (BAT/BCT) during its implementation. PPP administration will address the Pollution Prevention Team, Employee Training, and Plan Application.

2.1 Pollution Prevention Team

The Pollution Prevention Team is overseen by Robert Gurdikian, Senior Environmental Project Manager for Level 3. The team also consists of the following members:

Name	Title	Responsibilities	Contact Information
James Daily	OSP Engineer Southern California Operations	Pollution Prevention Team Oversight – Southern California	858-292-2108
Natalia Nikolaeva	Planning and Deployment Manager, Southern California Operations	Pollution Prevention Team Oversight – Northern California	415-819-1134

2.2 Employee Training

Level 3 will ensure that all employees involved with procedures of the General Permit will be trained in all aspects of the permit. Training will be repeated on an annual basis. The areas of training include the following:

- Evaluation of discharge water within the vaults and underground structures
- Good housekeeping practices
- Preventive maintenance
- Runoff controls
- Spill prevention and response
- Recordkeeping

Records of employee training within each Regional Water Board will be maintained at the Level 3 designated Gateway facility at 185 Berry, San Francisco, and 818 W 7th Street in Los Angeles California, as well as maintained electronically with Level 3's Environmental Management Team and will be available for inspection by SWRCB and Regional Water Board personnel.

2.3 Plan Application

Application of the PPP occurs during discharge events from vaults covered under the General Permit. These structures will require dewatering to allow for maintenance work to proceed within wet structures and to maintain water-free conditions within dry structures.

3.0 POTENTIAL POLLUTANT SOURCES

The PPP describes the potential pollutant sources, activities, and materials that may add significant levels of pollutants to the discharges covered under this General Permit. Pollutants include those contained within the discharges, spills, and leaks. A typical inventory of the potential pollutants includes the following:

- Oil and grease
- Petroleum fuels (diesel, gasoline)
- Organic matter
- Sewage
- Miscellaneous pollutants in storm water
- Sediment

3.1 Description of Underground Structures

Level 3 structures covered under the General Permit include manholes, underground utility vaults, and other underground structures. They are classified as either dry structures or wet structures. The primary purpose of the underground structures is to provide Level 3 with access to fiber cable. In general, mechanical equipment is not located within the vault structures. At this time, Level 3 does not believe that discharges will exceed a potential maximum discharge limit of 50,000 gallons for any single discharge. In the event that any single discharge exceeds 50,000 gallons, appropriate notifications will be made as outlined below in Section 5.3

Dry Structures

Dry structures are defined as environmentally controlled structures that contain equipment which is sensitive to temperature and moisture. Dry structures are sealed preventing most surface and subsurface inflow of water into the vaults. They are generally air conditioned to protect the contained equipment, and water collection within dry structures consists of condensate from the air due to climate control activities within the vaults. Dry structures are equipped with sump pumps that activate once water levels reach predetermined levels, and the water does not come into contact with the equipment in the vault. Discharges from dry structures are significantly less than discharges from wet structures.

Wet Structures

Wet structures include underground vaults, manholes, and other underground structures that are not completely sealed from the inflow of subsurface or surface waters, including storm waters. These structures contain various types of networking equipment that does not normally contribute pollutants to water within the structure. Water infiltrating into wet structures will require removal prior to the commencement of work within these structures by Level 3 personnel. Typical pollutants that may accumulate in waters in wet structures are outlined above in Section 3.0. Removal of water from wet structures will cover the majority of discharges under the General Permit.

3.2 Drainage Maps

Regional Water Board drainage maps for Level 3 locations that are covered under the General Permit are contained in Appendix A. Drainage Maps were obtained primarily from the Basin Plans and other documents available on line from the Regional Water Boards.

3.3 Underground Structure Location Maps

Maps showing the locations of the Level 3 underground vaults, as well as accessible non-Level 3 vaults and structures are contained in Appendix B.

4.0 TYPES OF DISCHARGES

Two types of discharges from Level 3 facilities are covered under the General Permit. Manual discharges are performed primarily from wet structures, but may be completed on dry structures, as required. Automatic discharges occur at dry structures. Discharges can also be categorized as unscheduled and scheduled. The types of discharges are described below in the following sections.

4.1 Manual Discharges

Water discharges from wet structures are primarily manual discharges. Following infiltration of water into wet structures, Level 3 personnel must first pump the water out of the vault or structure prior to safely entering the structure to perform network operations. Dry structures may require manual discharges under certain situations.

4.2 Automatic Discharges

Water removal from dry structures is considered as an automatic discharge. Dry structures typically contain sump pumps that will automatically discharge water once the water levels reach a predetermined point. Water discharged from dry structures is of considerably less volume than the water discharged manually from wet structures.

4.3 Unscheduled Discharges

Unscheduled discharges represent the majority of discharges from both wet and dry structures. The discharge from wet structures occurs when Level 3 personnel are required to enter the vault or underground structure to perform network operations maintenance. Unscheduled discharges from dry structures are determined automatically based on the amount of water in the structure.

4.4 Scheduled Discharges

Any scheduled discharges from wet or dry structures will be undertaken using the same procedures as those for unscheduled discharges.

5.0 PROCEDURES FOR DISCHARGES

Under the General Permit, inspection and evaluation of water contained in the vaults is required before a determination can be made for Level 3 to discharge these waters to the receiving waters of the United States and the State of California. All waters that are contained in vaults that do not pass the inspection and evaluation described below will be containerized and subsequently disposed according to all applicable regulations. The following sections cover the inspection, evaluation, discharge procedures, and recordkeeping activities related to discharges under the General Permit.

5.1 Inspection of Underground Structures

Prior to removing water from vault, qualified Level 3 personnel will initially inspect the structure to determine if a discharge is required prior to performing work within the vault. In most cases, these procedures will apply to wet structures; however, these procedures will also apply to the manual removal of water from dry structures, as necessary. The work team will ensure that the work area is clearly marked and protected according to all applicable standards, and that proper personal protective equipment (PPE), including confined-space protocols are in place. The initial inspection should determine if there are any major issues in the underground structure, such as chemical odors, the presence of free-floating product, the presence of a volume of water above the maximum allowable limit of 50,000 gallons, or lack of integrity of contained Level 3 equipment that would not allow for the discharge of waters of the structure under the General Permit.

5.2 Evaluation of Waters Contained in Underground Structures

The procedures contained within this section will be undertaken by trained Level 3 personnel to evaluate the quality of the water contained in the vault and determine if it meets the requirements under the General Permit for discharge. The evaluation is subdivided into two sections below: an initial Phase I Testing to determine if the water in the vault is clear, and a detailed Phase II Testing to determine if discharge can be undertaken if the water is cloudy or milky in appearance. A flow chart summarizing these evaluation procedures is contained in Appendix C.

<u>Phase I Testing</u>

If the initial inspection has determined that there are no visible pollutants in the contained water, a clean unused bailer will be lowered into the vault to obtain a representative sample of the vault water. The bailer should be lowered to a point above any visible sediment present in the bottom of the vault, and care should be taken not to disturb either the sediment or the water contained within the bailer.

Observe the water sample in the bailer. If there are any free-phase floating hydrocarbons on the water, or chemical or sewage odors, the water cannot be discharged under the General Permit, and return the sample to the vault.

If the water sample in the bailer does not contain product and odors as noted above, test the water for pH, using an approved methodology. If the pH of the sample is outside of the range of 6.5 to 9.0, the water cannot be discharged, and the sample should be returned to the vault.

If the water sample is clear (i.e. not cloudy) and passes the odor and pH tests as outlined above, the water can be discharged under the General Permit. Ensure that all floating debris is removed from the water prior to discharge. Best Management Practices (BMPs) as outlined below in Section 5.3, will be employed at all times during the discharge operations.

If the vault water sample does not pass the odor and pH tests as outlined above and is cloudy or milky in appearance or contains an oily sheen, additional observations/tests will be made as outlined below in Phase II Testing.

Phase II Testing

If the sample does not contain any sediment layers, solids, or an oily sheen, but is otherwise cloudy or milky, let the sample stand for a period of at least 5 minutes. If the sample remains cloudy, then the vault water cannot be discharged under the General Permit. If the material in the water sample settles into layers or if material has settled onto the bottom of the sample, refer to the procedures in the following paragraph.

If the vault water sample contains any sediment layers, solids, or an oily sheen, or if a cloudy sample has settled into layers or material at the bottom of the sample, make an identification of the settled materials. If the settled materials cannot be identified, they may consist of sludge, sewage, solvents, or other unidentifiable material, and the vault waters cannot be discharged under the General Permit.

If the settled solids in the vault water sample consist of sediment, soil, leaves or mud, determine if there is an oily sheen present on the surface of the water. If there is an oily sheen present, determine if it can be removed by using absorbent materials. If the absorbent materials will not remove the oily sheen, the vault waters cannot be discharged under the General Permit.

If the vault water passes all of the above tests, it can be discharged under the General Permit. All floating debris should be removed from the water prior to discharge. The vault water sample should be returned to the vault prior to discharge, and any materials used to mitigate any pollutants (e.g. absorbent pads) must be disposed according to all applicable regulations. BMPs as outlined below in Section 5.3 will be employed at all times during the discharge operations.

In the event that the vault water does not pass the evaluation and cannot be discharged to the receiving waters under the conditions of the General Permit, the water will be analytically tested, and subsequently containerized and disposed according to all applicable regulations.

5.3 Water Discharge Procedures

Waters contained in vaults that pass the inspection and evaluation procedures outlined above can be discharged to the receiving waters in accordance with the conditions in the General Permit. The water can be pumped directly into a storm sewer or catch basin or along a street if a storm sewer is not available in the immediate area. Temporary berms, erosion control measures, or other BMPs will be used to channel the water into the appropriate receiving area whenever possible.

Prior to pumping, the nozzle of the sump pump inlet should be lowered into the utility vault to a point above any accumulated bottom sediment where pumping activities will not disturb the sediment to a point where it will enter the discharge stream. Any water and sediment remaining in the vault following pumping operations should be removed and disposed according to all applicable regulations.

During discharge operations, Level 3 personnel will monitor the amount of the discharge to ensure that the maximum allowable amount of 50,000 gallons is not discharged. In the event that the discharge exceeds 50,000 gallons, Level 3 will contact the appropriate agency within 24 hours of discharge.

5.4 Recordkeeping

All procedures related to the inspection, evaluation, and discharge of waters from vaults will be recorded on a Underground Structure Inspection Form. A copy of that form is included at Appendix D. Maintenance activities and inspections will be recorded, and the records will include the data and time the inspection was performed, the name of the inspector, and the items inspected. In the event that problems are noted during the inspections, the type of corrective action should be documented, and the date of the completion of the corrective action will be noted. All records of discharges occurring under the General Permit within each Regional Water Board will be maintained at the Regional Office, and will be available for inspection by SWRCB and Regional Water Board personnel.

6.0 POLLUTION CONTROL MEASURES

Level 3 will maintain measures and controls to ensure that waters discharged from its vaults are in compliance with the General Permit. These measures include good housekeeping, preventive maintenance, and spill prevention and response procedures.

6.1 Good Housekeeping

Good housekeeping at all underground vaults and structures is critical to ensure that potential pollutants are kept to a minimum. Level 3 will maintain the integrity of their equipment in each of their vaults, and any wastes stored at each of the sites will be kept to a minimum or removed from the structure. Good housekeeping will aid in the minimization of the amount of water discharged under the General Permit.

6.2 Preventive Maintenance

Level 3, in general does not have mechanical equipment in its manholes and underground structures, as they are primarily used for fiber cable. In cases where mechanical equipment is present, Level 3 will perform preventive maintenance on its equipment in the vaults on a regular schedule. Any issues determined during the preventive maintenance will be addressed.

6.3 Spill Prevention and Response

Level 3 will utilize the discharge procedures, good housekeeping, and preventive maintenance outlined in the above sections to ensure that spills and other excursions of the General Permit are non-existent to minimal in occurrence. The following measures for

spill reporting will be utilized in the event of a release of pollutants to the waters of the United States and the State of California:

- In the event that the discharge exceeds 50,000 gallons, Level 3 will contact the appropriate agencies within 24 hours of the discharge.

- In the event of a release of hazardous pollutants during discharge, the discharge will be immediately stopped and the release will be contained to the extent possible. The spill will immediately be reported to the Level 3 Network Operations Center (NOC) and Level 3 Environmental Management, where reporting the spill to the National Response Center at (800) 424-8802 within 24 hours of the spill will be conducted. The appropriate local regulatory agencies will also be contacted within 24 hours of the spill.

- A written report describing the details of the excursion of the General Permit will be prepared by Level 3 for the appropriate Regional Water Board within 5 days of the excursion. The report will also outline measures planned to reduce or prevent a reoccurrence of the non-compliant event.

- If there is a release of hazardous pollutants to the state-owned waters of California, Level 3 may employ a hazardous materials response contractor to manage the mitigation activities. Level 3 utilizes HazMat One for all its emergency response activities.

- Level 3 will maintain detailed documentation of any spill and subsequent spill response activities. Records will be maintained at the Regional Office, and will be available for inspection by SWRCB and Regional Water Board personnel.

7.0 MONITORING AND REPORTING PLAN

Level 3 will prepare an Annual Monitoring and Reporting Plan in accordance with the General Permit. This plan is required under the General Permit and by Title 40 of the Code of Federal Regulations (CFR) Section 122.48, and under California Water Codes Sections 13267 and 13383. In accordance with the General Permit, dischargers who are enrolling for the first time, will develop a representative sampling and analysis program that can be used as a case study to represent typical discharges within each Regional Water Board. The case studies will be completed within six months of the enrollment under the General Permit, or within 12 months when no discharge occurs within the first six months. Level 3, as a first-time discharger, will submit the results of the case studies with the first annual report.

Elements of each of the Monitoring and Reporting Plans, which will be prepared for each Regional Water Board, are as follows:

- Level 3 will collect vault water samples at 5 locations within each Regional Water Board. The vault water samples will be representative of the types of discharge waters that occur within the vaults in that region.

- All samples will be analyzed for oil and grease, pH, Total Petroleum Hydrocarbons (TPH), and total Suspended Solids (TSS). All analysis will be completed by

laboratories certified by the California Department of Health Services.

- The annual report will contain a rationale for the selection of the sampling locations, a description of the sampling methods, and a detailed map showing the locations of the sample points in each Regional Water Board.

8.0 COMPREHENSIVE SITE COMPLIANCE EVALUATION

The PPP is designed to comply with the Best Availably Technology Economically Achievable/Best Conventional Pollutant Control Technology (BAT/BCT) to ensure Level 3's compliance with the requirements of the General Permit. Level 3 will review the PPP annually to determine its compliance with the General Permit. The PPP will be amended under specific conditions that include, but are not limited to the following:

- Changes in the inspection and evaluation procedures for the underground vault water prior to discharge
- Incidents of non-compliance of the PPP
- Changes in Level 3 personnel with respect to certification of the PPP
- Changes in the Monitoring and Reporting Plan
- The PPP has not achieved the general objective in controlling pollutants in the discharges to surface waters.

Based on the results of the comprehensive site compliance evaluation, Level 3 will amend any portions of the PPP within two weeks of the evaluation. Level 3 will submit an amended PPP to the appropriate Regional Water Board. Level 3 will write and retain for 3 years a report summarizing the scope of the evaluation, personnel making the evaluation, the date of the evaluation and major observation relating to the implementation of the PPP. An amendment page has been placed at the beginning of the PPP to address any amendments.

9.0 CERTIFICATION

"I certify under penalty of law that this document and all attachments were prepared under my direction and supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine or imprisonment".

