well as a variety of other factors that will ultimately determine the all-in construction costs. The Groundwater Level Monitoring Well Data Gaps Project will be funded using groundwater extraction fees (or other authorized SGMA fee method), unless grant funding is available.

6.6 Stream Gage Data Gaps Project [§354.44(b)(1) and (d)]

§354.44 Projects and Management Actions.
(b) *Each Plan shall include a description of the projects and management actions that include the following:*
(1) *A list of projects and management actions proposed in the Plan with a description of the measurable objective that is expected to benefit from the project or management action. The list shall include projects and management actions that may be utilized to meet interim milestones, the exceedance of minimum thresholds, or where undesirable results have occurred or are imminent.*
(d) *An Agency shall take into account the level of uncertainty associated with the basin setting when developing projects or management actions.*

The Stream Gage Data Gaps Project includes the installation of three new surface water gages to address surface water flow monitoring data gaps, as discussed in Section 5.8 and 5.8.4 and shown on Figure 5.8-01:

- Camino Cielo Road at Ventura River: This gage will be installed and maintained by UVRGA to provide more precise quantification of baseflows entering the Basin via the Ventura River.
- Santa Ana Boulevard at Ventura River: This gage will be installed and maintained by DWR to monitor surface water flow upstream of GDE areas.
- Casitas Springs Area, south of San Antonio Creek confluence (Gage A): This gage will be installed and maintained by UVRGA to monitor streamflow in the Confluence Aquatic Habitat Area.

6.6.1 Relevant Measurable Objective(s) [§354.44(b)(1)]

§354.44 Projects and Management Actions.
(b) *Each Plan shall include a description of the projects and management actions that include the following:*
(1) *A list of projects and management actions proposed in the Plan with a description of the measurable objective that is expected to benefit from the project or management action. The list shall include projects and management actions that may be utilized to meet interim milestones, the exceedance of minimum thresholds, or where undesirable results have occurred or are imminent.*

The relevant measurable objective for the Stream Gage Data Gaps Project is the measurable objective for the depletion of ISW sustainability indicator.

6.6.2 Implementation Triggers [§354.44(b)(1)(A)]

§354.44 Projects and Management Actions.
(b) *Each Plan shall include a description of the projects and management actions that include the following:*
(1) *The Plan shall include the following:*
(A) *A description of the circumstances under which projects or management actions shall be implemented, the criteria that would trigger implementation and termination of projects or management, and the process by which the Agency shall determine that conditions requiring the implementation of particular projects or management actions have occurred.*

The implementation trigger for the Stream Gage Data Gaps Project is GSP Emergency Regulations §354.38(d), which require GSAs to address data gaps before the first 5-year GSP assessment.

6.6.3 Public Notice Process [§354.44(b)(1)(B)]

§354.44 Projects and Management Actions.
(b) *Each Plan shall include a description of the projects and management actions that include the following:*
(1) *The Plan shall include the following:*
(B) *The process by which the Agency shall provide notice to the public and other agencies that the implementation of projects or management actions is being considered or has been implemented, including a description of the actions to be taken.*

UVRGA will continue to follow its adopted SEP (Appendix E) to inform the public about progress on developing the Stream Gage Data Gaps Project.

6.6.4 Permitting and Regulatory Process [§354.44(b)(3)]

§354.44 Projects and Management Actions.
(b) *Each Plan shall include a description of the projects and management actions that include the following:*
(3) *A summary of the permitting and regulatory process required for each project and management action.*

The Stream Gage Data Gaps Project will require the following permits:

- CEQA compliance (most likely a categorical exemption).
- Encroachment Permit – County of Ventura.
- Lake and Streambed Alteration Agreement from CDFW.

6.6.5 Implementation Timeline [§354.44(b)(4)]

§354.44 Projects and Management Actions.
(b) *Each Plan shall include a description of the projects and management actions that include the following:*
(4) *The status of each project and management action, including a time-table for expected initiation and completion, and the accrual of expected benefits.*

The implementation timeline for the Stream Gage Data Gaps Project is as follows:

- Camino Cielo Road at Ventura River: This stilling well at this site was constructed in 2020, and monitoring is scheduled to begin in calendar year 2022.
- Santa Ana Boulevard at Ventura River: This gage was installed and activated by DWR during calendar year 2021.
- Casitas Springs Area, south of San Antonio Creek confluence (Gage A): This gage is budgeted for construction in fiscal year 2023.

6.6.6 Anticipated Benefits [§354.44(b)(5)]

§354.44 Projects and Management Actions.
(b) *Each Plan shall include a description of the projects and management actions that include the following:*
(5) *An explanation of the benefits that are expected to be realized from the project or management action, and how those benefits will be evaluated.*

The Stream Gage Data Gaps Project will address streamflow data gaps:

- Camino Cielo Road at Ventura River: This gage will provide more precise quantification of baseflows entering the Basin via the Ventura River.
- Santa Ana Boulevard at Ventura River: This gage will monitor surface water flow between the areas where indirect depletion effects could potentially occur (Confluence and Foster Park Aquatic Habitat Areas) and the locations of significant pumping in the northern part of the Basin.
- Casitas Springs Area, south of San Antonio Creek confluence (Gage A): This gage will monitor streamflow in the Confluence Aquatic Habitat Area, which is necessary to determine the potential for significant and unreasonable depletions of ISW in this area (See Sections 4.9 and 6.7).

In addition, filling the data gaps will help provide better estimates of indirect depletion and help evaluate the relationship between the depletions of ISW sustainability indictor and the chronic lowering of groundwater levels and reduction of groundwater storage sustainability indicators.

6.6.7 Implementation Approach [§354.44(b)(6)]

§354.44 Projects and Management Actions.
(b) *Each Plan shall include a description of the projects and management actions that include the following:*
(6) *An explanation of how the project or management action will be accomplished. If the project or management actions rely on water from outside the jurisdiction of the Agency, an explanation of the source and reliability of that water shall be included.*

The Santa Ana Boulevard gage is being implemented by DWR. The other two gages will be implemented by UVRGA via professional services contracts.

6.6.8 Legal Authority [§354.44(b)(7)]

§354.44 Projects and Management Actions.
(b) *Each Plan shall include a description of the projects and management actions that include the following:*
(7) *A description of the legal authority required for each project and management action, and the basis for that authority within the Agency.*

UVRGA will rely on the authority provided for under SGMA to implement the project, including contracting for stream gage installation.