A. Printed Name: _____

B. Signature: _____

C. Date: _____

D. Title: _____

APPENDICES

APPENDIX A

Drainage Maps

North Coast Region 1

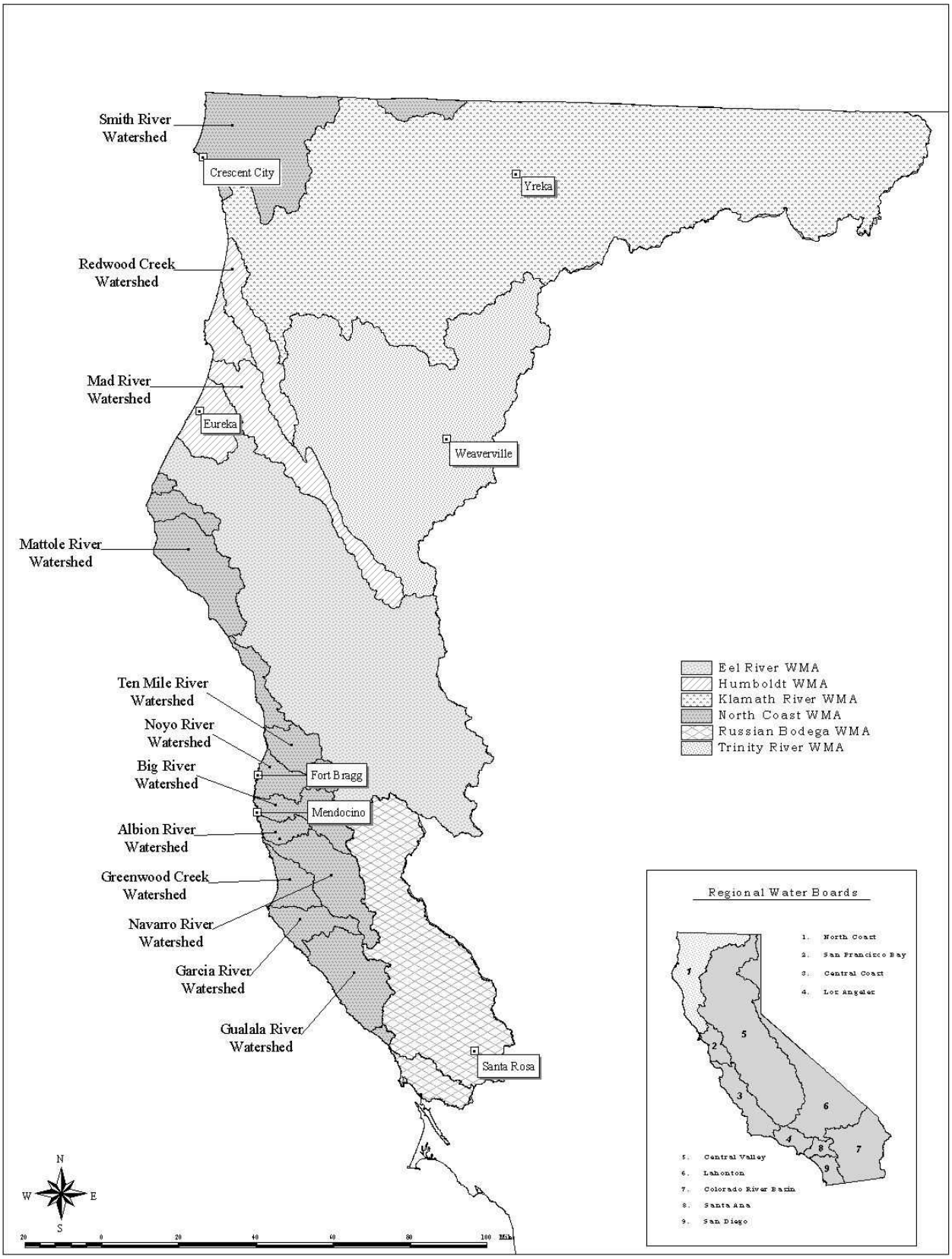
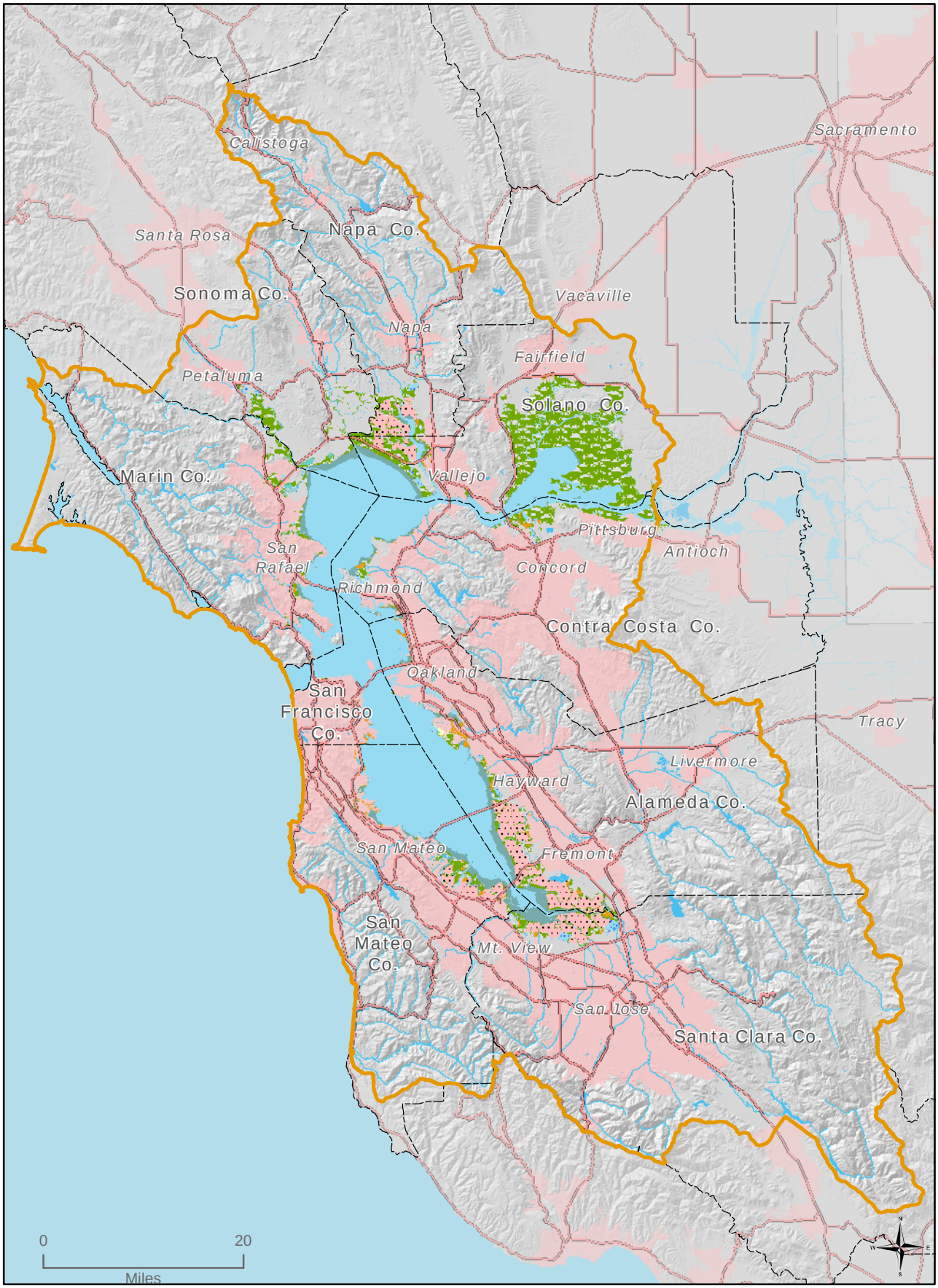


Figure 1. Watershed Management Areas for the North Coast Regional Water Quality Control Board

San Francisco Bay Region 2

Figure 1-1 San Francisco Bay Basin



Central Coast Region 3

Figure 1-1. Central Coast Region 3

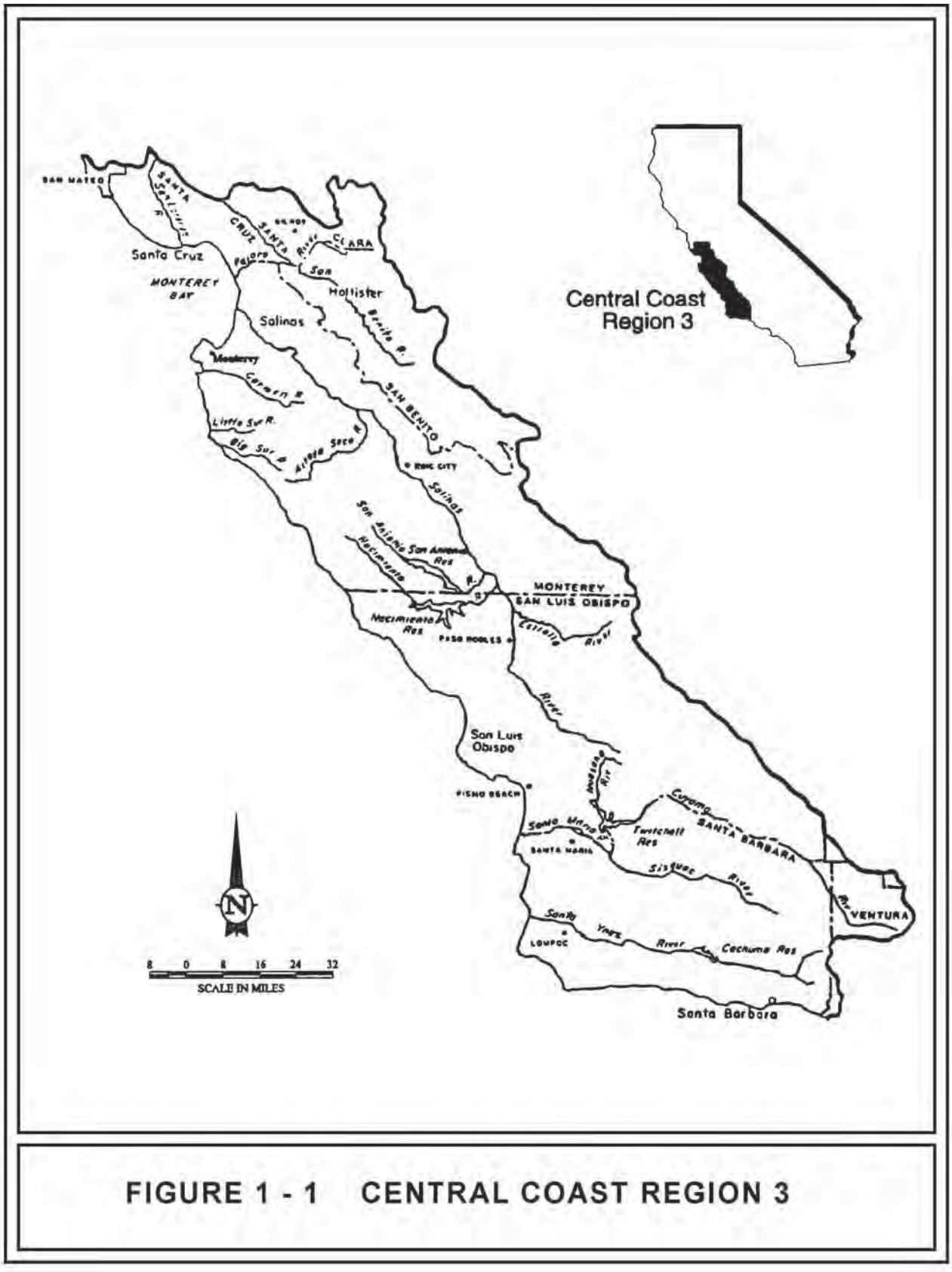


FIGURE 1 - 1 CENTRAL COAST REGION 3

Los Angeles Region 4

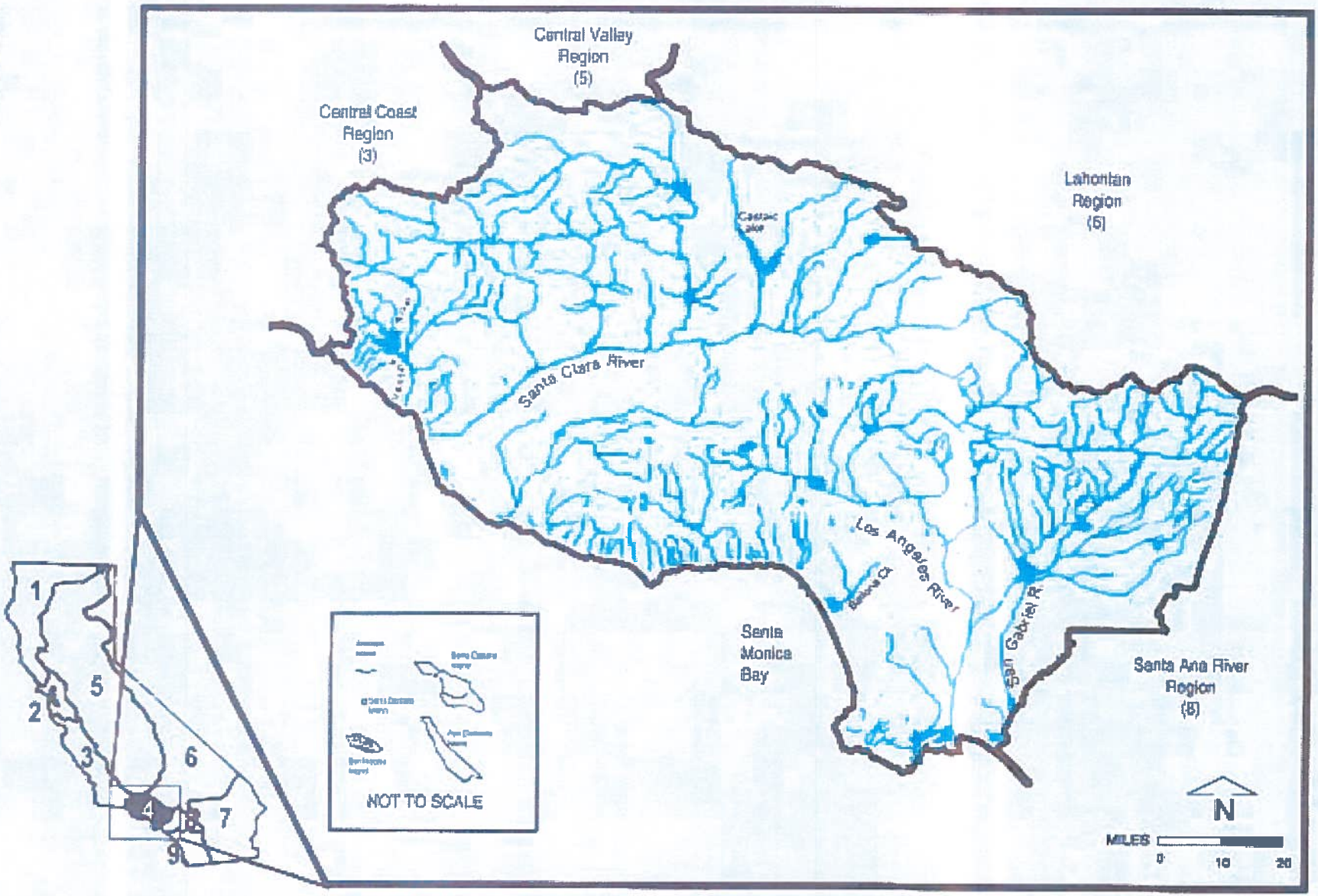
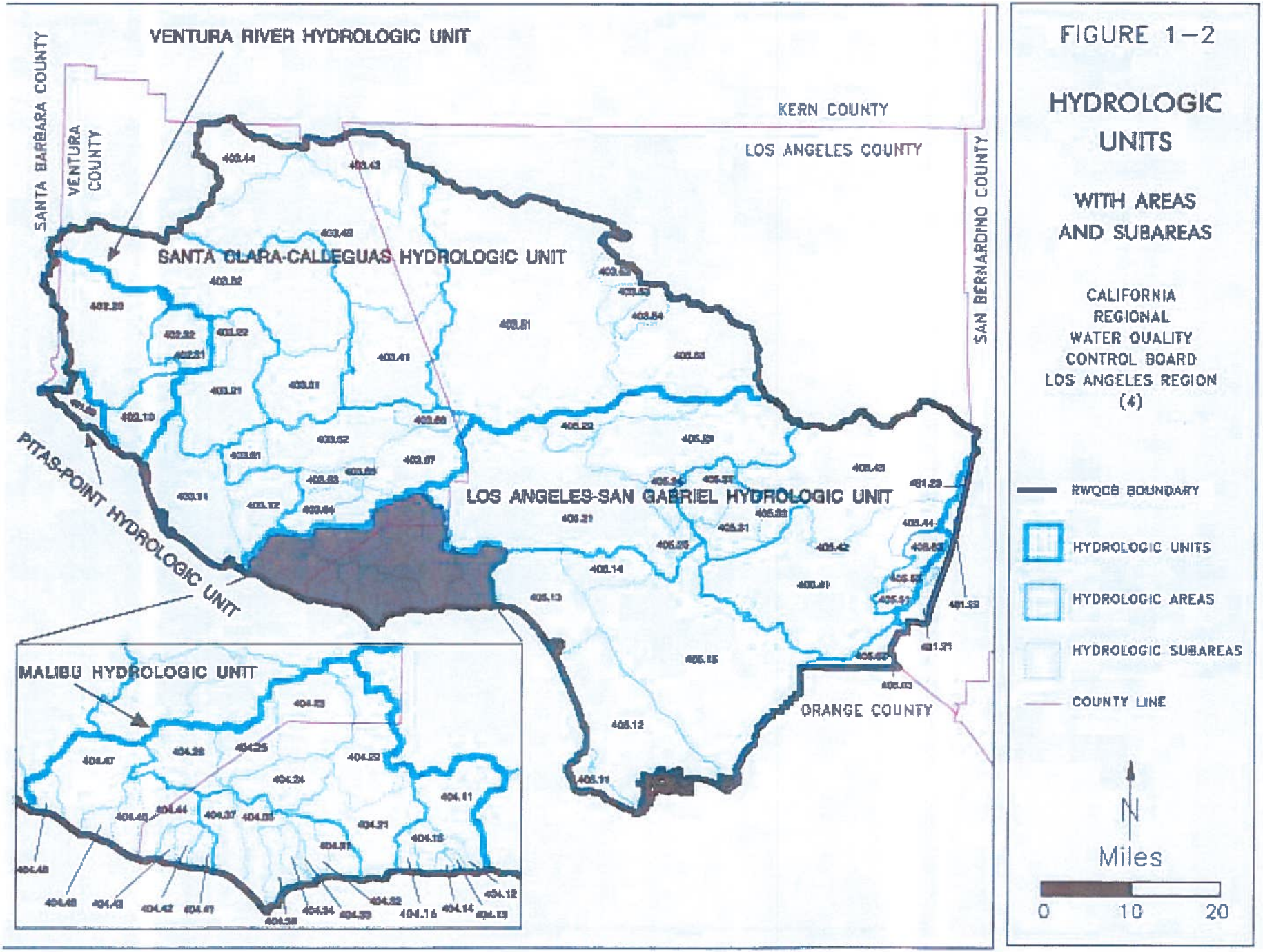


Figure 1-1. Regional Map: Regional Water Quality Control Board, Los Angeles Region.


VENTURA RIVER HYDROLOGIC UNIT
SANTA BARBARA COUNTY
VENTURA COUNTY
KERN COUNTY
LOS ANGELES COUNTY
SAN BERNARDINO COUNTY
SANTA CLARA-CALLEGUAS HYDROLOGIC UNIT
LOS ANGELES-SAN GABRIEL HYDROLOGIC UNIT
PITAS-POINT HYDROLOGIC UNIT
MALIBU HYDROLOGIC UNIT
ORANGE COUNTY
FIGURE 1-2
HYDROLOGIC UNITS
WITH AREAS AND SUBAREAS
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD LOS ANGELES REGION (4)
RWQCB BOUNDARY
HYDROLOGIC UNITS
HYDROLOGIC AREAS
HYDROLOGIC SUBAREAS
COUNTY LINE
N
Miles
0
10
20

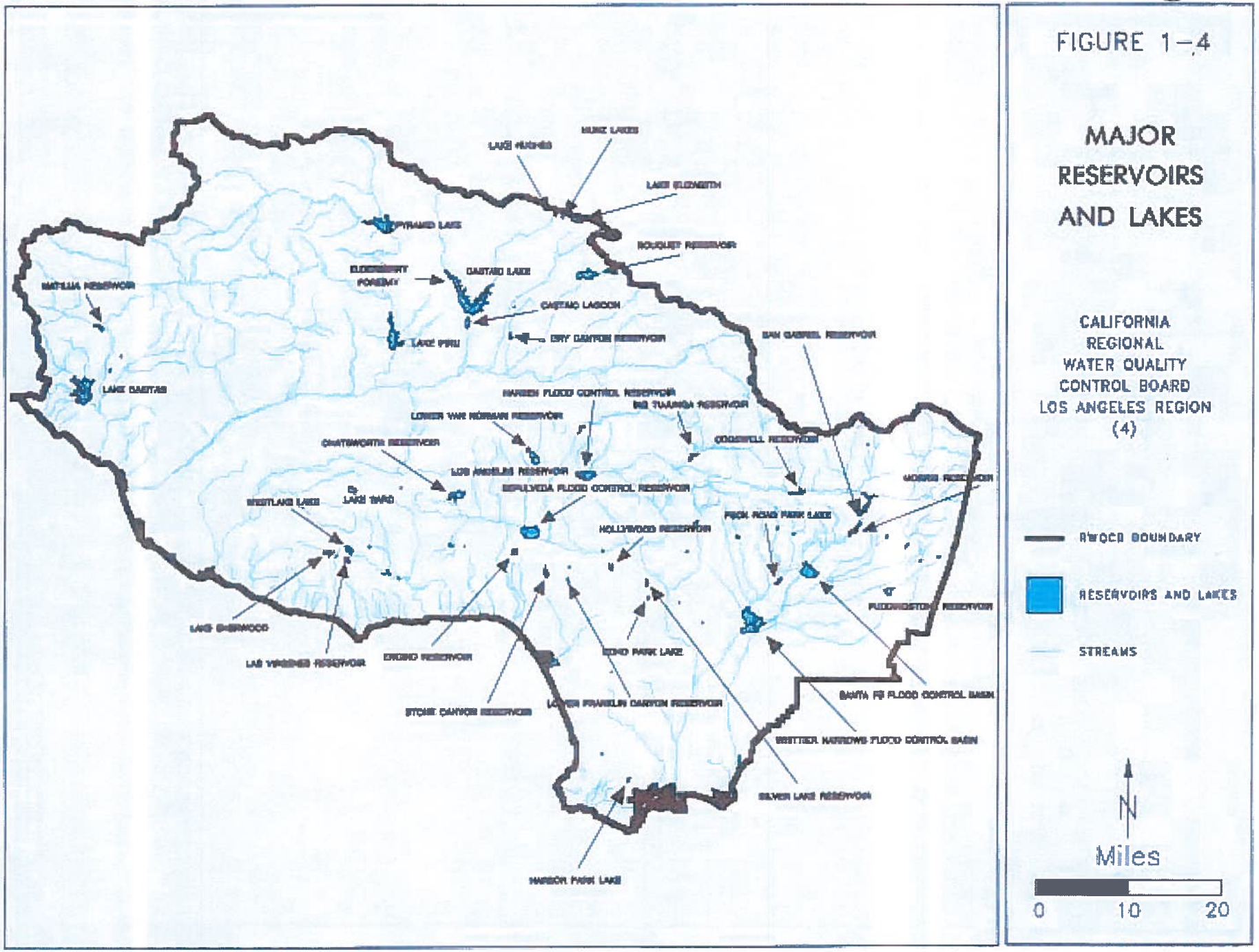


FIGURE 1-4
MAJOR RESERVOIRS AND LAKES
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD LOS ANGELES REGION (4)
RWQCB BOUNDARY
RESERVOIRS AND LAKES
STREAMS
N
Miles
0
10
20
LAKE HUGHES
LAKE ELIZABETH
PYRAMID LAKE
CASTAIC LAKE
CASTAIC LAGOON
DRY CANYON RESERVOIR
LAKE PIRU
MATILIJA RESERVOIR
LAKE CASITAS
SAN GABRIEL RESERVOIR
HANSEN FLOOD CONTROL RESERVOIR
PACOIMA RESERVOIR
LOWER VAN NORMAN RESERVOIR
CHATSWORTH RESERVOIR
LOS ANGELES RESERVOIR
SEPULVEDA FLOOD CONTROL RESERVOIR
LAKE BALBOA
WESTLAKE LAKES
HOLLYWOOD RESERVOIR
ECHO PARK LAKE
LAKE SHERWOOD
LAS VIRGENES RESERVOIR
ENCINO RESERVOIR
STONE CANYON RESERVOIR
LOWER FRANKLIN CANYON RESERVOIR
SANTA FE FLOOD CONTROL BASIN
BEETTIER NARROWS FLOOD CONTROL BASIN
SILVER LAKE RESERVOIR
HARBOR PARK LAKE

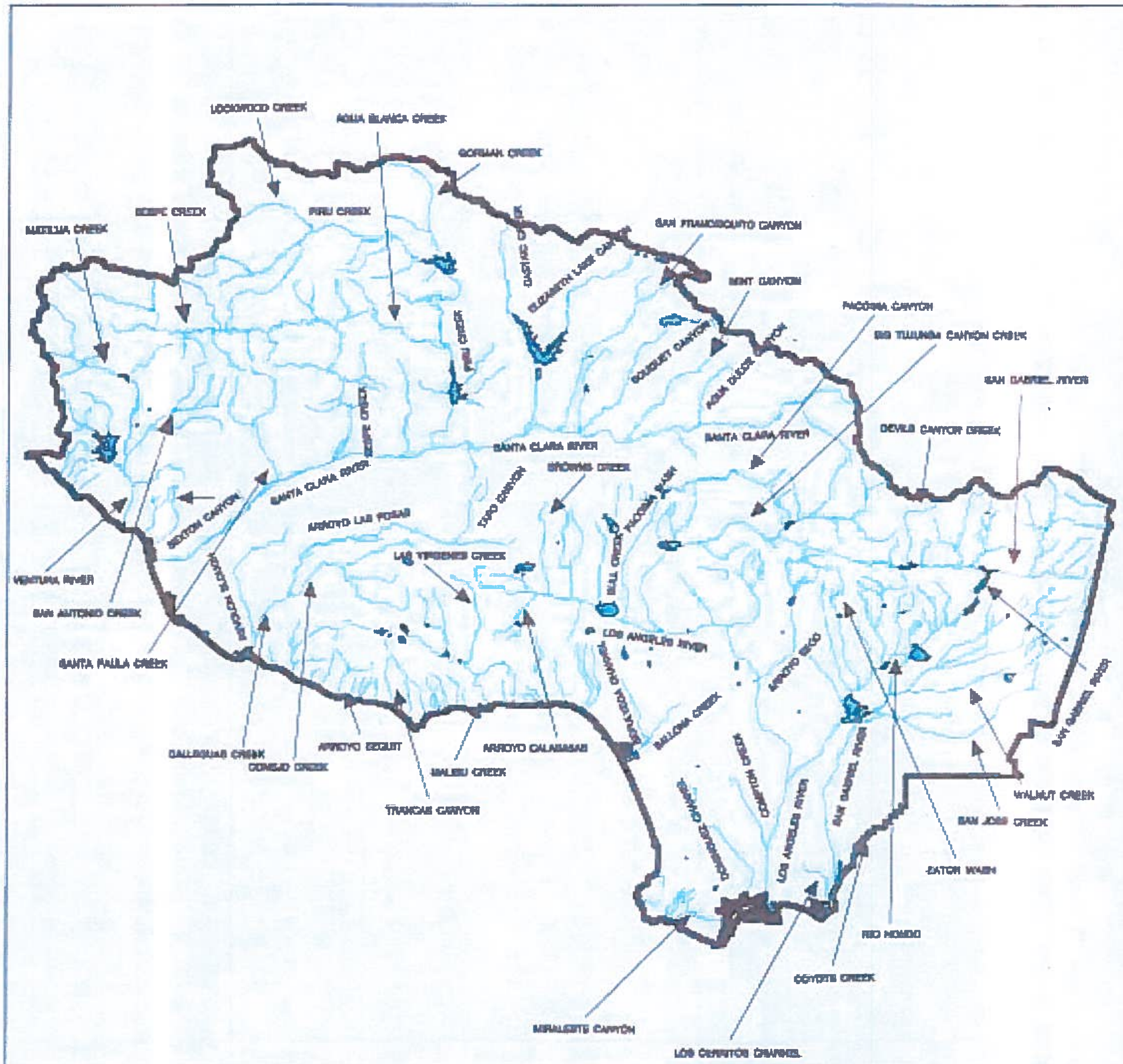


FIGURE 1-3

MAJOR RIVERS AND STREAMS

CALIFORNIA
REGIONAL
WATER QUALITY
CONTROL BOARD
LOS ANGELES REGION
(4)

REGIONAL BOUNDARY

STREAMS

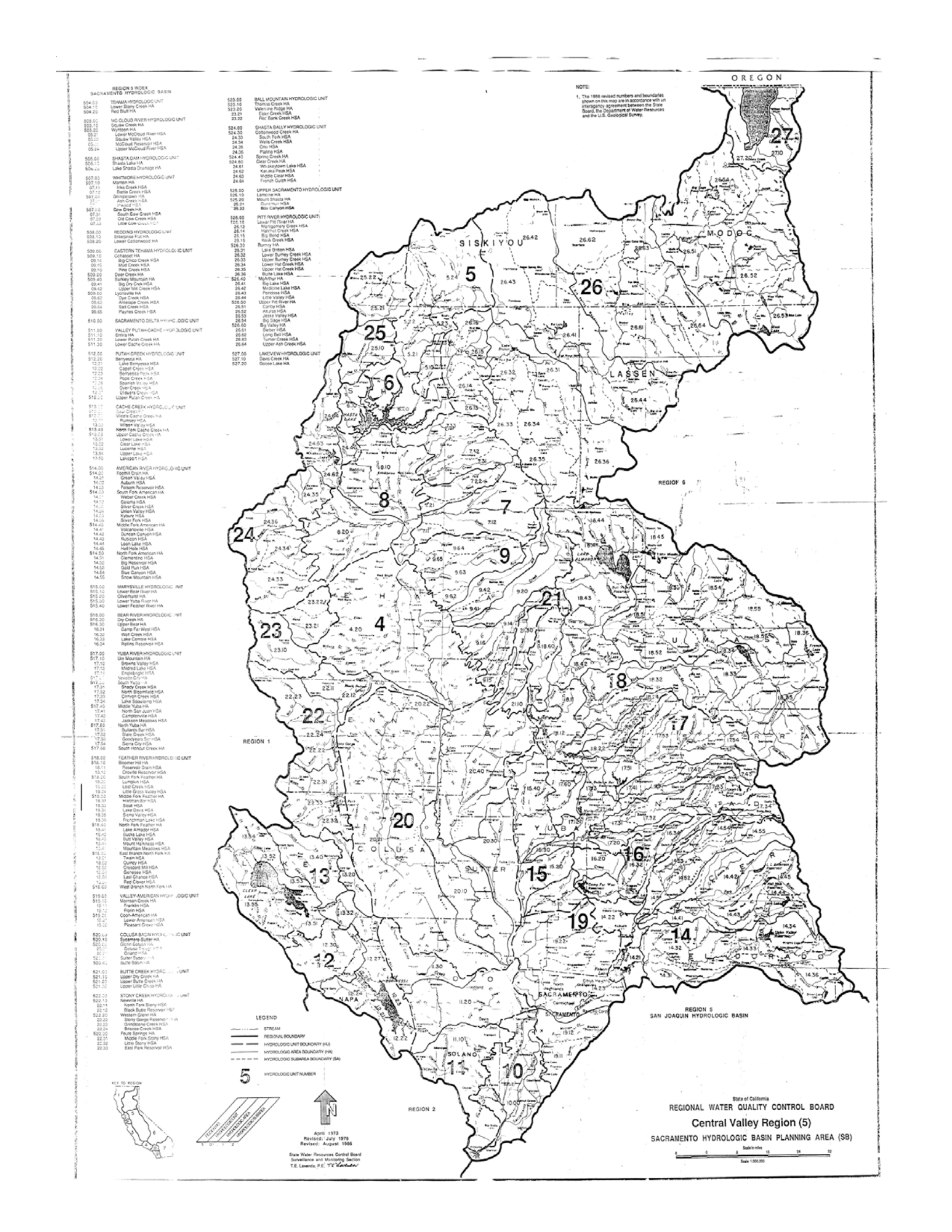
LAKES

N

Miles

0 10 20

Central Valley Region 5 – Redding


REGION 5 INDEX
SACRAMENTO HYDROLOGIC BASIN
504.00 TEHAMA HYDROLOGIC UNIT
504.10 Lower Stony Creek HA
504.20 Red Bluff HA
505.00 NO CLOUD RIVER HYDROLOGIC UNIT
505.10 Squaw Creek HA
505.20 Wynoochee HA
05.21 Lower McCloud River HSA
05.22 Squaw Valley HSA
05.23 McCloud Reservoir HSA
05.24 Upper McCloud River HSA
506.00 SHASTA DAM HYDROLOGIC UNIT
506.10 Shasta Lake HA
506.20 Lake Shasta Drainage HA
507.00 WHITMORE HYDROLOGIC UNIT
507.10 Manton HA
07.11 Inks Creek HSA
07.12 Battle Creek HSA
507.20 Shingletown HA
07.21 Ash Creek HSA
07.22 Prattville HSA
507.30 Cow Creek HA
07.31 South Cow Creek HSA
07.32 Old Cow Creek HSA
07.33 Little Cow Creek HSA
508.00 REDDING HYDROLOGIC UNIT
508.10 Enterprise HA
508.20 Lower Clear Creek HA
509.00 EASTERN TEHAMA HYDROLOGIC UNIT
509.10 Cohasset HA
09.14 Big Chico Creek HSA
09.15 Mud Creek HSA
09.16 Pine Creek HSA
509.20 Deer Creek HA
509.40 Barkley Mountain HA
09.41 Big Dry Creek HSA
09.42 Upper Mill Creek HSA
509.60 Lyonsville HA
09.62 Dye Creek HSA
09.63 Antelope Creek HSA
09.64 Salt Creek HSA
09.65 Paynes Creek HSA
510.00 SACRAMENTO DELTA HYDROLOGIC UNIT
511.00 VALLEY PUTAH-CACHE HYDROLOGIC UNIT
511.10 Elmira HA
511.20 Lower Putah Creek HA
511.30 Lower Cache Creek HA
512.00 PUTAH CREEK HYDROLOGIC UNIT
512.20 Berryessa HA
12.21 Lake Berryessa HSA
12.22 Capell Creek HSA
12.23 Berryessa Peak HSA
12.24 Pope Creek HSA
12.25 Spanish Valley HSA
12.26 Over Creek HSA
12.27 Lloyds Creek HSA
512.30 Upper Putah Creek HA
513.00 CACHE CREEK HYDROLOGIC UNIT
513.10 Clear Creek HA
513.20 Middle Cache Creek HA
13.21 Rumsey HSA
13.22 Wilson Valley HSA
513.40 North Fork Cache Creek HA
513.50 Upper Cache Creek HA
13.51 Upper Lake HSA
13.52 Clear Lake HSA
13.53 Lucerne HSA
13.54 Upper Lake HSA
13.55 Lakeport HSA
514.00 AMERICAN RIVER HYDROLOGIC UNIT
514.20 Foothill Drain HA
14.21 Green Valley HSA
14.22 Auburn HSA
14.23 Folsom Reservoir HSA
514.30 South Fork American HA
14.31 Weber Creek HSA
14.32 Coloma HSA
14.33 Silver Creek HSA
14.34 Union Valley HSA
14.35 Kyburz HSA
14.36 Silver Fork HSA
514.40 Middle Fork American HA
14.41 Volcanoville HSA
14.42 Duncan Canyon HSA
14.43 Robbers HSA
14.44 Loon Lake HSA
14.45 Hell Hole HSA
514.50 North Fork American HA
14.51 Clementine HSA
14.52 Big Reservoir HSA
14.53 Gold Run HSA
14.54 Blue Canyon HSA
14.55 Snow Mountain HSA
515.00 MARYSVILLE HYDROLOGIC UNIT
515.10 Lower Bear River HA
515.20 Olivehurst HA
515.30 Lower Yuba River HA
515.40 Lower Feather River HA
516.00 BEAR RIVER HYDROLOGIC UNIT
516.20 Dry Creek HA
516.30 Upper Bear HA
16.31 Camp Far West HSA
16.32 Wolf Creek HSA
16.33 Lake Combie HSA
16.34 Rollins Reservoir HSA
517.00 YUBA RIVER HYDROLOGIC UNIT
517.10 Live Mountain HA
17.12 Browns Valley HSA
17.13 Mildred Lake HSA
17.14 Englebright HSA
517.20 Nevada City HA
517.30 South Yuba HA
17.31 Shady Creek HSA
17.32 North Bloomfield HSA
17.33 Canyon Creek HSA
17.34 Lake Stampede HSA
517.40 Middle Yuba HA
17.41 North San Juan HSA
17.42 Camptonville HSA
17.43 Jackson Meadows HSA
517.60 North Yuba HA
17.61 Bullards Bar HSA
17.62 Slate Creek HSA
17.63 Goodyears Bar HSA
17.64 Sierra City HSA
517.70 South Honcut Creek HA
518.00 FEATHER RIVER HYDROLOGIC UNIT
518.10 Bloomer Hill HA
18.11 Reservoir Drain HSA
18.12 Oroville Reservoir HSA
518.20 South Fork Feather HA
18.21 Lumpkin HSA
18.22 Lost Creek HSA
18.24 Little Grass Valley HSA
518.30 Middle Fork Feather HA
18.31 Haskinville HSA
18.32 Sloat HSA
18.34 Lake Davis HSA
18.35 Sierra Valley HSA
18.36 Frenchman Lake HSA
518.40 North Fork Feather HA
18.41 Lake Almanor HSA
18.42 Bucks Lake HSA
18.43 Butt Valley HSA
18.44 Mount Harkness HSA
18.45 Mountain Meadows HSA
518.50 East Branch North Fork HA
18.51 Twain HSA
18.52 Quincy HSA
18.53 Crescent Mill HSA
18.54 Genesee HSA
18.55 Last Chance HSA
18.56 Red Clover HSA
518.60 West Branch North Fork HA
519.00 VALLEY-AMERICAN HYDROLOGIC UNIT
519.10 Morrison Creek HA
19.11 Franklin HSA
19.12 Florin HSA
519.20 Coon-American HA
19.21 Lower American HSA
19.22 Pleasant Grove HSA
520.00 COLUSA BASIN HYDROLOGIC UNIT
520.10 Sycamore-Sutter HA
520.11 Glenn Colusa HSA
20.12 Colusa Trough HSA
20.13 Grand HSA
520.20 Sutter Bypass HA
520.30 Butte Basin HA
521.00 BUTTE CREEK HYDROLOGIC UNIT
521.10 Upper Dry Creek HA
521.20 Upper Butte Creek HA
521.30 Upper Little Chico HA
522.00 STONY CREEK HYDROLOGIC UNIT
522.10 Newville HA
22.11 North Fork Stony HSA
22.12 Black Butte Reservoir HSA
522.20 Western Glenn HA
22.22 Stony Gorge Reservoir HSA
22.23 Grindstone Creek HSA
22.24 Briscoe Creek HSA
522.30 Fouts Springs HA
22.31 Middle Fork Stony HSA
22.32 Little Stony HSA
22.33 East Park Reservoir HSA
523.00 BALL MOUNTAIN HYDROLOGIC UNIT
523.10 Thomas Creek HA
523.20 Valentine Ridge HA
23.21 Cedar Creek HSA
23.22 Rec Bank Creek HSA
524.00 SHASTA BALLY HYDROLOGIC UNIT
524.30 Cottonwood Creek HA
24.33 South Fork HSA
24.34 Wells Creek HSA
24.35 Otto HSA
24.36 Platina HSA
524.40 Spring Creek HA
524.60 Clear Creek HA
24.61 Whiskeytown Lake HSA
24.62 Kanaka Peak HSA
24.63 Middle Clear HSA
24.64 French Gulch HSA
525.00 UPPER SACRAMENTO HYDROLOGIC UNIT
525.10 Lamoine HA
525.20 Mount Shasta HA
25.21 Dunsmuir HSA
25.22 Box Canyon HSA
526.00 PIT RIVER HYDROLOGIC UNIT
526.10 Lower Pit River HA
26.13 Montgomery Creek HSA
26.14 Hatchet Creek HSA
26.15 Big Bend HSA
26.16 Kosk Creek HSA
526.30 Burney HA
26.31 Lake Britton HSA
26.32 Lower Burney Creek HSA
26.33 Upper Burney Creek HSA
26.34 Lower Hat Creek HSA
26.35 Upper Hat Creek HSA
26.36 Burle Lake HSA
526.40 McArthur HA
26.41 Big Lake HSA
26.42 Medicine Lake HSA
26.43 Pondosa HSA
26.44 Little Valley HSA
526.50 Upper Pit River HA
26.51 Canby HSA
26.52 Alturas HSA
26.53 Jesse Valley HSA
26.54 Big Sage HSA
526.60 Big Valley HA
26.61 Bieber HSA
26.62 Long Bell HSA
26.63 Turner Creek HSA
26.64 Upper Ash Creek HSA
527.00 LAKEVIEW HYDROLOGIC UNIT
527.10 Davis Creek HA
527.20 Goose Lake HA
NOTE:
1. The 1986 revised numbers and boundaries shown on this map are in accordance with an interagency agreement between the State Board, the Department of Water Resources and the U.S. Geological Survey.
OREGON
SISKIYOU
MODOC
LASSEN
SHASTA
TEHAMA
GLENN
COLUSA
YUBA
SUTTER
BUTTE
PLUMAS
NEVADA
PLACER
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YOLO
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STREAM
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HYDROLOGIC AREA BOUNDARY (HA)
HYDROLOGIC SUBAREA BOUNDARY (SA)
5 HYDROLOGIC UNIT NUMBER
KEY TO REGION
April 1973
Revised: July 1976
Revised: August 1986
State Water Resources Control Board
Surveillance and Monitoring Section
T.E. Lawenda, P.E.
State of California
REGIONAL WATER QUALITY CONTROL BOARD
Central Valley Region (5)
SACRAMENTO HYDROLOGIC BASIN PLANNING AREA (SB)