6.6.9 Cost & Funding [§354.44(b)(8)]

§354.44 Projects and Management Actions.
(b) *Each Plan shall include a description of the projects and management actions that include the following:*
(8) *A description of the estimated cost for each project and management action and a description of how the Agency plans to meet those costs.*

The estimated cost to implement the Stream Gage Data Gaps Project is approximately $81,000 in 2021 dollars. The estimated costs include access agreements, permitting, project management, and construction costs. These approximate costs are estimates, as there are uncertainties such as site-specific considerations, construction bid environment at the time of bidding, as well as a variety of other factors that will ultimately determine the all-in construction costs. The Stream Gage Data Gaps Project will be funded using groundwater extraction fees (or other authorized SGMA fee method), unless grant funding is available.

6.7 Confluence Aquatic Habitat Area Biological Monitoring Study [§354.44(b)(1) and (d)]

§354.44 Projects and Management Actions.
(b) *Each Plan shall include a description of the projects and management actions that include the following:*
(1) *A list of projects and management actions proposed in the Plan with a description of the measurable objective that is expected to benefit from the project or management action. The list shall include projects and management actions that may be utilized to meet interim milestones, the exceedance of minimum thresholds, or where undesirable results have occurred or are imminent.*
(d) *An Agency shall take into account the level of uncertainty associated with the basin setting when developing projects or management actions.*

This project consists of a biological monitoring study to determine if depletions of ISW cause significant and unreasonable effects on aquatic species in the Confluence Aquatic Habitat Area. The need for this study is described in further detail in Section 4.9.

6.7.1 Relevant Measurable Objective(s) [§354.44(b)(1)]

§354.44 Projects and Management Actions.
(b) *Each Plan shall include a description of the projects and management actions that include the following:*
(1) *A list of projects and management actions proposed in the Plan with a description of the measurable objective that is expected to benefit from the project or management action. The list shall include projects and management actions that may be utilized to meet interim milestones, the exceedance of minimum thresholds, or where undesirable results have occurred or are imminent.*

The relevant measurable objective for Confluence Aquatic Habitat Area Biological Monitoring Study is the measurable objective for the depletions of ISW sustainability indicator.

6.7.2 Implementation Triggers [§354.44(b)(1)(A)]

§354.44 Projects and Management Actions.
(b) *Each Plan shall include a description of the projects and management actions that include the following:*
(1) *The Plan shall include the following:*
(A) *A description of the circumstances under which projects or management actions shall be implemented, the criteria that would trigger implementation and termination of projects or management, and the process by which the Agency shall determine that conditions requiring the implementation of particular projects or management actions have occurred.*

The implementation trigger for implementing the Confluence Aquatic Habitat Area Biological Monitoring Study is GSP Emergency Regulations §354.38(d), which require GSAs to address data gaps before the first 5-year GSP assessment.

6.7.3 Public Notice Process [§354.44(b)(1)(B)]

§354.44 Projects and Management Actions.
(b) *Each Plan shall include a description of the projects and management actions that include the following:*
(1) *The Plan shall include the following:*
(B) *The process by which the Agency shall provide notice to the public and other agencies that the implementation of projects or management actions is being considered or has been implemented, including a description of the actions to be taken.*

UVRGA will continue to follow its adopted SEP (Appendix E) to inform the public about progress on developing the Confluence Aquatic Habitat Area Biological Monitoring Study.

6.7.4 Permitting and Regulatory Process [§354.44(b)(3)]

§354.44 Projects and Management Actions.
(b) *Each Plan shall include a description of the projects and management actions that include the following:*
(3) *A summary of the permitting and regulatory process required for each project and management action.*

No permits or regulatory approvals are anticipated to be required to perform the Confluence Aquatic Habitat Area Biological Monitoring Study.

6.7.5 Implementation Timeline [§354.44(b)(4)]

§354.44 Projects and Management Actions.
(b) *Each Plan shall include a description of the projects and management actions that include the following:*
(4) *The status of each project and management action, including a time-table for expected initiation and completion, and the accrual of expected benefits.*

A Confluence Aquatic Habitat Area Biological Monitoring Study work plan will be developed during fiscal year 2022 to outline the specific schedule and field methods. Monitoring is anticipated to begin during fiscal year 2023 and extend for at least 3 years.

6.7.6 Anticipated Benefits [§354.44(b)(5)]

§354.44 Projects and Management Actions.
(b) *Each Plan shall include a description of the projects and management actions that include the following:*
(5) *An explanation of the benefits that are expected to be realized from the project or management action, and how those benefits will be evaluated.*

The Confluence Aquatic Habitat Area Biological Monitoring Study will determine if depletions of ISW cause significant and unreasonable effects on aquatic species in the Confluence Aquatic Habitat Area and, hence, whether SMC are warranted for depletions of ISW in the Confluence Aquatic Habitat Area. If potential significant and unreasonable effects are identified during the focused monitoring period, a long-term monitoring program will be developed.

6.7.7 Implementation Approach [§354.44(b)(6)]

§354.44 Projects and Management Actions.
(b) *Each Plan shall include a description of the projects and management actions that include the following:*
(6) *An explanation of how the project or management action will be accomplished. If the project or management actions rely on water from outside the jurisdiction of the Agency, an explanation of the source and reliability of that water shall be included.*

A monitoring plan will be developed during fiscal year 2022 to outline the specific schedule and field methods. A data assessment report will be completed at the end of the monitoring period to evaluate data and summarize findings to guide the first 5-year GSP assessment. Monitoring will continue a long-term basis if UVRGA concludes that ISW depletion may cause significant and unreasonable effects on the aquatic species in the Confluence Aquatic Habitat Area. The project will be implemented by UVRGA via professional services contracts.

6.7.8 Legal Authority [§354.44(b)(7)]

§354.44 Projects and Management Actions.
(b) *Each Plan shall include a description of the projects and management actions that include the following:*
(7) *A description of the legal authority required for each project and management action, and the basis for that authority within the Agency.*

UVRGA will rely on the authority provided for under SGMA to implement the project, including contracting for the study.

6.7.9 Cost & Funding [§354.44(b)(8)]

§354.44 Projects and Management Actions.
(b) *Each Plan shall include a description of the projects and management actions that include the following:*
(8) *A description of the estimated cost for each project and management action and a description of how the Agency plans to meet those costs.*

The estimated cost to implement Confluence Aquatic Habitat Area Biological Monitoring Study is approximately $162,000 in 2021 dollars. The estimated costs include the monitoring plan, monitoring

activities, data assessment, reporting, and project management. These approximate costs are estimates, as there are uncertainties such as the scope of the final approved monitoring plan. The Confluence Aquatic Habitat Area Biological Monitoring Study will be funded using groundwater extraction fees (or other authorized SGMA fee method), unless grant funding is available.

If potential significant and unreasonable effects are identified during the focused monitoring period, a long-term monitoring program will be developed. The GSP implementation budget includes ~$9,000 per year (in 2021 dollars) for ongoing monitoring, if needed.