Central Valley Region 5 – Sacramento

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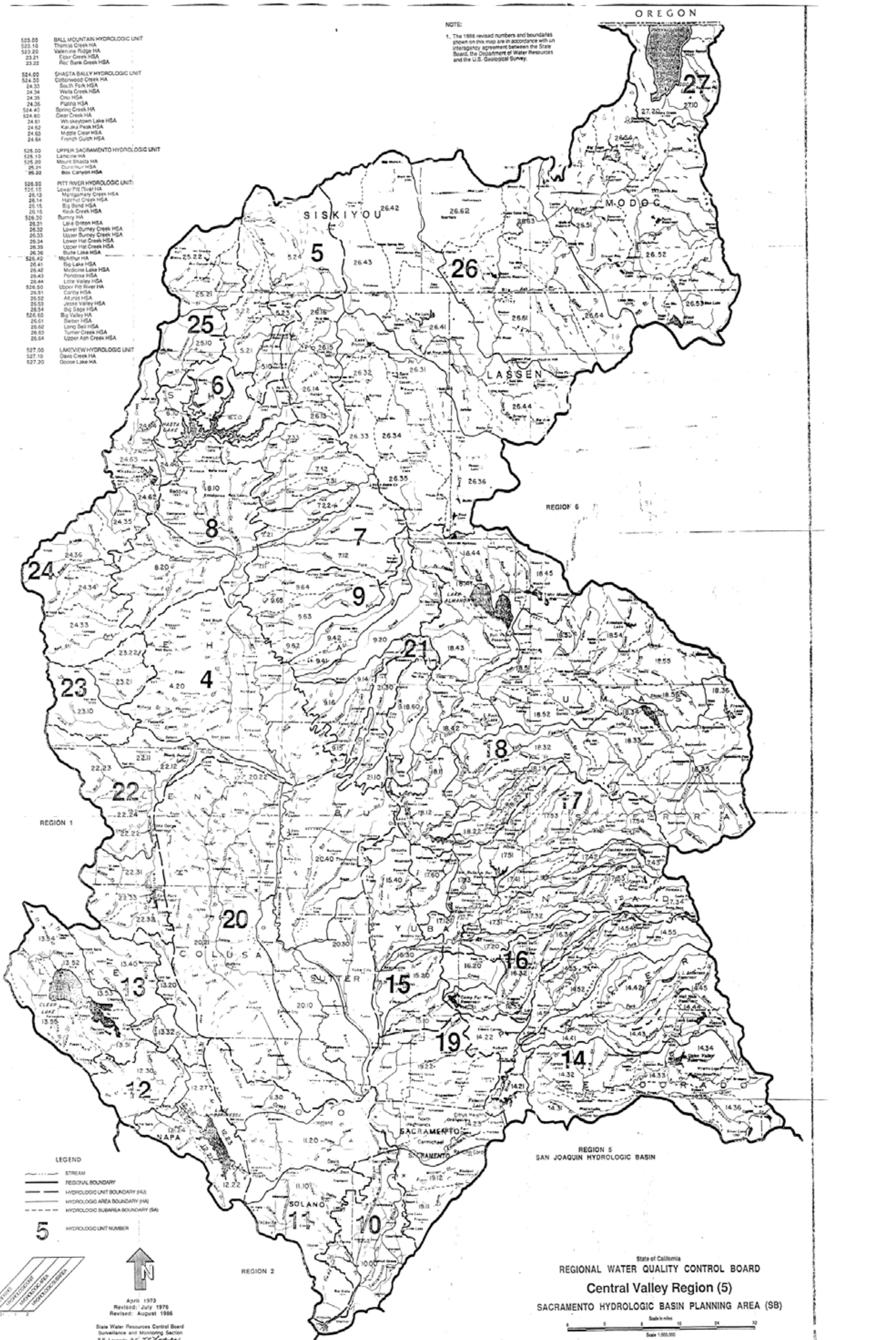
504.00	TEHAMA HYDROLOGIC UNIT
504.10	Lower Stony Creek HA
504.20	Red Bluff HA
505.00	MC CLOUD RIVER HYDROLOGIC UNIT
505.10	Squaw Creek HA
505.20	Wyntoon HA
05.21	Lower McCloud River HSA
05.22	Squaw Valley HSA
05.23	McCloud Reservoir HSA
05.24	Upper McCloud River HSA
506.00	SHASTA DAM HYDROLOGIC UNIT
506.10	Shasta Lake HA
506.20	Lake Shasta Drainage HA
507.00	WHITMORE HYDROLOGIC UNIT
507.10	Manton HA
07.11	Inks Creek HSA
07.12	Battle Creek HSA
507.20	Shingletown HA
07.21	Ash Creek HSA
07.22	Inwood HSA
507.30	Cow Creek HA
07.31	South Cow Creek HSA
07.32	Old Cow Creek HSA
07.33	Little Cow Creek HSA
508.00	REDDING HYDROLOGIC UNIT
508.10	Enterprise Flat HA
508.20	Lower Cottonwood HA
509.00	EASTERN TEHAMA HYDROLOGIC UNIT
509.10	Cohasset HA
09.14	Big Chico Creek HSA
09.15	Mud Creek HSA
09.16	Pine Creek HSA
509.20	Deer Creek HA
509.40	Barkley Mountain HA
09.41	Big Dry Creek HSA
09.42	Upper Mill Creek HSA
509.60	Lyonsville HA
09.62	Dye Creek HSA
09.63	Antelope Creek HSA
09.64	Salt Creek HSA
09.65	Paynes Creek HSA
510.00	SACRAMENTO DELTA HYDROLOGIC UNIT
511.00	VALLEY PUTAH-CACHE HYDROLOGIC UNIT
511.10	Elmira HA
511.20	Lower Putah Creek HA
511.30	Lower Cache Creek HA
512.00	PUTAH CREEK HYDROLOGIC UNIT
512.20	Berryessa HA
12.21	Lake Berryessa HSA
12.22	Capell Creek HSA
12.23	Berryessa Peak HSA
12.24	Pope Creek HSA
12.25	Spanish Valley HSA
12.26	Over Creek HSA
12.27	Eticuera Creek HSA
512.30	Upper Putah Creek HA
513.00	CACHE CREEK HYDROLOGIC UNIT
513.10	Bear Creek HA
513.20	Middle Cache Creek HA
13.21	Rumsey HSA
13.22	Wilson Valley HSA
513.40	North Fork Cache Creek HA
513.50	Upper Cache Creek HA
13.51	Lower Lake HSA
13.52	Clear Lake HSA
13.53	Lucerne HSA
13.54	Upper Lake HSA
13.55	Lakeport HSA
514.00	AMERICAN RIVER HYDROLOGIC UNIT
514.20	Foothill Drain HA
14.21	Green Valley HSA
14.22	Auburn HSA
14.23	Folsom Reservoir HSA
514.30	South Fork American HA
14.31	Weber Creek HSA
14.32	Coloma HSA
14.33	Silver Creek HSA
14.34	Union Valley HSA
14.35	Kyburz HSA
14.36	Silver Fork HSA
514.40	Middle Fork American HA
14.41	Volcanoville HSA
14.42	Duncan Canyon HSA
14.43	Rubicon HSA
14.44	Loon Lake HSA
14.45	Hell Hole HSA
514.50	North Fork American HA
14.51	Clementine HSA
14.52	Big Reservoir HSA
14.53	Gold Run HSA
14.54	Blue Canyon HSA
14.55	Snow Mountain HSA
515.00	MARYSVILLE HYDROLOGIC UNIT
515.10	Lower Bear River HA
515.20	Olivehurst HA
515.30	Lower Yuba River HA
515.40	Lower Feather River HA
516.00	BEAR RIVER HYDROLOGIC UNIT
516.20	Dry Creek HA
516.30	Upper Bear HA
16.31	Camp Far West HSA
16.32	Wolf Creek HSA
16.33	Lake Combie HSA
16.34	Rollins Reservoir HSA
517.00	YUBA RIVER HYDROLOGIC UNIT
517.10	Ure Mountain HA
17.12	Browns Valley HSA
17.13	Mildred Lake HSA
17.14	Englebright HSA
517.20	Nevada City HA
517.30	South Yuba HA
17.31	Shady Creek HSA
17.32	North Bloomfield HSA
17.33	Canyon Creek HSA
17.34	Lake Spaulding HSA
517.40	Middle Yuba HA
17.41	North San Juan HSA
17.42	Camptonville HSA
17.43	Jackson Meadows HSA
517.50	North Yuba HA
17.51	Bullards Bar HSA
17.52	Slate Creek HSA
17.53	Goodyears Bar HSA
17.54	Sierra City HSA
517.60	South Honcut Creek HA
518.00	FEATHER RIVER HYDROLOGIC UNIT
518.10	Bloomer Hill HA
18.11	Reservoir Drain HSA
18.12	Oroville Reservoir HSA
518.20	South Fork Feather HA
18.22	Lumpkin HSA
18.23	Lost Creek HSA
18.24	Little Grass Valley HSA
518.30	Middle Fork Feather HA
18.32	Hartman Bar HSA
18.33	Sloat HSA
18.34	Lake Davis HSA
18.35	Sierra Valley HSA
18.36	Frenchman Lake HSA
518.40	North Fork Feather HA
18.41	Lake Almanor HSA
18.42	Bucks Lake HSA
18.43	Butt Valley HSA
18.44	Mount Harkness HSA
18.45	Mountain Meadows HSA
518.50	East Branch North Fork HA
18.51	Twain HSA
18.52	Quincy HSA
18.53	Crescent Mill HSA
18.54	Genesee HSA
18.55	Last Chance HSA
18.56	Red Clover HSA
518.60	West Branch North Fork HA
519.00	VALLEY-AMERICAN HYDROLOGIC UNIT
519.10	Morrison Creek HA
19.11	Franklin HSA
19.12	Florin HSA
519.20	Coon-American HA
19.21	Lower American HSA
19.22	Pleasant Grove HSA
520.00	COLUSA BASIN HYDROLOGIC UNIT
520.10	Sycamore-Sutter HA
520.20	Glenn Colusa HA
20.21	Colusa Trough HSA
20.22	Orland HSA
520.30	Sutter Bypass HA
520.40	Butte Basin HA
521.00	BUTTE CREEK HYDROLOGIC UNIT
521.10	Upper Dry Creek HA
521.20	Upper Butte Creek HA
521.30	Upper Little Chico HA
522.00	STONY CREEK HYDROLOGIC UNIT
522.10	Newville HA
22.11	North Fork Stony HSA
22.12	Black Butte Reservoir HSA
522.20	Western Glenn HA
22.22	Stony Gorge Reservoir HSA
22.23	Grindstone Creek HSA
22.24	Briscoe Creek HSA
522.30	Fouts Springs HA
22.31	Middle Fork Stony HSA
22.32	Little Stony HSA
22.33	East Park Reservoir HSA

523.00	BALL MOUNTAIN HYDROLOGIC UNIT
523.10	Thomas Creek HA
523.20	Valentine Ridge HA
23.21	Elder Creek HSA
23.22	Red Bank Creek HSA
524.00	SHASTA BALLY HYDROLOGIC UNIT
524.30	Cottonwood Creek HA
24.33	South Fork HSA
24.34	Wells Creek HSA
24.35	Ono HSA
24.36	Platina HSA
524.40	Spring Creek HA
524.60	Clear Creek HA
24.61	Whiskeytown Lake HSA
24.62	Kanaka Peak HSA
24.63	Middle Clear HSA
24.64	French Gulch HSA
525.00	UPPER SACRAMENTO HYDROLOGIC UNIT
525.10	Lamoine HA
525.20	Mount Shasta HA
25.21	Dunsmuir HSA
25.22	Box Canyon HSA
526.00	PITT RIVER HYDROLOGIC UNIT
526.10	Lower Pitt River HA
26.13	Montgomery Creek HSA
26.14	Hatchet Creek HSA
26.15	Big Bend HSA
26.16	Kosk Creek HSA
526.30	Burney HA
26.31	Lake Britton HSA
26.32	Lower Burney Creek HSA
26.33	Upper Burney Creek HSA
26.34	Lower Hat Creek HSA
26.35	Upper Hat Creek HSA
26.36	Butte Lake HSA
526.40	McArthur HA
26.41	Big Lake HSA
26.42	Medicine Lake HSA
26.43	Pondosa HSA
26.44	Little Valley HSA
526.50	Upper Pit River HA
26.51	Canby HSA
26.52	Alturas HSA
26.53	Jesse Valley HSA
26.54	Big Sage HSA
526.60	Big Valley HA
26.61	Bieber HSA
26.62	Long Bell HSA
26.63	Turner Creek HSA
26.64	Upper Ash Creek HSA
527.00	LAKEVIEW HYDROLOGIC UNIT
527.10	Davis Creek HA
527.20	Goose Lake HA



KEY TO REGION


Central Valley Region 5 – Fresno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SAN JOAQUIN HYDROLOGIC BASIN
531.00 NORTH VALLEY FLOOR HYDROLOGIC UNIT
531.10 Lower Cosumnes-Dry HA
31.11 Hosiel HSA
31.12 Lower Deer Creek HSA
531.20 Lower Mokelumne HA
531.30 Lower Calaveras HA
531.40 Dusk-Littlejohns HA
532.00 MIDDLE SIERRA HYDROLOGIC UNIT
532.20 Cosumnes HA
32.21 Big Canyon Creek HSA
32.22 Upper Deer Creek HSA
32.23 North Fork Cosumnes HSA
32.24 Omo Ranch HSA
532.40 Butler Creek HA
532.60 Upper Mokelumne HA
533.00 UPPER CALAVERAS HYDROLOGIC UNIT
533.10 New Hogan Reservoir HA
533.20 North Fork Calaveras HA
533.30 South Fork Calaveras HA
534.00 STANISLAUS RIVER HYDROLOGIC UNIT
534.10 Table Mountain HA
534.20 Copperopolis HA
34.21 New Melones Res HSA
34.22 Angels Camp HSA
534.30 South Fork Stanislaus HA
534.40 Middle Fork Stanislaus HA
34.41 Dardanelle HSA
34.42 Beardsley Lake HSA
534.50 North Fork Stanislaus HA
534.60 Clark Fork HA
535.00 SAN JOAQUIN VALLEY FLOOR HYDROLOGIC UNIT*
535.10 Manteca HA
535.20 Valley Home HA
535.30 Riverbank HA
535.40 Waterford HA
535.50 Turlock HA
535.60 Montpelier HA
535.70 El Nido-Stevinson HA
535.80 Merced HA
535.90 Fahr Creek HA
536.00 TUOLUMNE RIVER HYDROLOGIC UNIT
536.20 Wood Creek HA
536.30 Big Oak Flat HA
36.31 Sonora HSA
36.32 New Don Pedro Reservoir HSA
536.40 Clavey River HA
536.50 Cherry Creek HA
36.51 Mercut Peak HSA
36.52 Cherry Lake HSA
36.53 Lake Eleanor HSA
536.60 Hetch Hetchy HA
536.70 Middle Tuolumne HA
536.80 South Fork Tuolumne HA
537.00 MERCED RIVER HYDROLOGIC UNIT
537.10 Kesserbaum Flats HA
537.20 Buckhorn Peak HA
37.21 Coulterville HSA
37.22 Lake McClure HSA
537.30 North Fork Merced HA
537.40 South Fork Merced HA
537.50 Yosemite HA
537.60 Mount Raser King HA
538.00 MARIPOSA HYDROLOGIC UNIT
539.00 AHWAHNEE HYDROLOGIC UNIT
539.10 Chowchilla River HA
39.11 Chapman Creek HSA
39.12 Buchanon Reservoir HSA
539.20 Daulton HA
539.30 Fresno River HA
39.31 Coarse Gold Creek HSA
39.32 Hensley Reservoir HSA
540.00 SAN JOAQUIN RIVER HYDROLOGIC UNIT
540.10 Auberry HA
40.11 Pine Gold Creek HSA
40.12 Millerton Lake HSA
540.20 North Fork HA
40.21 Wishon HSA
40.22 Bass Lake HSA
540.30 Redinger HA
540.40 Minnehaha Pond HA
540.50 Lakeshore HA
40.51 Big Creek HSA
40.52 Huntington Lake HSA
540.60 North Fork San Joaquin HA
540.70 Little Dry Creek HA
541.00 DELTA-MENDOTA CANAL HYDROLOGIC UNIT
541.10 Patterson HA
541.20 Los Banos HA
542.00 MIDDLE WEST SIDE HYDROLOGIC UNIT
542.10 Del Puerto Creek HA
542.20 Orestimba Creek HA
542.30 Pacheco Pass HA
40.31 Romero Creek HSA
42.32 San Luis Reservoir HSA
542.40 Panoche Creek HA
42.41 Unknown HSA
42.42 Los Banos Reservoir HSA
543.00 NORTH DIABLO RANGE HYDROLOGIC UNIT
544.00 SAN JOAQUIN DELTA HYDROLOGIC UNIT
545.00 SAN JOAQUIN VALLEY FLOOR HYDROLOGIC UNIT*
545.10 Gowaly Fork HA
545.20 Madera HA
545.30 Berenda Creek HA
* SAN JOAQUIN VALLEY FLOOR HYDROLOGIC UNIT includes HYDROLOGIC UNIT NUMBERS 535 and 545
NOTE:
1. The 1986 revised numbers and boundaries shown on this map are in accordance with an interagency agreement between the State Board, the Department of Water Resources and the U.S. Geological Survey.
2. San Joaquin Valley Floor Hydrologic Unit includes Hydrologic Unit numbers 535 and 545.
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SAN JOAQUIN
CONTRA COSTA
ALAMEDA
STANISLAUS
MERCED
MARIPOSA
TUOLUMNE
MADERA
FRESNO
SAN BENITO
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HYDROLOGIC AREA BOUNDARY (HA)
HYDROLOGIC SUBAREA BOUNDARY (SA)
5 HYDROLOGIC UNIT NUMBER
KEY TO REGION
REGIONAL
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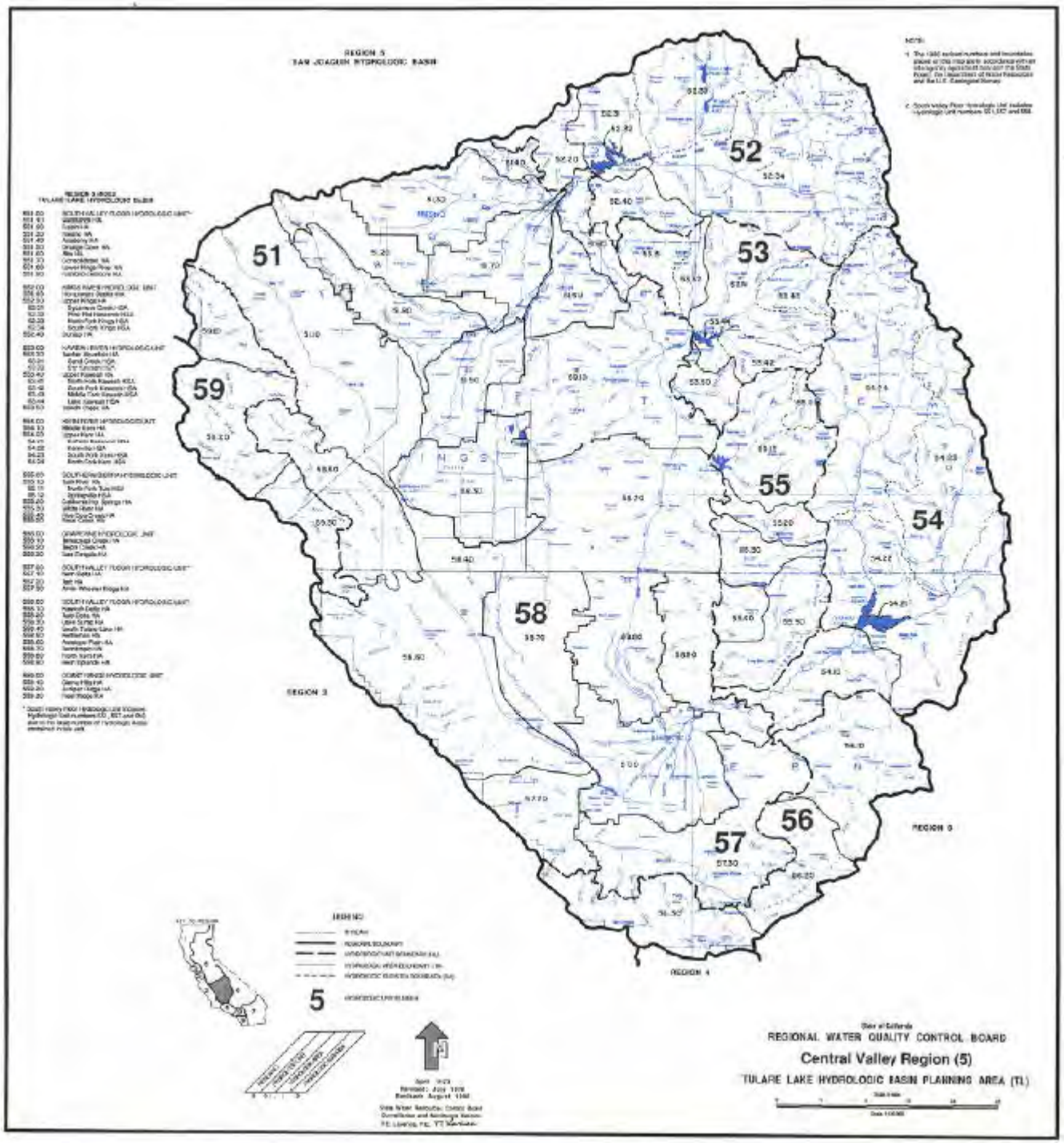
HYDROLOGIC SUBAREA
April 1973
Revised: July 1976
Revised: August 1986
State Water Resources Control Board
Surveillance and Monitoring Section
T.E. Lowndes, P.E.
State of California
REGIONAL WATER QUALITY CONTROL BOARD
Central Valley Region (5)
SAN JOAQUIN HYDROLOGIC BASIN PLANNING AREA (SJ)


REGION 5
SAN JOAQUIN HYDROLOGIC BASIN
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REGION 3
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REGION 4
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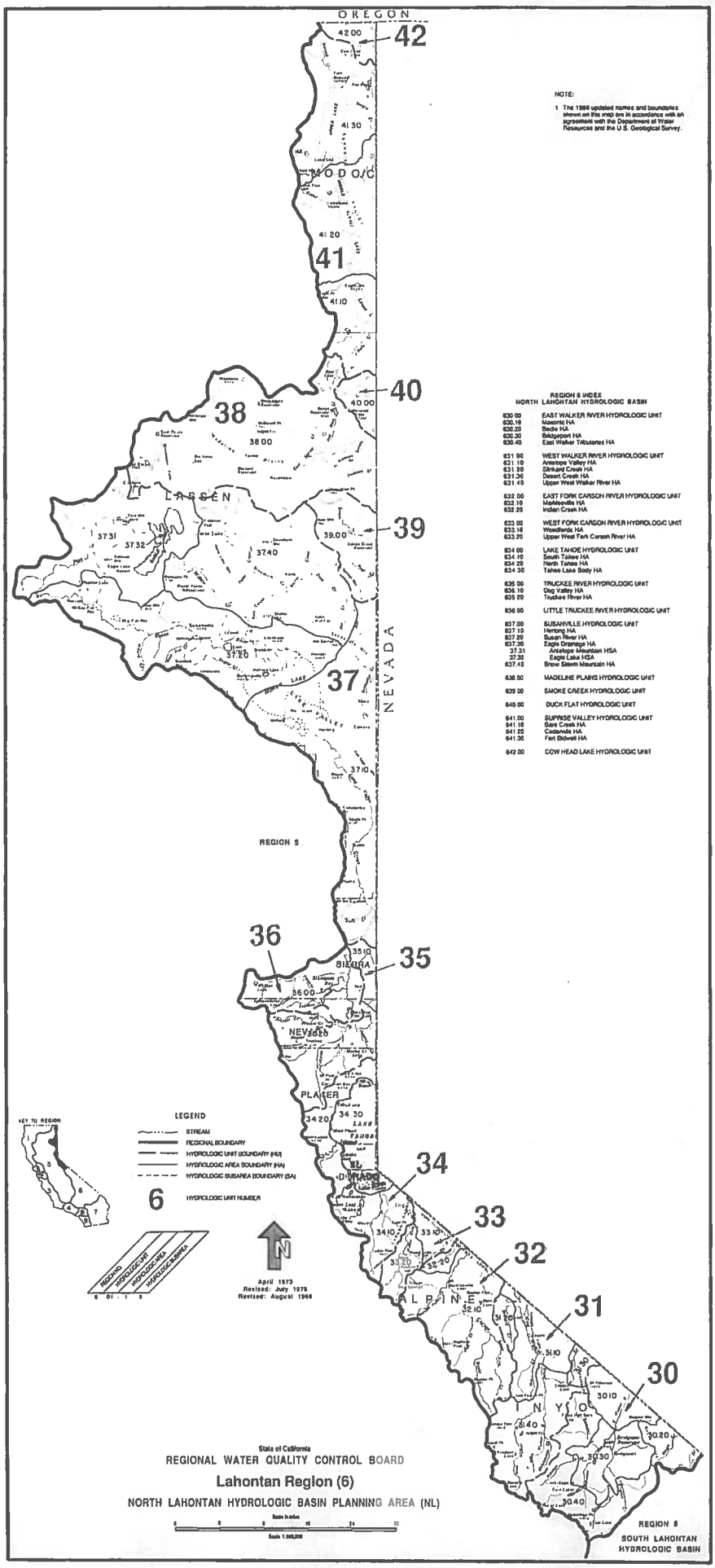
State of California
REGIONAL WATER QUALITY CONTROL BOARD
Central Valley Region (5)
TULARE LAKE HYDROLOGIC BASIN PLANNING AREA (TL)

Lahontan Region 6 – South Lake Tahoe


OREGON
42
41
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34
33
32
31
30
NEVADA
LASSEN
MODOC
SIERRA
PLACER
ALPINE
MONO
TAHOE
REGION 5
REGION 6
SOUTH LAHONTAN HYDROLOGIC BASIN
NOTE:
1 The 1996 updated names and boundaries shown on this map are in accordance with an agreement with the Department of Water Resources and the U.S. Geological Survey.
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NORTH LAHONTAN HYDROLOGIC BASIN
630.00 EAST WALKER RIVER HYDROLOGIC UNIT
630.10 Masonic HA
630.20 Bodie HA
630.30 Bridgeport HA
630.40 East Walker Tributaries HA
631.00 WEST WALKER RIVER HYDROLOGIC UNIT
631.10 Antelope Valley HA
631.20 Slinkard Creek HA
631.30 Desert Creek HA
631.40 Upper West Walker River HA
632.00 EAST FORK CARSON RIVER HYDROLOGIC UNIT
632.10 Markleeville HA
632.20 Indian Creek HA
633.00 WEST FORK CARSON RIVER HYDROLOGIC UNIT
633.10 Woodfords HA
633.20 Upper West Fork Carson River HA
634.00 LAKE TAHOE HYDROLOGIC UNIT
634.10 South Tahoe HA
634.20 North Tahoe HA
634.30 Tahoe Lake Body HA
635.00 TRUCKEE RIVER HYDROLOGIC UNIT
635.10 Dog Valley HA
635.20 Truckee River HA
636.00 LITTLE TRUCKEE RIVER HYDROLOGIC UNIT
637.00 SUSANVILLE HYDROLOGIC UNIT
637.10 Herlong HA
637.20 Susan River HA
637.30 Eagle Drainage HA
37.31 Antelope Mountain HSA
37.32 Eagle Lake HSA
637.40 Snow Storm Mountain HA
638.00 MADELINE PLAINS HYDROLOGIC UNIT
639.00 SMOKE CREEK HYDROLOGIC UNIT
640.00 DUCK FLAT HYDROLOGIC UNIT
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641.20 Cedarville HA
641.30 Fort Bidwell HA
642.00 COW HEAD LAKE HYDROLOGIC UNIT
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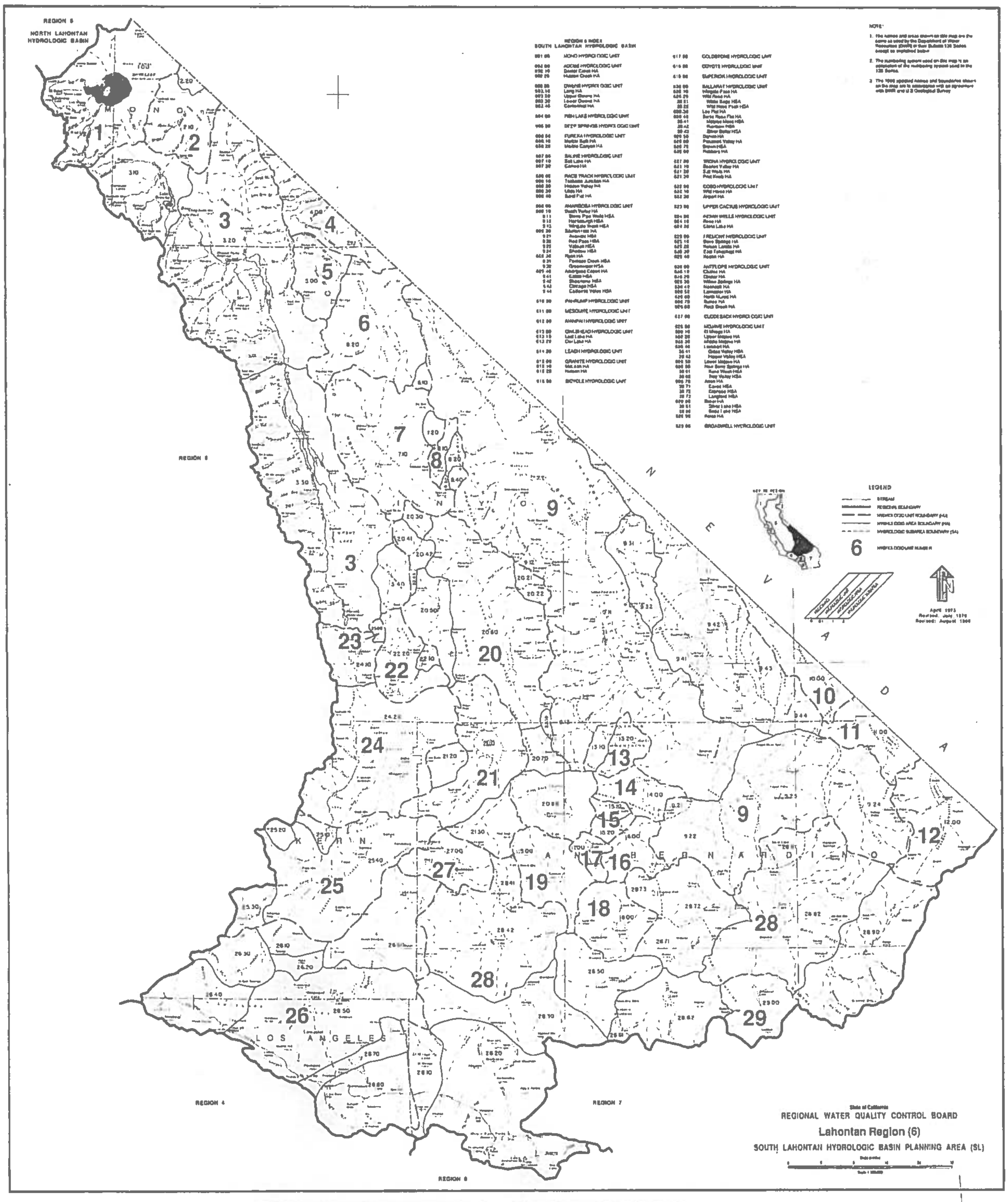
April 1973
Revised: July 1975
Revised: August 1986
State of California
REGIONAL WATER QUALITY CONTROL BOARD
Lahontan Region (6)
NORTH LAHONTAN HYDROLOGIC BASIN PLANNING AREA (NL)

Lahontan Region 6 – Victorville


REGION 6
NORTH LAHONTAN
HYDROLOGIC BASIN
REGION 5
MONO
INYO
NEVADA
KERN
SAN BERNARDINO
LOS ANGELES
LEGEND
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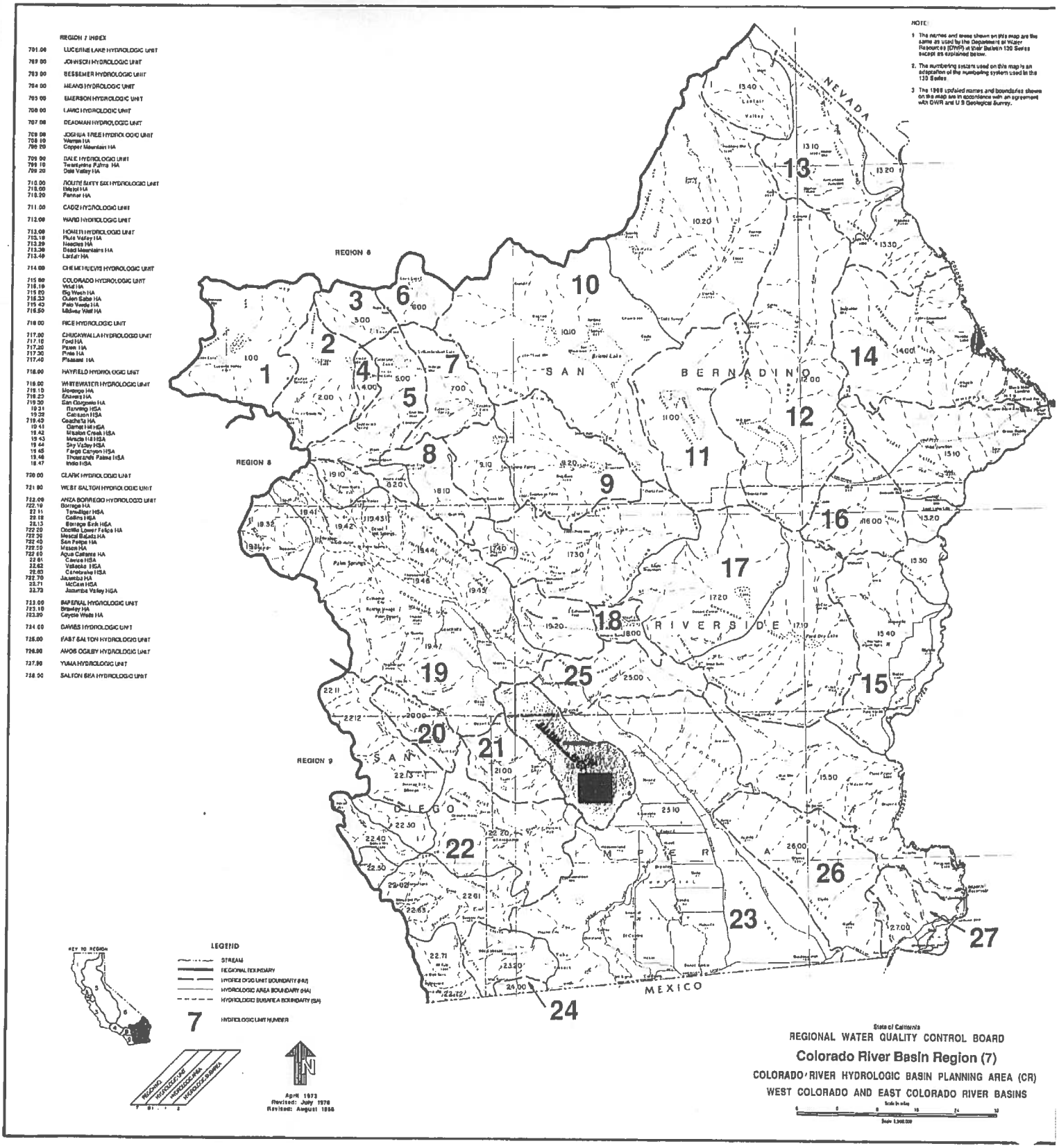
REGION 8
State of California
REGIONAL WATER QUALITY CONTROL BOARD
Lahontan Region (6)
SOUTH LAHONTAN HYDROLOGIC BASIN PLANNING AREA (SL)