7.0 GSP Implementation

This section presents estimated GSP implementation costs and schedule. Please note that the costs and schedule are approximate estimates based on currently available information and will be reviewed and updated during the Agency's annual budgeting process. Importantly, some monitoring activities included in this GSP may overlap with future monitoring programs that may be developed as part of a Ventura River Adjudication judgment and/or implementation of the SWRCB's Instream Flow Enhancement program. UVRGA will coordinate GSP implementation with these and other efforts in the watershed to minimize redundancy and costs to the water users of the Basin.

7.1 Estimate of GSP Implementation Costs [§354.6(e)]

§354.6 Agency Information. *When submitting an adopted Plan to the Department, the Agency shall include a copy of the information provided pursuant to Water Code Section 10723.8, with any updates, if necessary, along with the following information:*

(e) *An estimate of the cost of implementing the Plan and a general description of how the Agency plans to meet those costs.*

This section describes the scope and estimated costs for GSP implementation. Implementation cost considerations include UVRGA administration, outreach and engagement, coordination with water management efforts by others, monitoring, addressing data gaps, data management, planning for projects and management actions, GSP assessments, GSP updates, maintaining a prudent fiscal reserve, and other costs estimated over the GSP 20-year implementation horizon. Importantly, implementation costs for any projects and management actions deemed necessary to address the measurable objectives are not included because project and management actions that would be implemented by UVRGA are not yet identified and will be developed, as needed, during GSP implementation. Project and management action scope, schedule, and costs will be added to the GSP once data gaps have been addressed and any projects or management actions have been identified.

The following sections present estimated costs for each major expense category. The estimated costs include annual costs for ongoing activities and estimated costs for one-time activities. This approach enables calculating costs through the first GSP assessment and update to better inform UVRGA's annual and multiyear budgeting processes. Because costs are based on the best available estimates at the time of preparation, actual costs may vary from those included in the projections below. UVRGA will coordinate GSP implementation with other water management efforts in the watershed (e.g., Ventura River Adjudication judgement and SWRCB's Instream Flow Enhancement program) to minimize duplication of effort and costs to the water users of the Basin.

The following sections describe the scope of the various GSP implementation activities. Associated costs are presented in Table 7.1-01. In general, all costs were developed using 2021 dollars and escalated by 3% per year for the remainder of the 20-year GSP implementation period.

7.1.1 Agency Administration

This category includes administrative staff support, Treasurer (CPA), Executive Director, insurance, organizational memberships and conferences, miscellaneous supplies, and materials. The estimated costs are presented in Table 7.1-01. Executive management is provided under contract with an independent

consultant, Bondy Groundwater Consulting, Inc. (Bryan Bondy). Mr. Bondy serves as the Agency's Executive Director and the GSP Plan Manager. Administrative support is provided by Agency Counsel's administrative staff under contract. Accounting support is provided under contract with Carrie Troup, CPA. This budget category includes finance-related costs for routine accounts payable and receivable functions, extraction fee billing, financial reporting, and financial audits. Administrative costs also include annual liability insurance costs, IT services (website, e-mail, and cloud storage), and incidentals (postage, copies, etc.). UVRGA does not own or lease any office space or office equipment.

7.1.2 Legal Counsel

Legal services are provided under contract with Olivarez Madruga Lemieux O'Neill. The budget assumes legal review of contracts and access agreements as well as consultation on other matters, such as Brown Act and groundwater extraction fee issues.

7.1.3 Groundwater Management, Coordination, and Outreach

GSP implementation will require certain management and coordination activities:

- **Ongoing SGMA Outreach and Stakeholder Engagement:** The Executive Director and Ad Hoc Stakeholder Engagement Committee will perform ongoing outreach required by SGMA concerning GSP implementation in accordance with the UVRGA SEP (Appendix E).
- **Monitor and Coordinate with Local Water Management Activities:** The Executive Director will monitor activities of the Member Agencies, land use planning agencies, VRWC (Integrated Regional Water Management program), Ventura Watershed Instream Flow Enhancement and Water Resiliency Regional Framework planning process, OBGMA (GSA for the adjacent Ojai Basin), and the Ventura River Watershed Adjudication.
- **San Antonio Creek Water Management:** As described in Section 3.3, Water Budget Components, of this GSP, inflows from San Antonio Creek are part of the water balance for the UVRGB and the creek provides important habitat for aquatic species that also inhabit the Basin aquatic GDE areas. Therefore, UVRGA has an interest in the quantification and management of water flows in San Antonio Creek. Management of San Antonio Creek flows will require focused coordination with OBGMA (for outflows from the Ojai Basin to San Antonio Creek), SWRCB, and others for those portions of the San Antonio Creek drainage that lie outside of OBGMA. The UVRGA Board has requested that the Executive Director work with others to develop an understanding of San Antonio Creek flows and depletions of those flows. This effort is listed as Action No. 1-3 in Table 6.1-01, "Outline of Proposed Process for Developing and Implementing Projects and/or Management Actions to Address Indirect ISW Depletion in the Foster Park Aquatic Habitat Area."
- **Monitor and Coordinate with the SWRCB Ventura River Instream Flow Enhancement Program:** The Executive Director will continue to participate on the SWRCB Technical Advisory Committee for the Instream Flow Enhancement Program. This effort includes technical review and commenting on SWRCB work products. The Executive Director will also continue work with SWRCB staff on coordination of overlapping elements of the SGMA implementation and the Instream Flow Enhancement Program.
- **SGMA Program:** The Executive Director will track DWR updates concerning SGMA and related programs.

This cost category also includes miscellaneous technical support that may be needed to implement the GSP that is not captured in other cost categories. The specific needs and costs are yet to be identified but it is expected, as the initial GSP implementation efforts proceed, that these needs will become evident. Examples of technical support are potential tasks such as ongoing data review (outside of annual reporting and GSP evaluation), day-to-day data management, review of funding mechanisms, development of alternative funding mechanisms (grants), and other technical issues that may arise during plan implementation. It is envisioned that much of the work will be completed by the Executive Director with support from other consultants, as needed.

Lastly, the first year (fiscal year 2022) budget includes $25,000 to apply for a GSP Implementation Grant.

7.1.4 Monitoring Program

UVRGA's proposed monitoring program is presented in the monitoring section (Section 5). The monitoring program consists of the following elements:

- Groundwater Elevation Monitoring Network.
- Groundwater Quality Monitoring Network.
- Streamflow Monitoring Network.
- Riparian GDE Monitoring.
- Aquatic GDE Monitoring.

Each monitoring element is described in the sections below. The overall budget for the monitoring program includes project management costs (assumed 10% of the total monitoring costs). It is noted that some monitoring activities may overlap with future monitoring programs that may be developed as part of a Ventura River Adjudication judgment and/or implementation of the SWRCB's Instream Flow Enhancement Program. UVRGA will coordinate GSP implementation with these and other efforts in the watershed to minimize redundancy and costs to the water users of the Basin.