Colorado River Basin Region 7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701.00 LUCERNE LAKE HYDROLOGIC UNIT
702.00 JOHNSON HYDROLOGIC UNIT
703.00 BESSEMER HYDROLOGIC UNIT
704.00 MEANS HYDROLOGIC UNIT
705.00 EMERSON HYDROLOGIC UNIT
706.00 LANG HYDROLOGIC UNIT
707.00 DEADMAN HYDROLOGIC UNIT
709.00 JOSHUA TREE HYDROLOGIC UNIT
709.10 Warren HA
709.20 Copper Mountain HA
709.00 DALE HYDROLOGIC UNIT
709.10 Twentynine Palms HA
709.20 Dale Valley HA
710.00 ROUTE SIXTY SIX HYDROLOGIC UNIT
710.00 Bristol HA
710.20 Fenner HA
711.00 CADIZ HYDROLOGIC UNIT
712.00 WARD HYDROLOGIC UNIT
713.00 HOMER HYDROLOGIC UNIT
713.10 Piute Valley HA
713.20 Needles HA
713.30 Dead Mountains HA
713.40 Lavkar HA
714.00 CHEMEHUEVIS HYDROLOGIC UNIT
715.00 COLORADO HYDROLOGIC UNIT
715.10 Vidal HA
715.20 Big Wash HA
715.30 Quien Sabe HA
715.40 Palo Verde HA
715.50 Midway Well HA
716.00 RICE HYDROLOGIC UNIT
717.00 CHUCKWALLA HYDROLOGIC UNIT
717.10 Ford HA
717.20 Pinon HA
717.30 Pinto HA
717.40 Pleasant HA
718.00 HAYFIELD HYDROLOGIC UNIT
719.00 WHITEWATER HYDROLOGIC UNIT
719.10 Morongo HA
719.20 Edwards HA
719.30 San Gorgonio HA
19.31 Banning HSA
19.32 Cabazon HSA
719.40 Coachella HA
19.41 Garnet Hill HSA
19.42 Mission Creek HSA
19.43 Mecca Hill HSA
19.44 Dry Valley HSA
19.45 Fargo Canyon HSA
19.46 Thousand Palms HSA
19.47 Indio HSA
720.00 CLARK HYDROLOGIC UNIT
721.00 WEST SALTON HYDROLOGIC UNIT
722.00 ANZA BORREGO HYDROLOGIC UNIT
722.10 Borrego HA
22.11 Terwilliger HSA
22.12 Collins HSA
22.13 Borrego Sink HSA
722.20 Ocotillo Lower Fellps HA
722.30 Mescal Bajada HA
722.40 San Felipe HA
722.50 Mason HA
722.60 Agua Caliente HA
22.61 Clevise HSA
22.62 Valleoito HSA
22.63 Canebrake HSA
722.70 Jacumba HA
22.71 McCain HSA
22.72 Jacumba Valley HSA
723.00 IMPERIAL HYDROLOGIC UNIT
723.10 Brawley HA
723.20 Calexico Wells HA
724.00 DAVIES HYDROLOGIC UNIT
725.00 EAST SALTON HYDROLOGIC UNIT
726.00 AMOS OGILBY HYDROLOGIC UNIT
727.00 YUMA HYDROLOGIC UNIT
728.00 SALTON SEA HYDROLOGIC UNIT
NOTE:
1 The names and areas shown on this map are the same as used by the Department of Water Resources (DWR) in their Bulletin 130 Series except as explained below.
2. The numbering system used on this map is an adaptation of the numbering system used in the 130 Series
3 The 1968 updated names and boundaries shown on this map are in accordance with an agreement with DWR and U S Geological Survey.
NEVADA
REGION 6
REGION 8
REGION 9
SAN BERNADINO
RIVERSIDE
SAN DIEGO
IMPERIAL
MEXICO
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27
KEY TO REGION
LEGEND
STREAM
REGIONAL BOUNDARY
HYDROLOGIC UNIT BOUNDARY (HU)
HYDROLOGIC AREA BOUNDARY (HA)
HYDROLOGIC SUBAREA BOUNDARY (SA)
7 HYDROLOGIC UNIT NUMBER
REGIONAL HYDROLOGIC UNIT HYDROLOGIC AREA HYDROLOGIC SUBAREA
April 1973
Revised: July 1976
Revised: August 1986
State of California
REGIONAL WATER QUALITY CONTROL BOARD
Colorado River Basin Region (7)
COLORADO RIVER HYDROLOGIC BASIN PLANNING AREA (CR)
WEST COLORADO AND EAST COLORADO RIVER BASINS

Santa Ana Region 8

REGION 8 INDEX

801.00	SANTA ANA RIVER HYDROLOGIC UNIT
801.10	Lower Santa Ana River HA
1.11	East Coastal Plain HSA
1.12	Santiago HSA
1.13	Santa Ana Narrows HSA
801.20	Middle Santa Ana River HA Split
801.21	Chino HSA Split
481.21	Chino HSA Split
481.22	Harrison HSA
801.23	Claremont Heights HSA Split
481.23	Claremont Heights HSA Split
801.24	Cucamonga HSA
1.25	Temescal HSA
1.26	Arlington HSA
1.27	Riverside HSA
801.30	Lake Matthews HA
1.31	Coldwater HSA
1.32	Bedford HSA
1.33	Cajalco HSA
1.34	Lee Lake HSA
1.35	Terra Cotta HSA
801.40	Colton-Rialto HA
1.41	Upper Lytle HSA
1.42	Lower Lytle HSA
1.43	Rialto HSA
1.44	Colton HSA
1.45	Reche HSA
801.50	Upper Santa Ana River HA
1.51	Calon HSA
1.52	Bunker Hill HSA
1.53	Redlands HSA
1.54	Mentone HSA
1.55	Reservoir HSA
1.56	Crafton HSA
1.57	Santa Ana Canyon HSA
1.58	Mill Creek HSA
1.59	Sycamore HSA
801.60	San Timoteo HA
1.61	Yucaipa HSA
1.62	Beaumont HSA
1.63	Cherry Valley HSA
1.64	Chicken Hill HSA
1.65	Gateway HSA
1.66	Oak Glen HSA
1.67	South Mesa HSA
1.68	Triple Falls Creek HSA
1.69	Noble Creek HSA
801.70	San Bernardino Mountain HA
1.71	Bear Valley HA
1.72	Seven Oaks HSA
1.73	Baldwin HSA

802.00	SAN JACINTO VALLEY HYDROLOGIC UNIT
802.10	Perris HA
2.11	Perris Valley HSA
2.12	Menifee HSA
2.13	Winchester HSA
2.14	Lakeview HSA
2.15	Hemet HSA
802.20	San Jacinto HA
2.21	Gilman Hot Springs HSA
2.22	Hemet Lake HSA
2.23	Bautista HSA
802.30	Elsinore Valley HA
2.31	Elsinore HSA
2.32	Railroad HSA

805.00	LOS ANGELES-SAN GABRIEL RIVER HYDROLOGIC UNIT
805.10	Coastal Plain of Los Angeles County HA Split
845.15	Central HSA Split
845.60	Anaheim HA Split
845.61	Anaheim HSA Split
845.62	La Habra HSA Split
845.63	Yorba Linda HSA Split

NOTE:

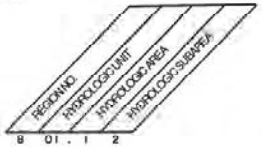
1. The names and areas shown on this map are the same as used by the Department of Water Resources (DWR) in their Bulletin 130 Series except as explained below.
2. The numbering system used on this map is an adaptation of the numbering system used in the 130 Series.
3. The boundary between Region 8 and Region 4 follows the boundary between Los Angeles County and Orange or San Bernardino Counties, not the Hydrologic Boundary. The San Bernardino County line splits Hydrologic Unit 1 (Santa Ana River HU) so that Sub-Areas 481.21, 481.22, and 481.23 are legally in Region 4 but drain into Region 8. The Orange County line splits Hydrologic Unit 5 (Los Angeles-San Gabriel River HU) so that Sub-Areas 845.15, 845.61, 845.62 and 845.63 are legally in Region 8 but drain into Region 4. Therefore, a 5 digit number on the map indicates that a regional boundary divides a hydrologic unit, area or subarea. In these cases the second digit is the number of the region from which the hydrologic area has been separated by the regional boundary. All other digits are as described in the legend.
4. The 1986 updated names shown on the map are in accordance with an agreement with DWR and US Geological Survey.

KEY TO REGION

LEGEND

- STREAM
- REGIONAL BOUNDARY
- HYDROLOGIC UNIT BOUNDARY (HU)
- HYDROLOGIC AREA BOUNDARY (HA)
- HYDROLOGIC SUBAREA BOUNDARY (SA)

5 HYDROLOGIC UNIT NUMBER



April 1973
Revised: July 1976
Revised: August 1986

State Water Resources Control Board
Surveillance and Monitoring Section
T.E. Lavenda, P.E.

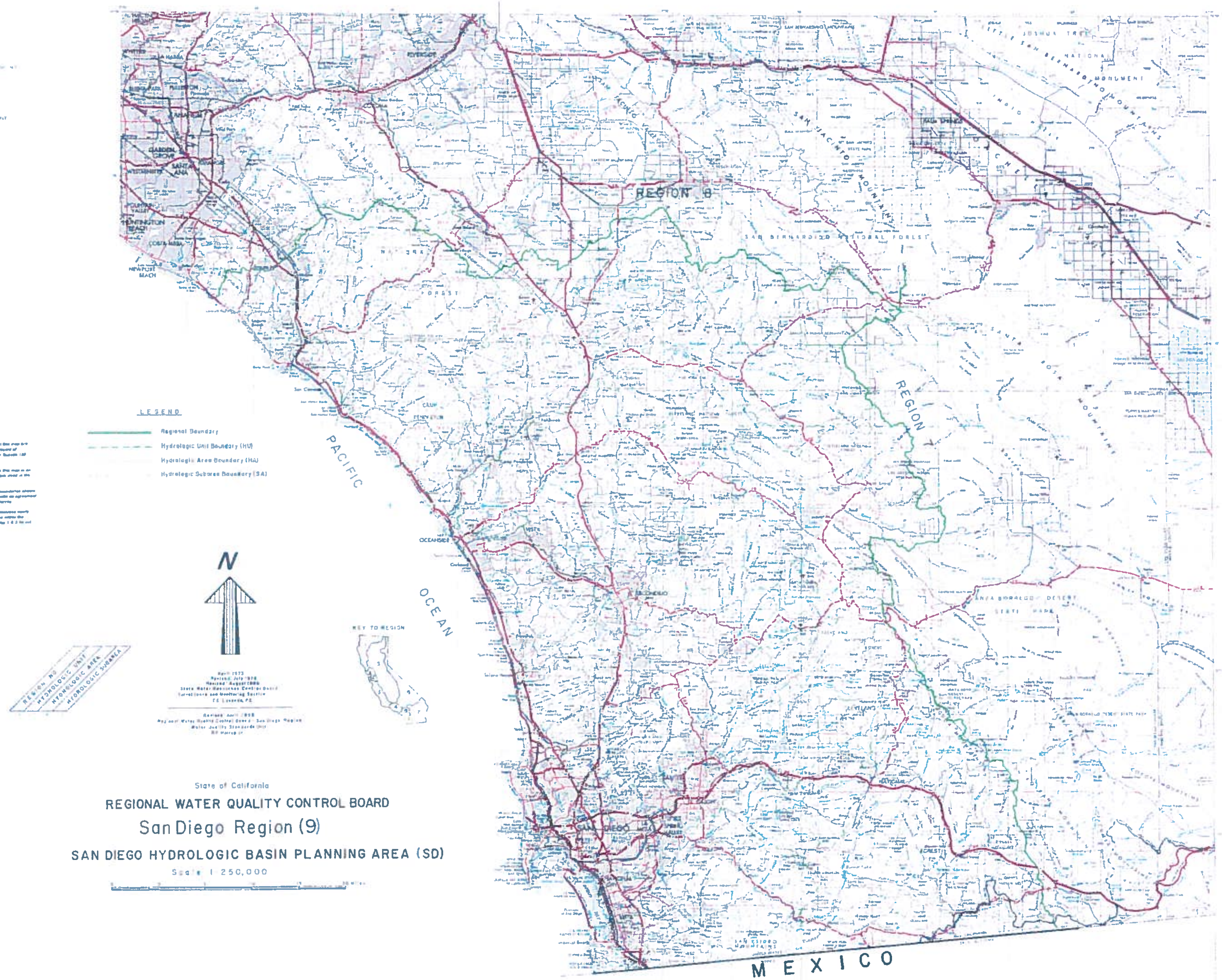
State of California
REGIONAL WATER QUALITY CONTROL BOARD

Santa Ana Region (8)

SANTA ANA HYDROLOGIC BASIN PLANNING AREA (SA)

Scale in miles
0 8 16 24 32
Scale 1:500,000

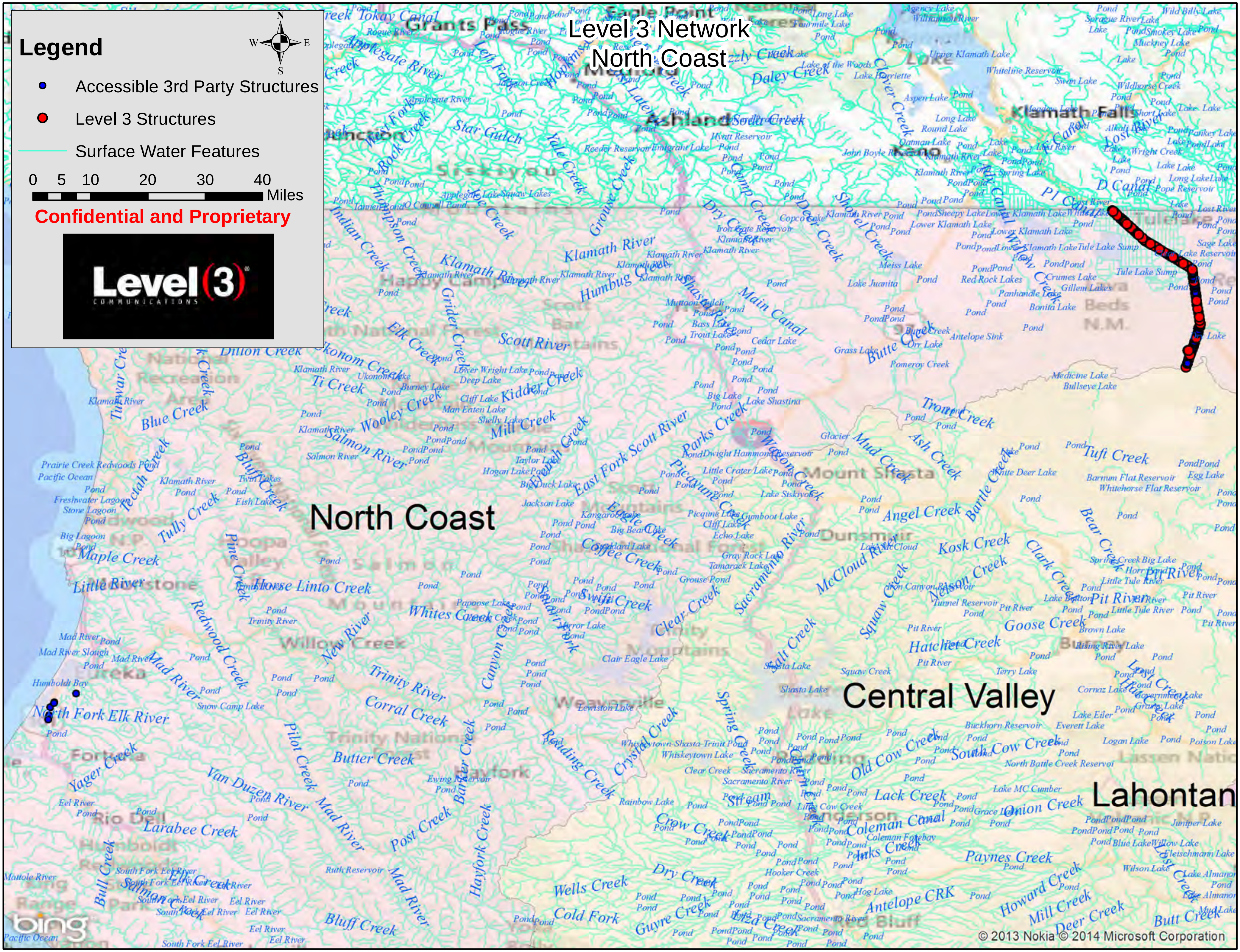
San Diego Region 9


LEGEND
Regional Boundary
Hydrologic Unit Boundary (HU)
Hydrologic Area Boundary (HA)
Hydrologic Subarea Boundary (SA)
PACIFIC
OCEAN
OCEANSIDE
NEWPORT BEACH
REGION 8
REGION 7
SAN BERNARDINO NATIONAL FOREST
SANTA ANA MOUNTAINS
SAN JACINTO MOUNTAINS
SANTA ROSA MOUNTAINS
ANZA BORREGO DESERT STATE PARK
MEXICO
N
KEY TO REGION
REGION NO
HYDROLOGIC UNIT
HYDROLOGIC AREA
HYDROLOGIC SUBAREA
State of California
REGIONAL WATER QUALITY CONTROL BOARD
San Diego Region (9)
SAN DIEGO HYDROLOGIC BASIN PLANNING AREA (SD)
Scale 1:250,000

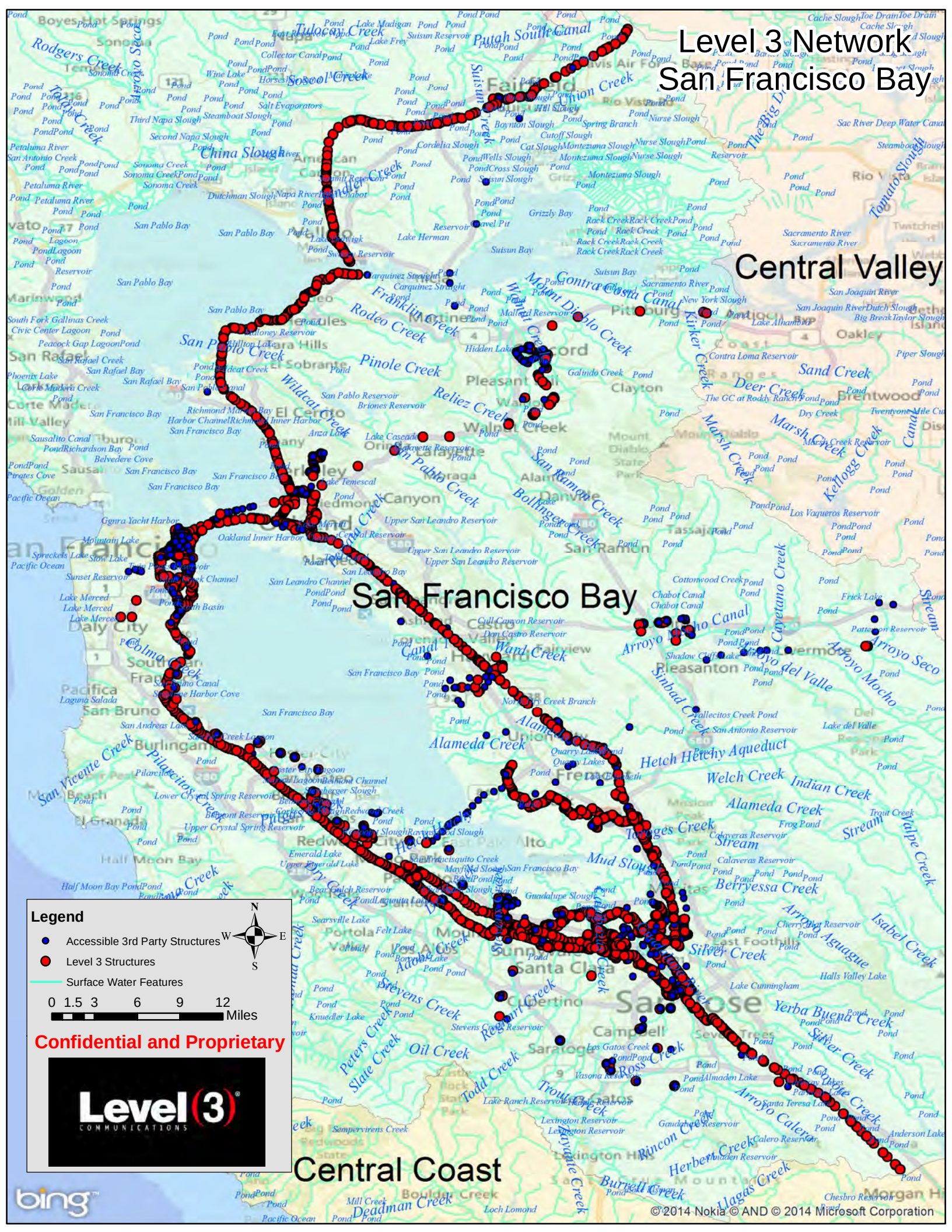
APPENDIX B

Underground Vault Location Maps

North Coast Region 1


Level 3 Network
North Coast
Legend
Accessible 3rd Party Structures
Level 3 Structures
Surface Water Features
0 5 10 20 30 40
Miles
Confidential and Proprietary
Level(3)
COMMUNICATIONS
North Coast
Central Valley
Lahontan
© 2013 Nokia © 2014 Microsoft Corporation
bing

San Francisco Bay Region 2


Level 3 Network
San Francisco Bay
Central Valley
San Francisco Bay
Central Coast
Legend
Accessible 3rd Party Structures
Level 3 Structures
Surface Water Features
0 1.5 3 6 9 12
Miles
N
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Confidential and Proprietary
Level 3 COMMUNICATIONS
bing
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Central Coast Region 3


San Francisco Bay
Level 3 Network
Central Coast
Central Valley
Central Coast
Los Angeles
Los Angeles
Legend
Accessible 3rd Party Structures
Level 3 Structures
Surface Water Features
0 4 8 16 24 32
Miles
N
W
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S
Confidential and Proprietary
Level 3 COMMUNICATIONS
bing
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Los Angeles Region 4


Central Valley
Central Coast
Level 3 Network
Los Angeles
Lahontan
Los Angeles
Santa Ana
San Diego
Legend
Accessible 3rd Party Structures
Level 3 Structures
Surface Water Features
0 2.75 5.5 11 16.5 22
Miles
Confidential and Proprietary
Level (3) COMMUNICATIONS
bing
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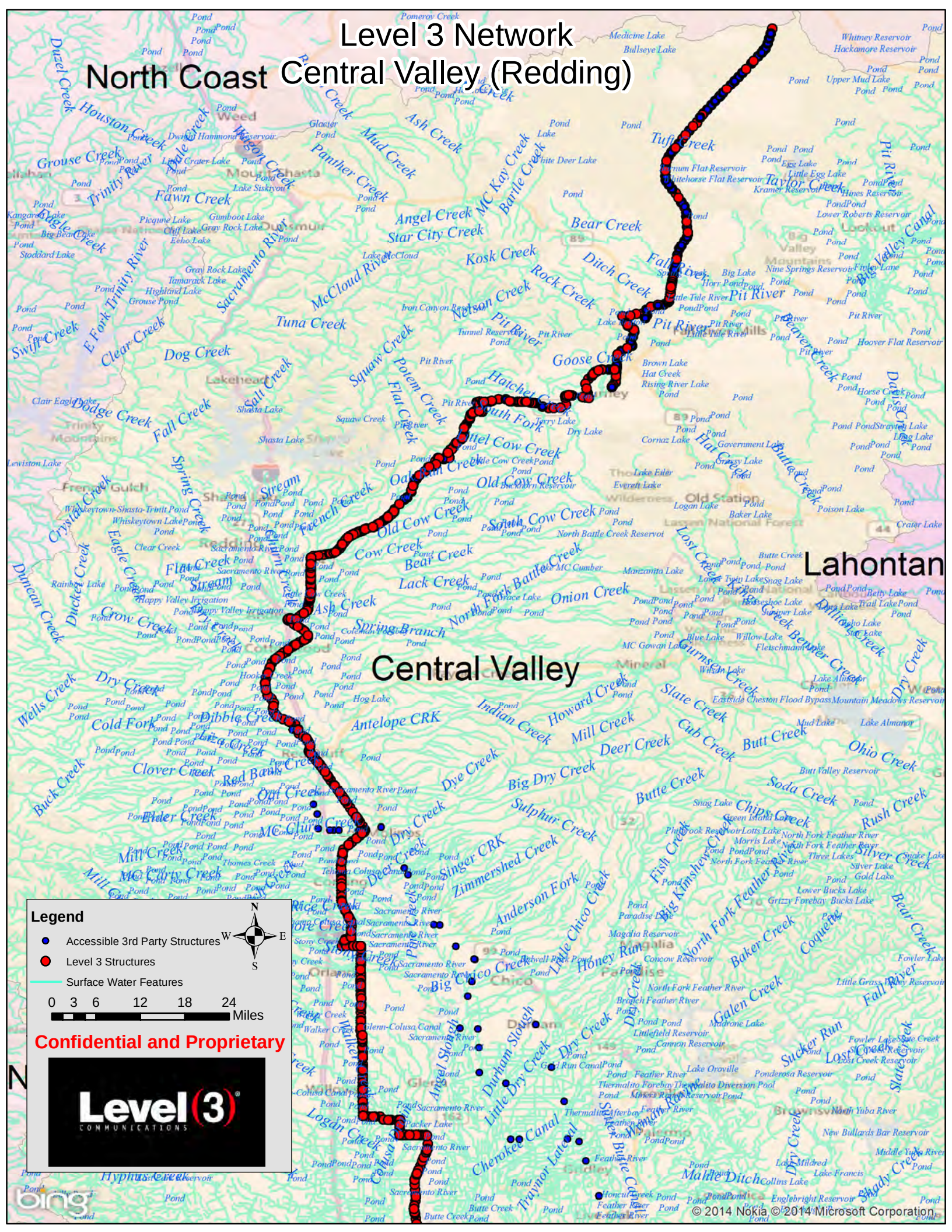
Central Valley Region 5 – Redding


Level 3 Network
Central Valley (Redding)
North Coast
Central Valley
Lahontan
Legend
Accessible 3rd Party Structures
Level 3 Structures
Surface Water Features
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Miles
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Confidential and Proprietary
Level 3
COMMUNICATIONS
bing
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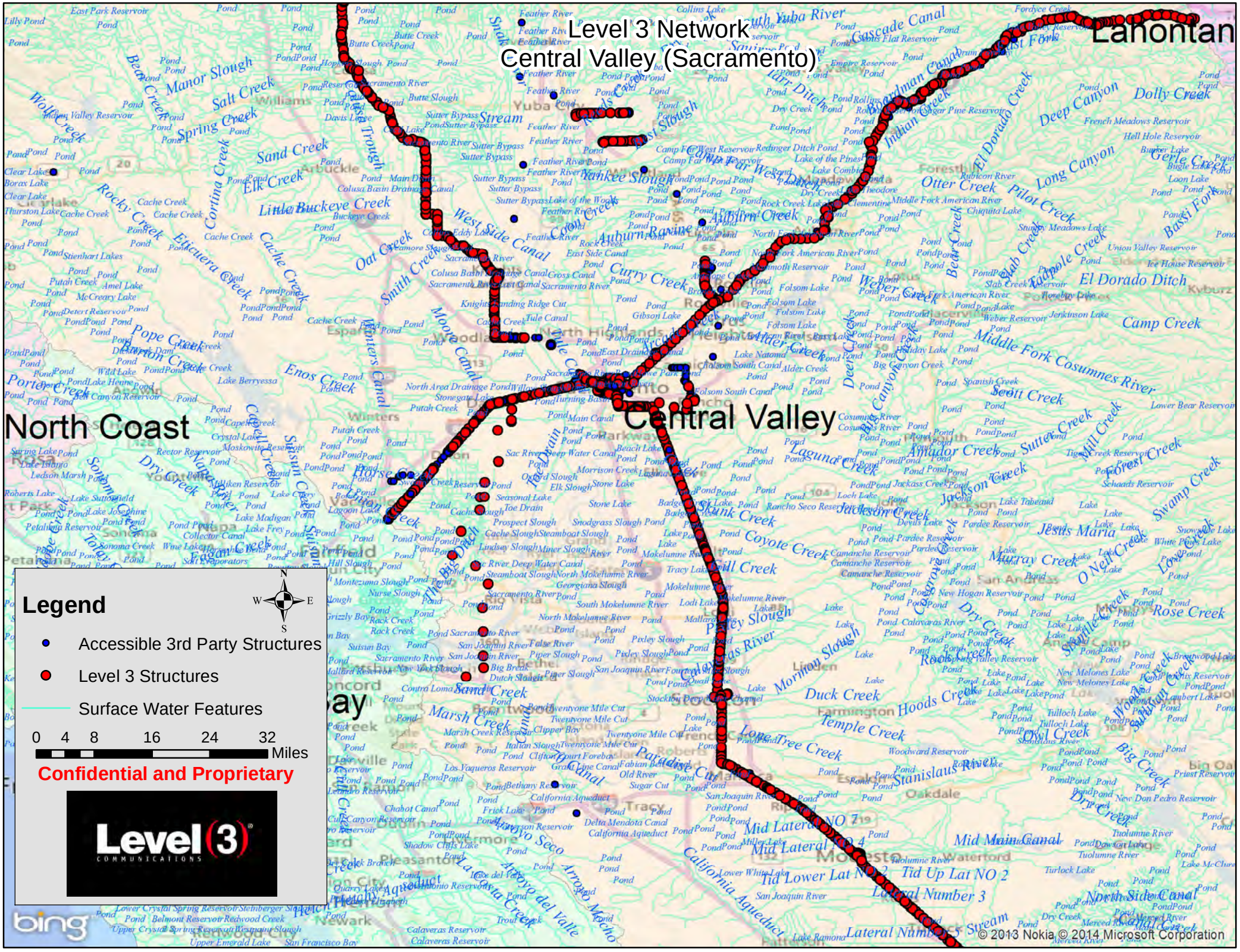
Central Valley Region 5 – Sacramento


Level 3 Network
Central Valley (Sacramento)
Lahontan
North Coast
Central Valley
Legend
Accessible 3rd Party Structures
Level 3 Structures
Surface Water Features
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Miles
Confidential and Proprietary
Level (3) COMMUNICATIONS
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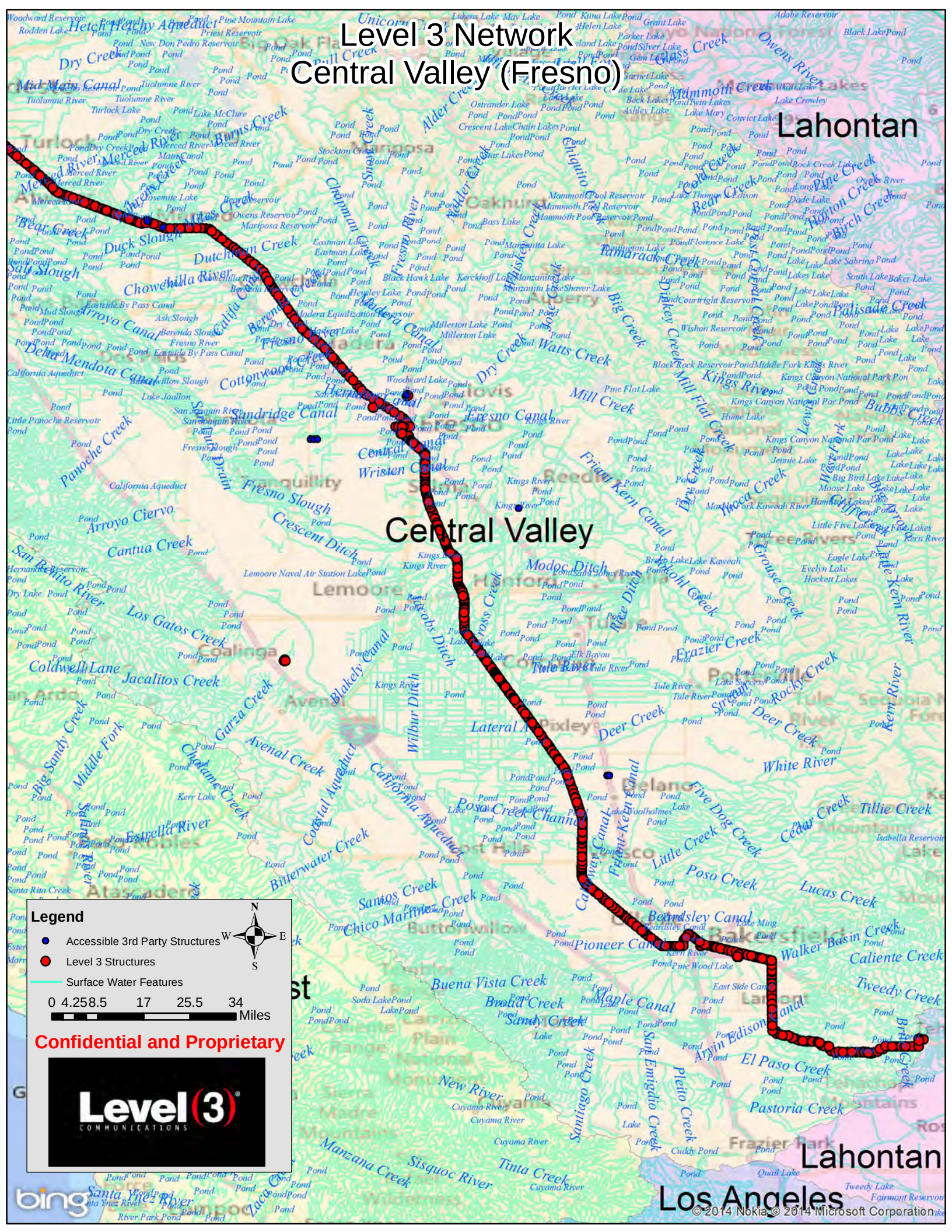
Central Valley Region 5 – Fresno


Level 3 Network
Central Valley (Fresno)
Lahontan
Central Valley
Lahontan
Los Angeles
Legend
Accessible 3rd Party Structures
Level 3 Structures
Surface Water Features
0 4.25 8.5 17 25.5 34
Miles
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Confidential and Proprietary
Level 3 COMMUNICATIONS
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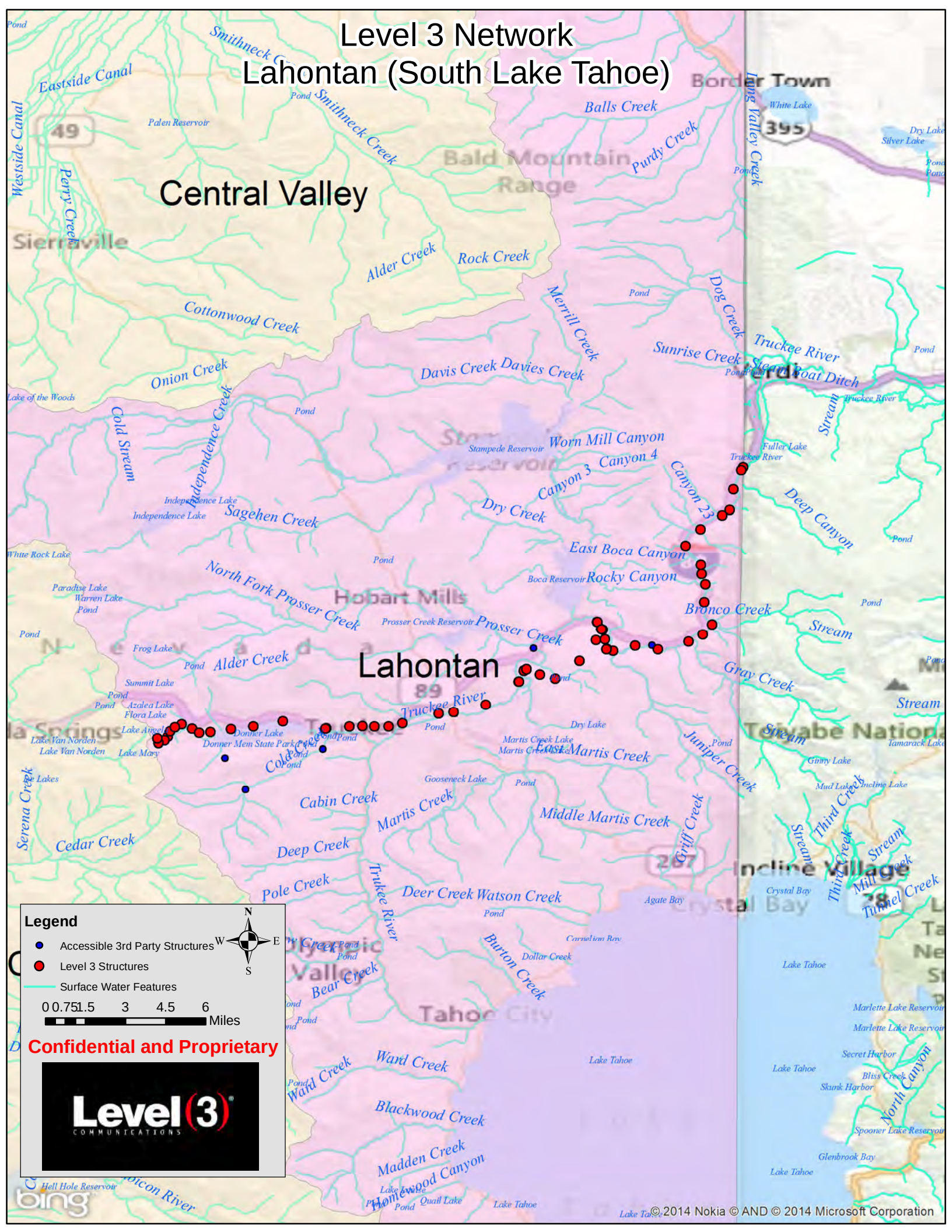
Lahontan Region 6 – South Lake Tahoe