7.1.4.1 Groundwater Elevation Monitoring Network

As discussed in Section 5.3, the groundwater elevation monitoring network consists of wells monitored by UVRGA, Member Agencies, and the VCWPD. The GSP implementation budget includes costs for ongoing monitoring by UVRGA and incorporation of new wells described below. The costs for ongoing groundwater elevation by others are included in their budgets. UVRGA's approximate cost for groundwater elevation monitoring is ~$7,000 in 2021 dollars. However, it is noted that the monitoring costs are projected to increase as new wells are added to the monitoring network, as described below.

7.1.4.1.1 Expansion of Groundwater Elevation Monitoring Network to Address Data Gaps

As discussed in Sections 5.3.4, certain data gaps in the groundwater elevation monitoring network will be addressed as part of GSP implementation. In summary, it was concluded that five monitoring wells are needed between Highway 150 and Foster Park to (1) address a data gaps within the South Santa Ana Riparian GDE Unit and the Confluence Aquatic Habitat Area; (2) monitor groundwater storage and flow upstream of and entering the South Santa Ana Riparian GDE Unit and the Confluence Aquatic Habitat Area

(3) monitor groundwater levels and storage upstream and downstream of the confluence with San Antonio Creek; (4) monitor groundwater storage and flow upstream of and entering the Foster Park Riparian GDE Unit and Foster Park Aquatic Habitat Area; (5) correlate groundwater levels with stream gages; and (6) determine whether or how the groundwater levels and storage SMC impact attainment of the measurable objective for the depletions of ISW sustainability indicator. Five groundwater monitoring well sites are proposed in Section 5 to address these data needs (Figure 5.3-01). Pursuant to GSP Emergency Regulations §354.38(d), the data gaps must be addressed prior to the first 5-year GSP assessment. The budget assumes that three of the five sites will be addressed by obtaining access to existing wells for monitoring. There are no known existing wells located in the vicinity of the other data gap areas; these areas will require construction of two monitoring wells.

The estimated costs to address the groundwater level data gaps is (i.e., add three existing wells and construct two new monitoring well) is ~$270,000 in 2021 dollars. The estimated costs include access agreements, permitting, project management, and construction costs. These approximate costs are estimates, as there are uncertainties such as site-specific considerations, construction bid environment at the time of bidding, as well as a variety of other factors that will ultimately determine the all-in construction costs.

In addition to the monitoring wells described above, it is proposed that UVRGA add existing wells in other areas of the monitoring network, if opportunities arise. Incorporating additional wells will help improve UVRGA's understanding of Basin conditions and numerical model calibration. The budget includes costs to incorporate up to six additional existing wells to enhance the monitoring network. For budgeting purposes, it is assumed these wells would be added before fiscal year 2026.

7.1.4.2 Groundwater Quality Monitoring

The current groundwater quality monitoring network consists of wells sampled by VCWPD and public water system well owners who are required to report to the DDW (Table 5.6-01). Monitoring is described in detail in Section 5.6. The costs for ongoing monitoring of the existing monitoring network are included in the budgets of the current monitoring entities. Most wells in the network are sampled to comply with DDW regulations, which generally have infrequent sampling requirements. To meet the GSP's water quality monitoring needs, the GSP implementation budget includes $4,000 (in 2021 dollars) for labor to coordinate more frequent sampling from eight wells and payment of laboratory analytical fees.

7.1.4.3 Streamflow Monitoring Network

7.1.4.3.1 Stream Gaging

As discussed in Section 5.8, the proposed streamflow monitoring network consists of gages maintained by UVRGA and other agencies, including VCWPD, City of Ventura, DWR, and the USGS. UVRGA installed stream gage infrastructure at the Camino Cielo crossing in 2020 and plans to activate the gage in 2022. As discussed in Section 5.8.4, a streamflow data gap exists in the Confluence Aquatic Habitat Area. The GSP implementation budget includes ~$81,000 (in 2021 dollars) to install a stream gage in this area (inclusive of access, permitting, CEQA, equipment, and installation). The GSP implementation budget includes ~$12,650 (in 2021 dollars) per gage for ongoing operation and maintenance.

7.1.4.3.2 Ephemeral Flow Visual Monitoring

As discussed in Section 5.8.1, GSP Emergency Regulations §354.34(c)(6)B) requires monitoring to determine the "approximate date and location where ephemeral or intermittent flowing streams and rivers cease to flow." UVRGA will perform the ephemeral flow monitoring to identify the spatial and temporal distribution of ephemeral flow in the Basin. The GSP implementation budget includes ~$16,400 (in 2021 dollars) for this monitoring.

7.1.4.3.3 Riparian GDE Monitoring

As discussed in Section 5.8.4, monitoring of the South Santa Ana and Foster Park Riparian GDE Units will be performed to monitor and document conditions and trends to assess potential effects on the GDEs. The monitoring will consist primarily of tracking satellite and aerial imagery (publicly available and collected using drones) in comparison with measured groundwater levels. The GSP implementation budget includes ~$5,000 per year (in 2021 dollars) for this effort.

7.1.4.4 Aquatic GDE Monitoring

7.1.4.4.1 Confluence Aquatic Area

As discussed in Sections 4.9 and 5.8, available data were insufficient to determine if existing depletion rates of ISW in the Confluence Aquatic Habitat Area GDE result in significant and unreasonable effects. A multiyear focused monitoring program will be implemented to assess potential effects of ISW depletion on instream habitat and aquatic species. A monitoring plan will be developed in fiscal year 2022 to outline the specific schedule and field methods. A data assessment report will be completed at the end of the monitoring period to evaluate data and summarize findings to guide the first GSP assessment. The GSP implementation budget includes ~$162,000 (in 2021 dollars) for the monitoring program, data evaluation, and findings report.

If potential significant and unreasonable effects are identified during the focused monitoring period, a long-term monitoring program will be developed. The GSP implementation budget includes ~$9,000 per year (in 2021 dollars) for ongoing monitoring, if needed.

7.1.4.4.2 Foster Park Aquatic Habitat Area

As discussed in Sections 4.9 and 5.8, monitoring is required to document the performance of the depletions of ISW SMC. It is anticipated that a monitoring program will eventually be developed and implemented as part of a judgment for the Ventura River Watershed Adjudication. However, there is currently not a definitive timeline for either a judgment and/or implementation of a physical solution. Therefore, UVRGA has included scope and budget for monitoring of the Foster Park Aquatic Habitat Area GDE, with the understanding that monitoring may transition to or be shared with others in the future.

A work plan will be developed during fiscal year 2022 to lay out the proposed monitoring activities. It is anticipated that the work plan will include a greater degree of monitoring activities during the 4 years leading up to the first 5-year GSP assessment to establish baseline information, followed by a more limited and streamlined monitoring program for the remainder of the GSP implementation period. The initial 5-year "baseline" program may include field monitoring activities like field observations of instream habitat and aquatic species and continuous in-situ water quality monitoring. It is anticipated that collected

data will be correlated with flow measurements made by USGS and the City of Ventura. The study plan will detail a specific schedule, monitoring parameters, field methods, and data interpretation/evaluation methodology. UVRGA will develop the monitoring plan in coordination with the adjudication parties to seek consistency in potential monitoring activities that may be envisioned post-judgment. The GSP implementation budget includes ~$110,000 (in 2021 dollars) for work plan development, baseline monitoring activities, and a report at the conclusion of the baseline monitoring phase. The GSP implementation budget includes ~$9,000 per year (in 2021 dollars) for ongoing monitoring after the baseline monitoring phase has concluded.

7.1.4.5 Groundwater Extraction Monitoring

A groundwater extraction reporting program will be developed to facilitate monitoring of extractions in the Basin. The GSP implementation budget includes ~$5,000 (in 2021 dollars) to develop the extraction reporting program and ~$2,000 per year (in 2021 dollars) for implementation.

7.1.5 Annual Reporting

SGMA regulations require submittal of annual reports to DWR concerning GSP implementation status and basin conditions. The reporting requirements are presented in GSP Emergency Regulations §356.2. In general, the annual report must include an executive summary, description and graphical presentation of basin conditions (groundwater levels and storage), reporting of groundwater extractions, surface water supplies to the basin, total water use in the basin, and a discussion of the GSP implementation progress relative to the SMC. It is anticipated that the annual reports will be prepared by the Executive Director with consultant support. The cost for the first annual report is anticipated to be greater than the cost for subsequent reports because the first report must be developed from scratch and will include several years of data to bridge the gap between data presented in the GSP and water year 2020/2021. The first annual report is due in April 2022.

Ongoing costs for maintaining the SMGA-required DMS are included in the annual reporting costs. See Section 5.10 and Appendix T for more information concerning the DMS.

7.1.6 Projects and Management Actions

As discussed in Section 4, it does not appear that any projects or management actions will be needed to meet the measurable objectives for chronic lowering of groundwater levels, groundwater storage reduction, degraded water quality, land subsidence, or seawater intrusion sustainability indictors.

Projects and/or management actions will be needed to meet the measurable objective for depletions of ISW in Foster Park Aquatic Habitat Area. It is currently anticipated that the Foster Park Protocols will address direct depletion by the City of Ventura pumping in the Foster Park Habitat Area (funded by the City). However, the Foster Park Protocols will not address indirect depletion caused by pumping wells located upstream of the Foster Park Aquatic Habitat Area. The initial GSP does not include project or management actions to address indirect depletion because there are significant groundwater level data gaps that impact the numerical modeling estimates of the indirect depletions. This initial GSP lays out a path over time to address the groundwater level data gaps, update the numerical model to provide better quantification of indirect depletion, and develop appropriately sized projects or management actions to address indirect depletions. These actions are laid out in Table 6.1-01.

Costs are included under the Projects and Management Actions category for Actions 1-7, 2-3, and 2-4. The estimated cost for these actions is $300,000. The costs for project or management action implementation (Table 6.1-01 Actions 3-2 and 4-2) are not included because projects and management actions that impact the UVRGA budget are not identified in the initial GSP. If additional projects or management actions are developed, the costs will be added when they are known. The costs for other Table 6.1-01 Actions are included in other budget categories.

7.1.7 GSP Evaluations and Amendments

GSP Emergency Regulations §356.4 require UVRGA to evaluate the GSP at least every 5 years and in conjunction with any GSP amendments. The initial 5-year GSP evaluation is due to DWR in 2027. It is assumed that any plan amendments will be timed such that only one GSP evaluation will be performed per 5-year period. GSP evaluations are dependent on maintaining and updating the numerical model.

7.1.7.1 Numerical Model Updates and Simulations

Prior to performing each 5-year GSP evaluation, the numerical flow model will be updated. The updated model will help inform ongoing performance assessment of the SMC. Periodic updates to the groundwater model will be required to continue to refine and improve its capabilities and maintain ongoing functionality. This includes incorporating new model tools and features, updates to data, and updates to calibration. The model will be an important tool to inform the evaluation of GSP implementation over time. Simulations will be performed with the updated model for use during the GSA evaluation and update processes. The first model update will incorporate new data from the expanded groundwater and surface water monitoring networks and modeled ungaged surface water inflows to the UVRGB from the final regional watershed-wide model developed by SWRCB. The first model update is anticipated to result in a significant recalibration of the model and is therefore anticipated to be more expensive than later updates. The estimated cost for the first model update is $100,000 (in 2021 dollars). The estimated cost for subsequent model updates is $50,000 (in 2021 dollars).

7.1.7.2 GSP Evaluation

SGMA regulations require submittal of written evaluation of the GSP to DWR at least once every 5 years. The GSP evaluation requirements are presented in GSP Emergency Regulations §356.4. In general, the GSP evaluation must include a description of groundwater conditions relative to each sustainability indicator, discussion of GSP implementation, proposed revisions to the basin setting and SMC in light of new information or changes in water use, assessment of the monitoring networks, regulatory actions taken by UVRGA, summary of coordination with agencies located within the Basin and adjacent basins, and a description of any proposed or adopted GSP amendments. It is anticipated the GSP evaluation will be led by the Executive Director in collaboration with the GSP Development Team. The estimated cost for the GSP evaluations is $50,000 (in 2021 dollars).

7.1.7.3 GSP Amendments

To control costs, UVRGA will seek to perform any plan amendments in conjunction with the required 5-year evaluations. Pertinent sections of the GSP will be amended, as appropriate, based on new information, groundwater conditions, monitoring results, water use, land use changes, land use plan updates, and management status of adjacent basins. It is anticipated the GSP evaluation will led by the

Executive Director in collaboration with the GSP Development Team. The estimated cost for the GSP amendments is $150,000 (in 2021 dollars).

7.1.8 Respond to DWR GSP Evaluations and Assessments

UVRGA will address DWR requests for additional information and comments following its review of the adopted GSP. It is assumed that DWR comments on the initial GSP will be received and addressed during fiscal year 2024. UVRGA will respond to DWR comments and requests for information associated with subsequent 5-year GSP assessments. It is anticipated the responses will be led by the Executive Director in collaboration with the GSP Development Team. The estimated cost for addressing the DWR assessment comments on the initial GSP in 2024 is $50,000 (in 2021 dollars). The estimated cost for responding to DWR comments following the 5-year GSP evaluations is $25,000 (in 2021 dollars).