Level 3 Network
Lahontan (South Lake Tahoe)
Central Valley
Lahontan
Sierraville
Hobart Mills
Tahoe City
Incline Village
Crystal Bay
Truckee River
Prosser Creek
Boca Reservoir
Stampede Reservoir
Prosser Creek Reservoir
Independence Lake
Donner Lake
Donner Mem State Park
Martis Creek Lake
Lake Tahoe
Eastside Canal
Westside Canal
Smithneck Creek
Palen Reservoir
Perry Creek
Balls Creek
Purdy Creek
Bald Mountain Range
Long Valley Creek
White Lake
Dry Lake
Silver Lake
Alder Creek
Rock Creek
Cottonwood Creek
Onion Creek
Davis Creek
Davies Creek
Merrill Creek
Dog Creek
Sunrise Creek
Steamboat Ditch
Truckee River
Lake of the Woods
Cold Stream
Independence Creek
Sagehen Creek
Worn Mill Canyon
Canyon 4
Canyon 3
Canyon 23
Dry Creek
Deep Canyon
Fuller Lake
White Rock Lake
Paradise Lake
Warren Lake
North Fork Prosser Creek
East Boca Canyon
Rocky Canyon
Bronco Creek
Frog Lake
Alder Creek
Summit Lake
Azalea Lake
Flora Lake
Lake Angela
Lake Van Norden
Lake Mary
Cold Creek
Gray Creek
Stream
Dry Lake
East Martis Creek
Martis Creek Lake
Juniper Creek
Tamarack Lake
Ginny Lake
Mud Lake
Incline Lake
Serena Creek
Cedar Creek
Cabin Creek
Martis Creek
Middle Martis Creek
Griff Creek
Third Creek
Deep Creek
Pole Creek
Trukee River
Deer Creek
Watson Creek
Agate Bay
Tunnel Creek
Burton Creek
Dollar Creek
Bear Creek
Ward Creek
Blackwood Creek
Madden Creek
Homewood Canyon
Quail Lake
Marlette Lake Reservoir
Secret Harbor
Bliss Creek
Skunk Harbor
North Canyon
Spooner Lake Reservoir
Glenbrook Bay
Hell Hole Reservoir
Legend
Accessible 3rd Party Structures
Level 3 Structures
Surface Water Features
0 0.75 1.5 3 4.5 6
Miles
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Confidential and Proprietary
Level 3 COMMUNICATIONS
bing
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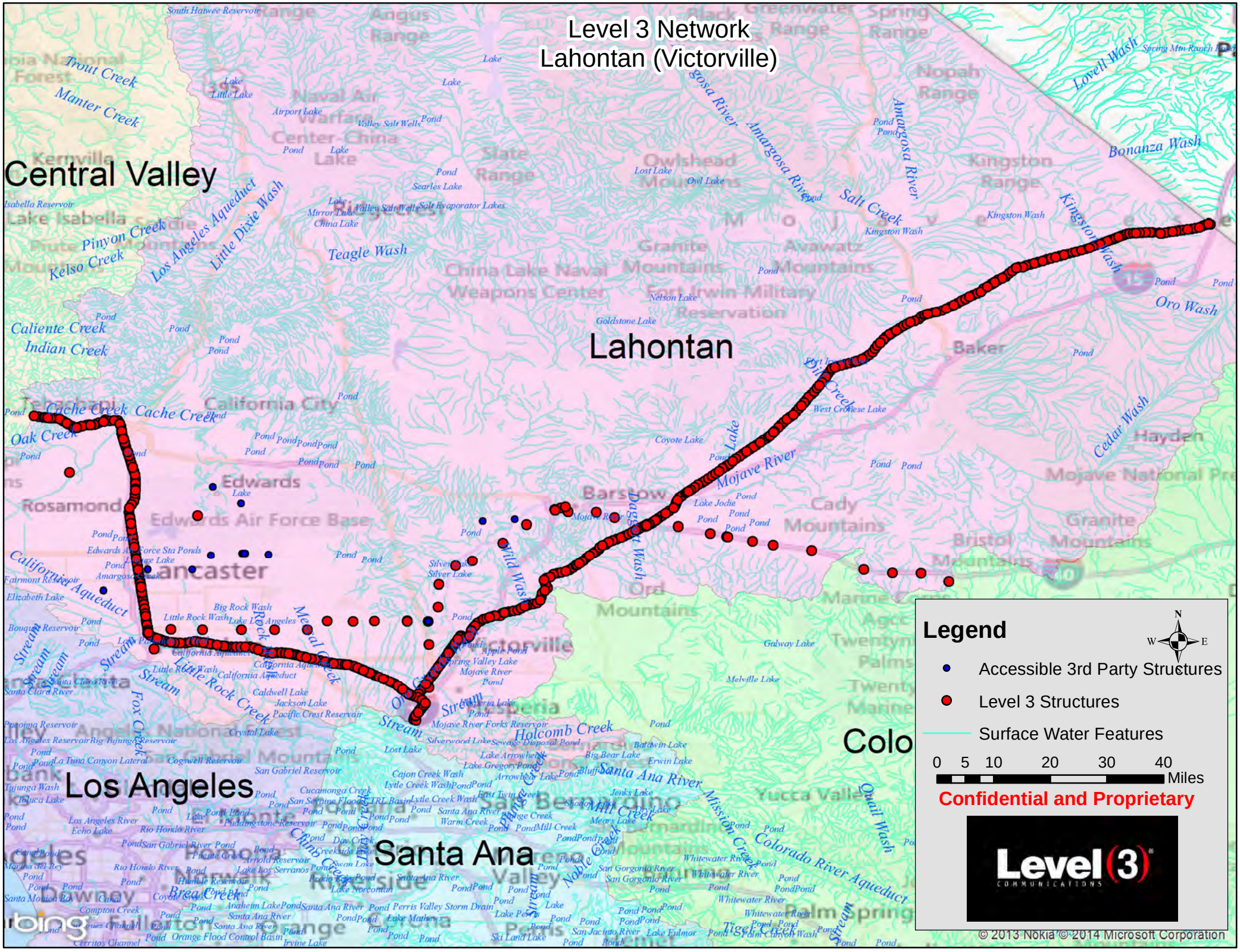
Lahontan Region 6 – Victorville


Level 3 Network
Lahontan (Victorville)
Central Valley
Lahontan
Los Angeles
Santa Ana
Colo
Legend
Accessible 3rd Party Structures
Level 3 Structures
Surface Water Features
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Miles
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Colorado River Basin Region 7


Level 3 Network
Colorado River
Legend
Accessible 3rd Party Structures
Level 3 Structures
Surface Water Features
0 4 8 16 24 32
Miles
Confidential and Proprietary
Level(3) COMMUNICATIONS
N
S
E
W
Colorado River
Santa Ana
Santa Ana
San Diego
Mexicali
Calexico
Palm Springs
Twentynine Palms
Joshua Tree National Park
Mojave National Preserve
Colorado River Aqueduct
All American Canal
Coachella Canal
East Highline Canal
Salton Sea
Sacramento Wash
Piute Wash
Big Wash
Sunflower Wash
Pinto Wash
Porcupine Wash
Pinkham Wash
Salt Creek
Whitewater River
Coyote Creek
San Felipe Creek
New River
Alamo River
Tumco Wash
Milpitas Wash
Arroyo Seco
Ship Creek
Gary Wash
MC Coy Wash
Chemehuevi Wash
Danby
Chubbuck
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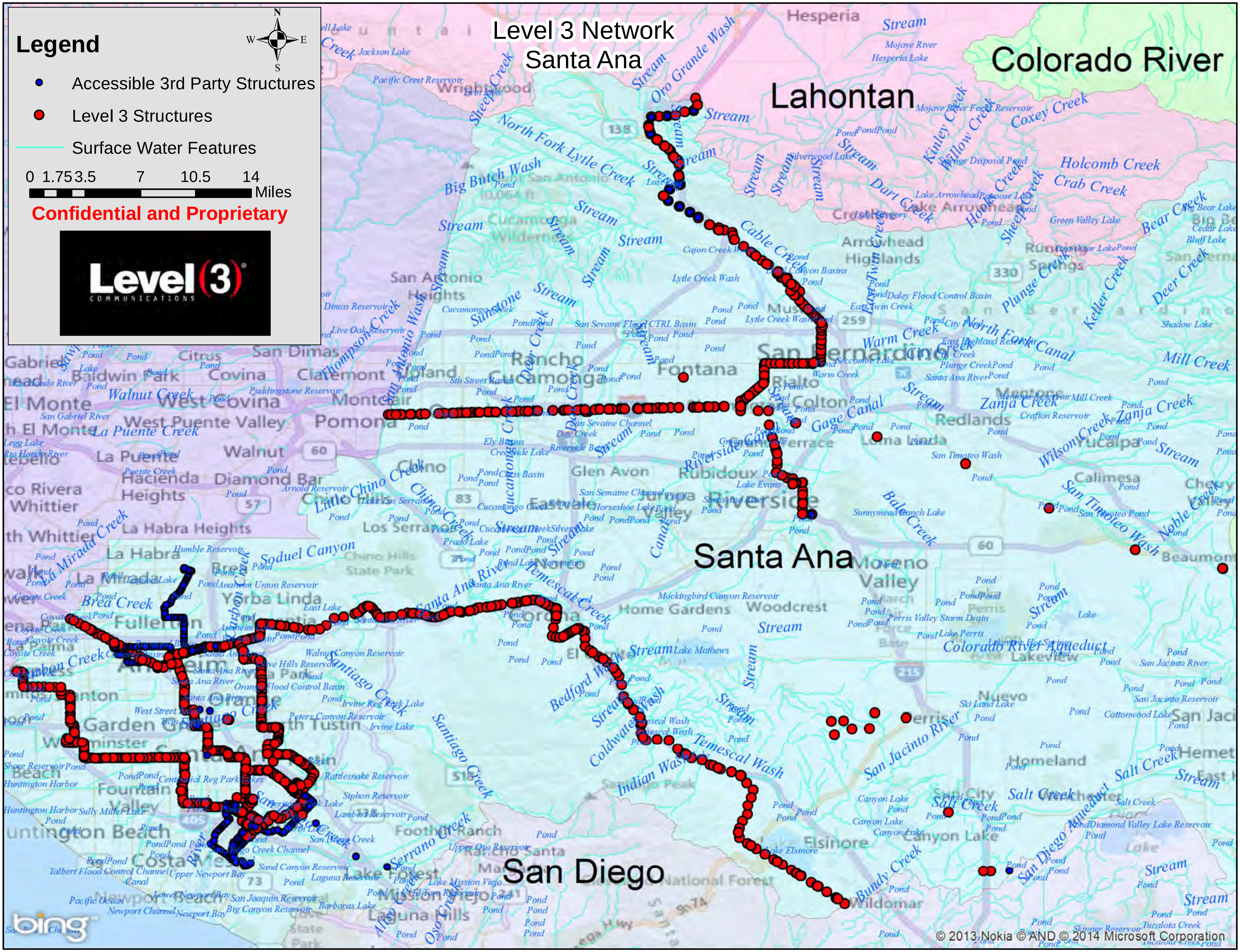
Santa Ana Region 8


Level 3 Network
Santa Ana
Legend
N
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S
Accessible 3rd Party Structures
Level 3 Structures
Surface Water Features
0 1.75 3.5 7 10.5 14
Miles
Confidential and Proprietary
Level(3)
COMMUNICATIONS
Lahontan
Colorado River
Santa Ana
San Diego
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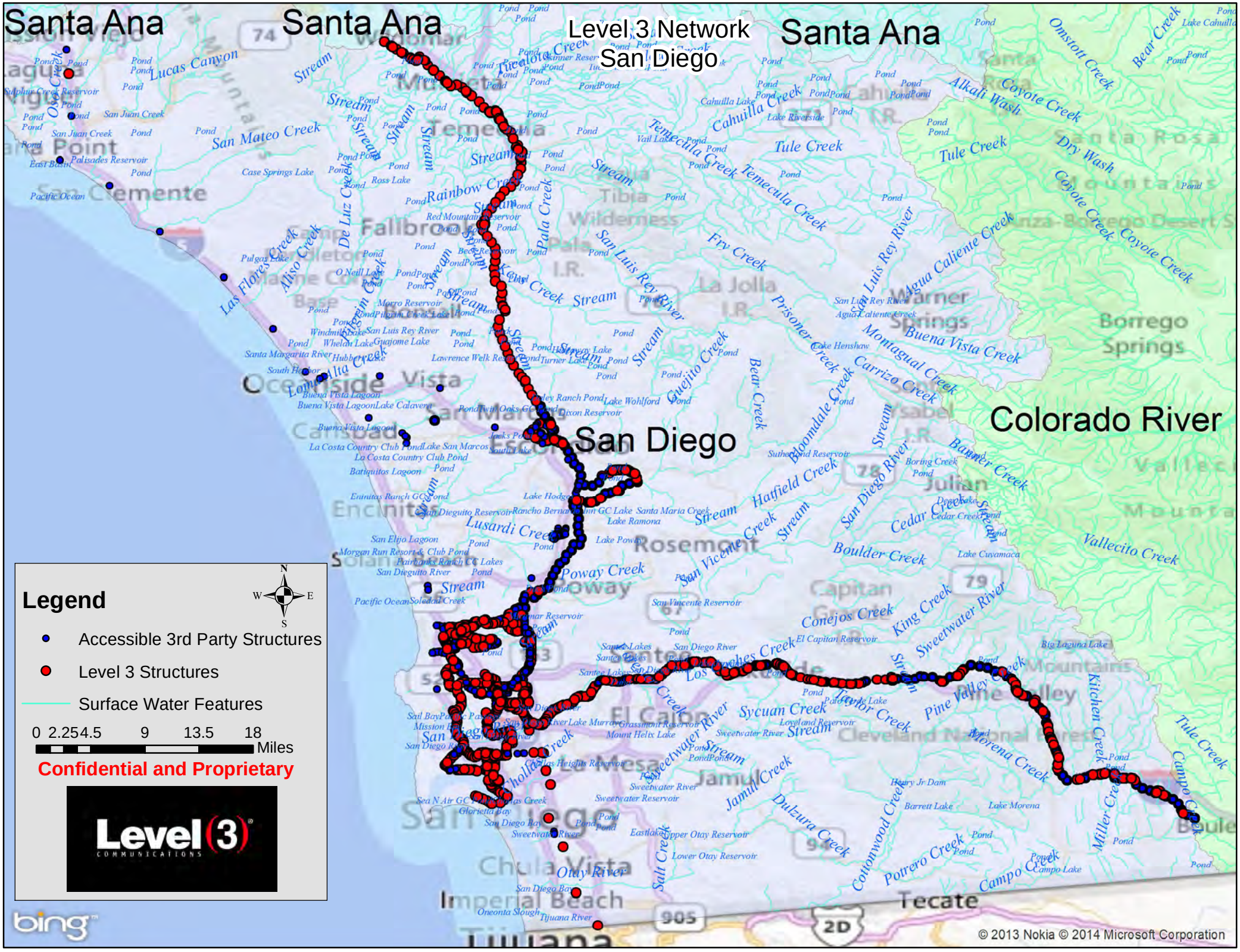
San Diego Region 9


Level 3 Network
San Diego
Santa Ana
Santa Ana
Santa Ana
San Diego
Colorado River
Legend
Accessible 3rd Party Structures
Level 3 Structures
Surface Water Features
0 2.254.5 9 13.5 18
Miles
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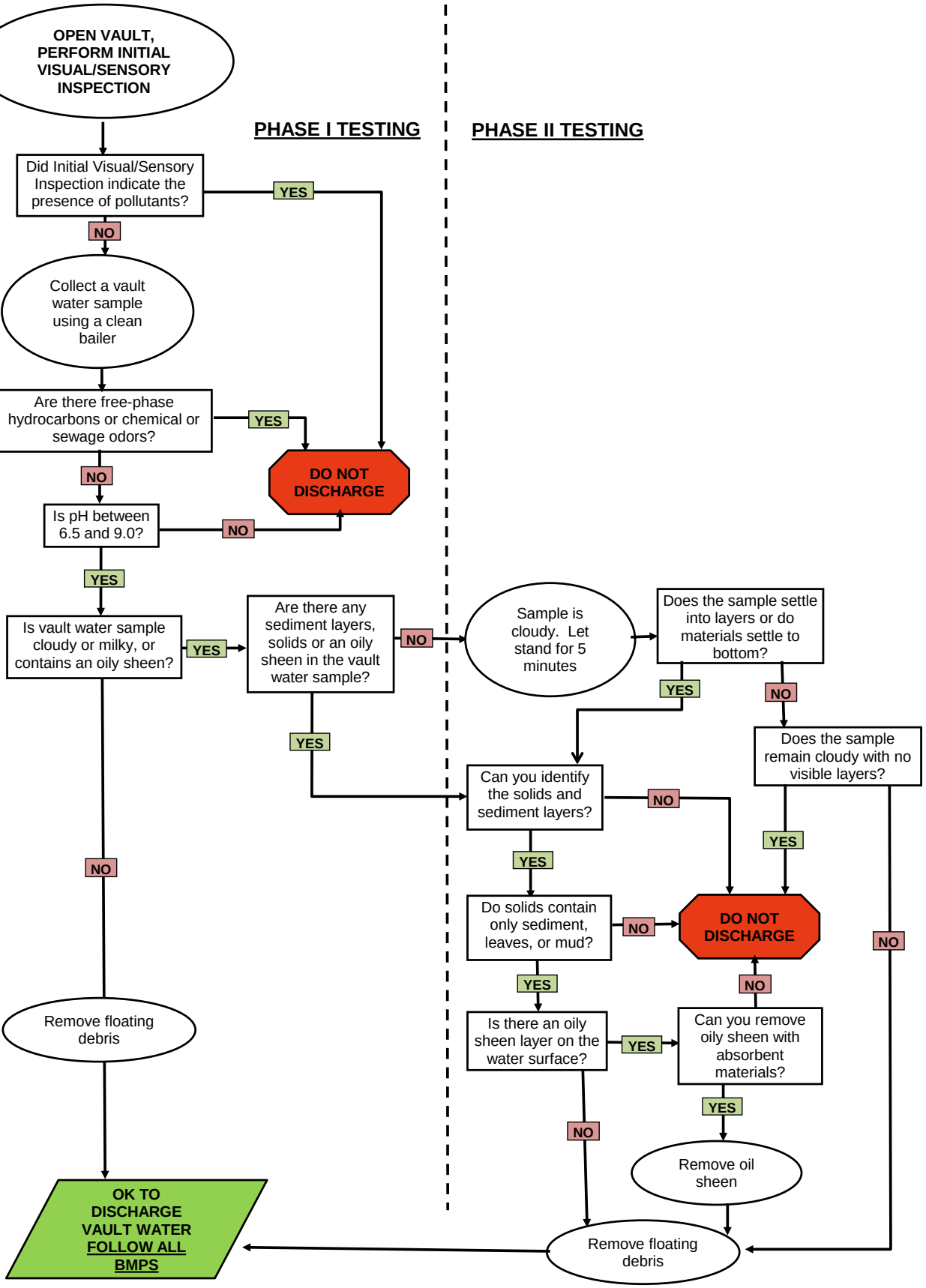
APPENDIX C

Evaluation Chart for Utility Vault Discharges

LEVEL 3 EVALUATION FLOW CHART FOR UTILITY VAULT DISCHARGES



APPENDIX D

Underground Structure Inspection Form

LEVEL 3 UNDERGROUND STRUCTURE INSPECTION FORM AND DISCHARGE LOG

Vault Location	
Location Code	
Date	
Time	

1 INITIAL VAULT INSPECTION

	YES	NO
Vault integrity good?		
Equipment integrity good?		
Water Free from Odors and Discoloration?		

If any of the answers are "NO", do not discharge and contact Level 3 Preventive Maintenance

If all answers are "YES", go to Section 2 below

2 COLLECT A VAULT WATER SAMPLE ACCORDING TO POLLUTION PREVENTION PLAN

Phase I Testing

	YES	NO
Sample contains visible hydrocarbon layers?		
Sample contains odors?		
Is pH of sample not between 6.5 and 9.0?		
Water sample has visible oily sheen?		
Is water sample cloudy or milky?		
Are there sediments/solid layers?		

If any of the answers are "YES", do not discharge and go to Phase II Testing below
If all answers are "NO," remove floating debris and discharge using BMPs in accordance with the Pollution Prevention Plan

Phase II Testing

	YES	NO
Does cloudiness clear after 5 minutes?		
Are layers only soil, mud, leaves?		
Is there an absence of odors?		
Can oil sheen be removed with pads?		

If all answers are "YES," remove floating debris and discharge using BMPs in accordance with the Pollution Prevention Plan
If any of the answers are "NO", inform Level 3 Environmental Management Team

WATER DISCHARGE LOG

Time Discharge Started

Time Discharge Completed

Discharge Conditions (storm drain, gutter, etc.)

Best Management Practices (BMPs) used

Comments

Number of gallons discharged

If number of gallons discharged is >50,000 gallons, contact Level 3 Environmental Management Team immediately

DISCHARGE CERTIFICATION

Technician Name _____

Signature _____ Date _____