7.1.9 Contingencies

Contingency is included in the budget in recognition that GSP implementation is new and there is potential for unanticipated expenses. For the purposes of conservatively estimating the cost to implement the GSP, the budget estimate includes a 10% contingency. Contingency amounts will be reviewed during each annual budgeting process. It is anticipated that contingency amounts will decline over time as UVRGA becomes more certain about ongoing GSP implementation costs.

7.1.10 Financial Reserves

Prudent financial management requires that UVRGA carry a general reserve in order to manage cash flow. General reserves have no restrictions on the types of expenses they can be used to fund. Current Board Direction policy on reserve level is $74,000. It is assumed that the reserve will be increased to ~50% of annual expenses.

7.1.11 Total Estimated Implementation Costs Through 2042 [§354.6(e)]

§354.6 Agency Information. *When submitting an adopted Plan to the Department, the Agency shall include a copy of the information provided pursuant to Water Code Section 10723.8, with any updates, if necessary, along with the following information:*

(e) *An estimate of the cost of implementing the Plan and a general description of how the Agency plans to meet those costs.*

GSP implementation costs are presented in Table 7.1-01. The estimated costs are presented by the budget categories discussed in Section 7.1. The estimated total cost of the GSP implementation over the 20-year planning horizon is $10,068,507. Costs through the first 5-year evaluation period are also provided as a subtotal. The total estimated cost through the first 5-year evaluation is $2,272,885. The annual costs include an annual rate of inflation of 3.0% factored into the cost projections. These estimated costs are based on the best available information at the time of GSP preparation and represent UVRGA's current understanding of Basin conditions and the current roles and responsibilities of the UVRGA under SGMA. UVRGA will coordinate GSP implementation with other water management efforts in the watershed (e.g., Ventura River Adjudication judgement and SWRCB's Instream Flow Enhancement program) to minimize duplication of effort and costs to the water users of the Basin.

7.2 Funding Sources and Mechanisms [§354.6(e)]

§354.6 Agency Information. *When submitting an adopted Plan to the Department, the Agency shall include a copy of the information provided pursuant to Water Code Section 10723.8, with any updates, if necessary, along with the following information:*

(e) *An estimate of the cost of implementing the Plan and a general description of how the Agency plans to meet those costs.*

Funding for GSP implementation will be obtained from fees charged to groundwater users and/or landowners in the Basin. UVRGA current utilizes a fee based on groundwater extractions. UVRGA intends to reevaluate the funding methodology during fiscal year 2022 and potentially implement a new fee structure effective fiscal year 2023. Funding options will be reevaluated over time as the GSP implementation progresses. UVRGA obtained a $630,000 Proposition 1 Sustainable Groundwater Planning Grant from DWR to fund, in part, development of the GSP. UVRGA will seek additional grants for GSP implementation, although, to be conservative, the budget assumes no additional grant funding.

7.3 Implementation Schedule [§354.44(b)(4)]

§354.44 Projects and Management Actions.

(b) *Each Plan shall include a description of the projects and management actions that include the following:*

(4) *The status of each project and management action, including a time-table for expected initiation and completion, and the accrual of expected benefits.*

GSP adoption is anticipated in December 2021 for submittal to DWR no later than January 31, 2022.

Most of the budget categories consist of ongoing tasks and efforts that will be conducted throughout GSP Implementation (i.e., administration, coordination, outreach, monitoring, etc.).

GSP reporting will occur on an annual basis, with reports for the preceding water year due to DWR by April 1.

Periodic evaluations (every 5 years) and any associated GSP amendments will be submitted to DWR by April 1 at least every 5 years (no later than 2027, 2032, 2037, and 2042).

The schedule for one-time activities are as follows:

- Stream Gage Installation: The gage is scheduled for installation during fiscal year 2023.
- Monitoring Well Construction: The proposed monitoring wells are scheduled for construction during fiscal year 2025. Site identification, access agreements, and permitting, will begin prior to fiscal year 2025.
- Projects and Management Actions: See Table 6.1-01.

8.0 References and Technical Studies [§354.4(b)]

§354.4 General Information.

(b) *Each Plan shall include the following general information: A list of references and technical studies relied upon by the Agency in developing the Plan. Each Agency shall provide to the Department electronic copies of reports and other documents and materials cited as references that are not generally available to the public.*

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Figures

Figures

Section 2

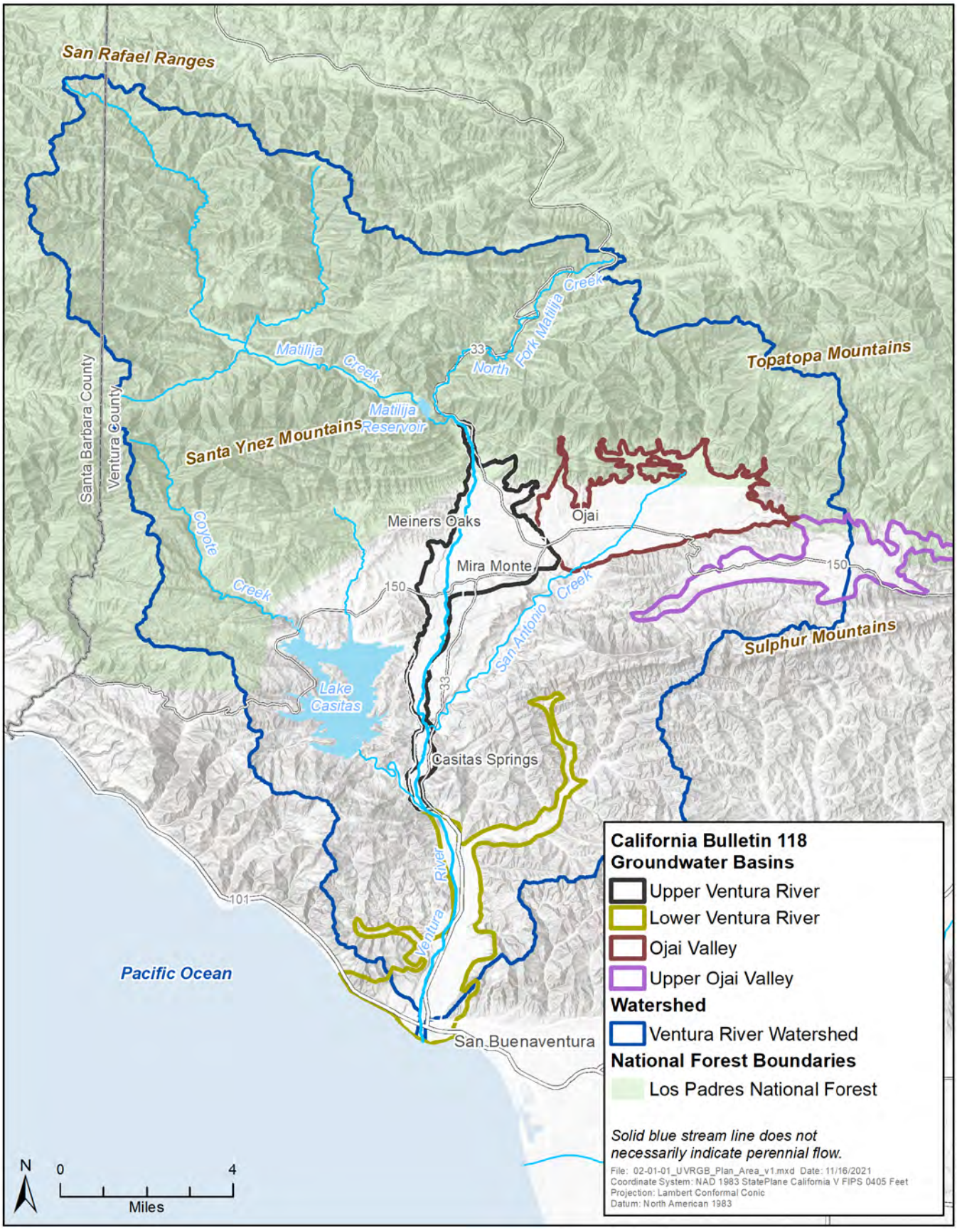


Figure 2.1-01 Upper Ventura River Valley Groundwater Basin Plan Area.

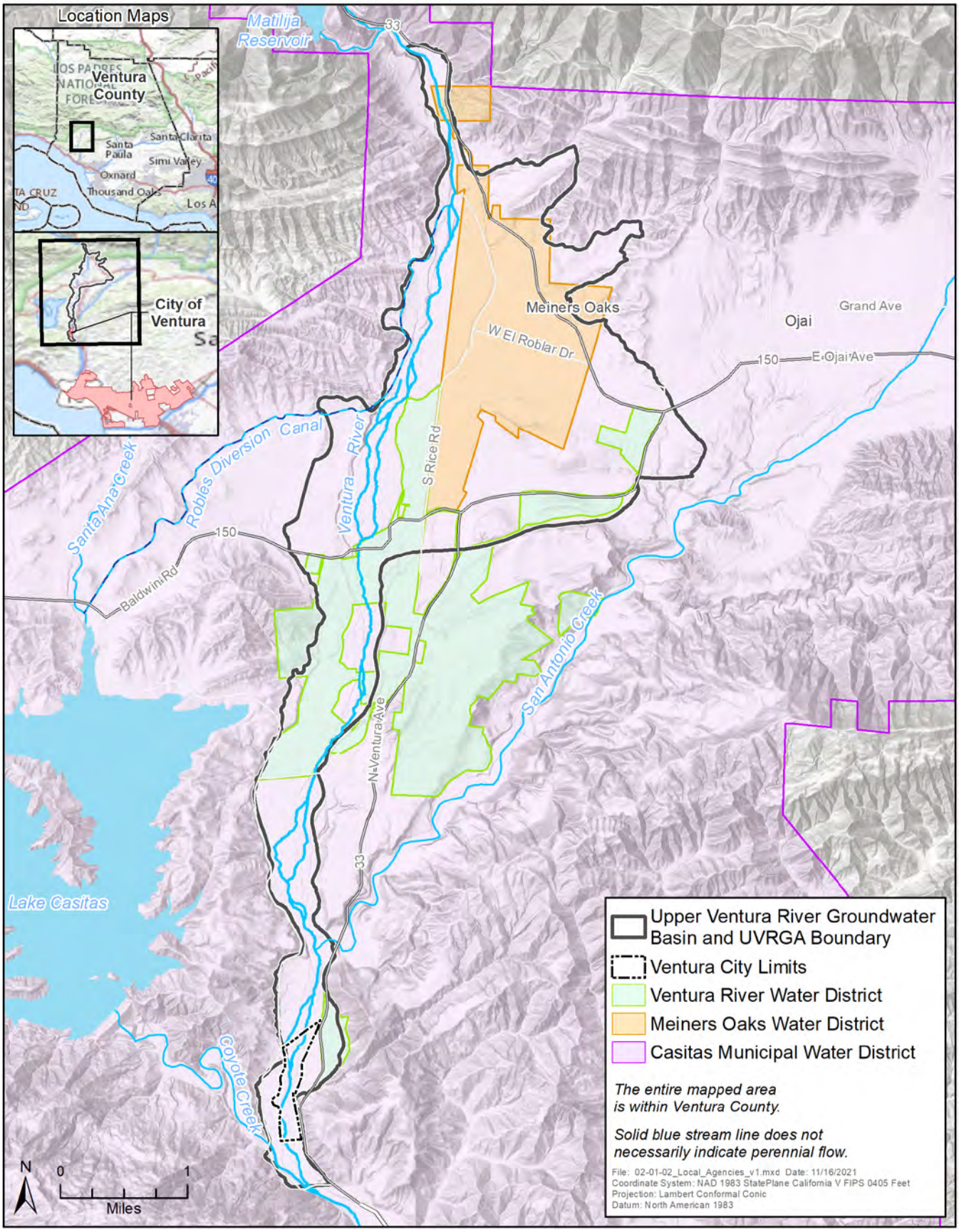
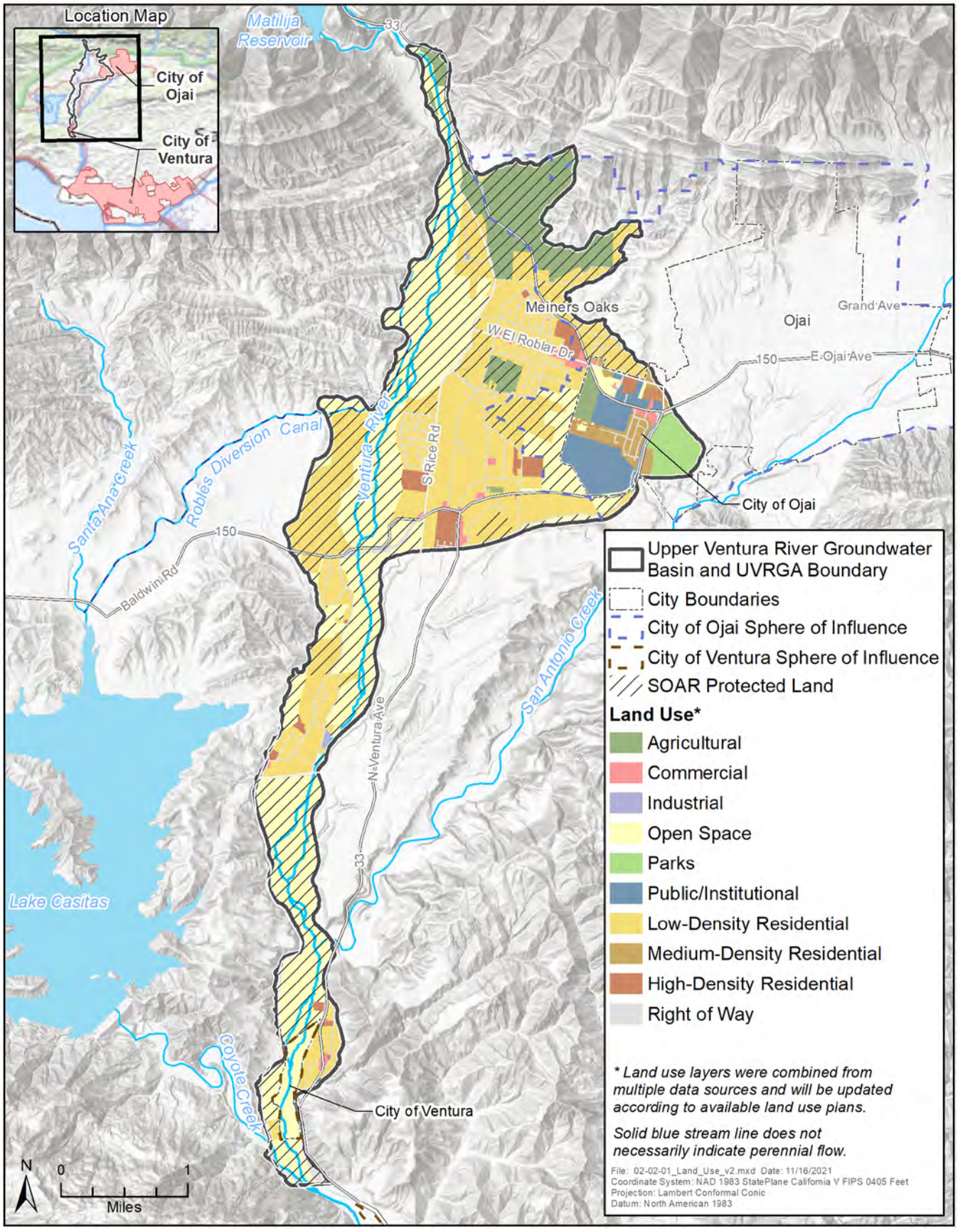


Figure 2.1-02 UVRGA and Member Agency Boundaries.



Data Source: Ventura County, 2020; SCAG, 2020; ESRI, 2021.

Figure 2.2-01 Upper Ventura River Groundwater Basin Land Use.

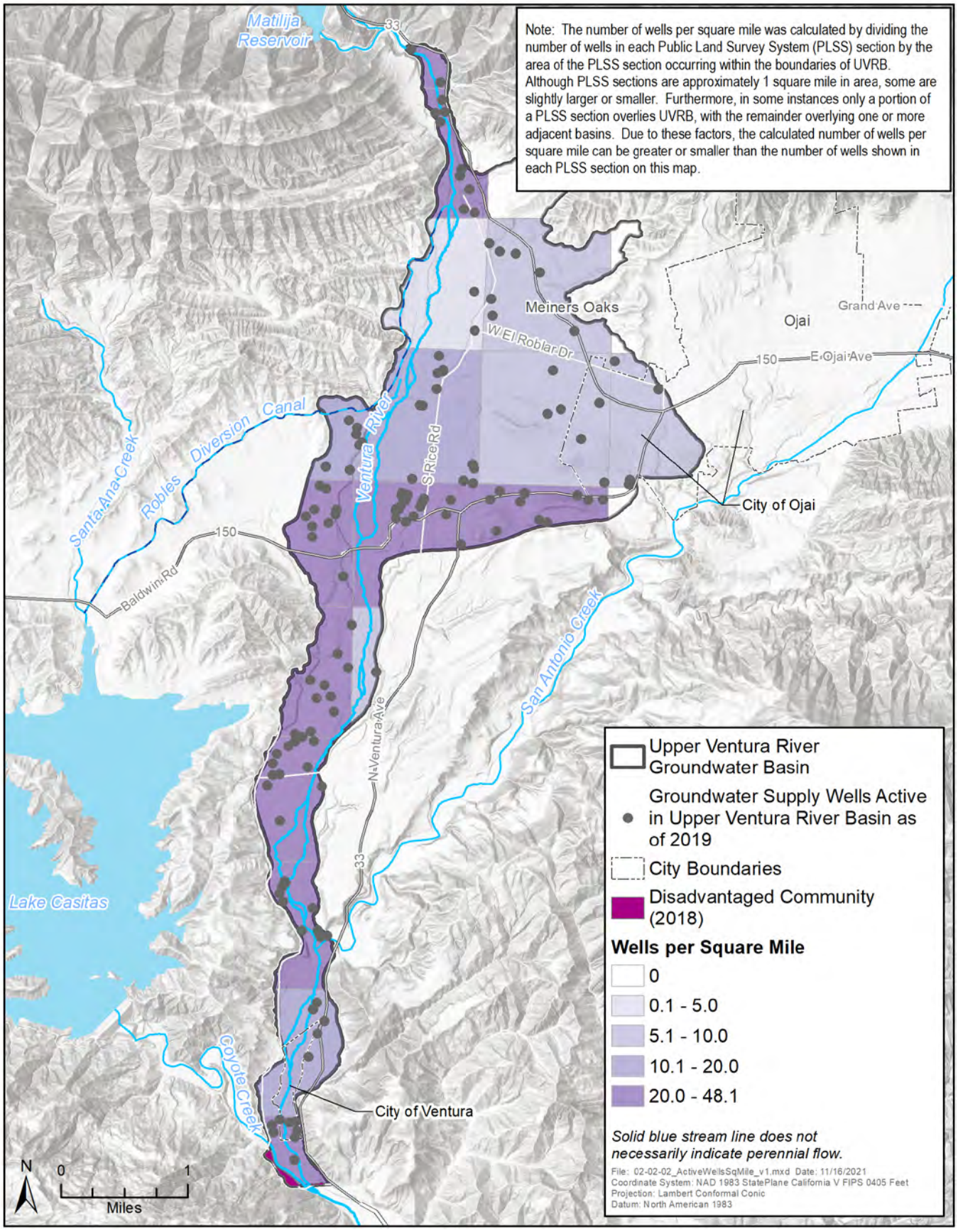


Figure 2.2-02 Groundwater Supply Wells Active in Upper Ventura River Groundwater Basin as of 2019.

Figures

Section 3

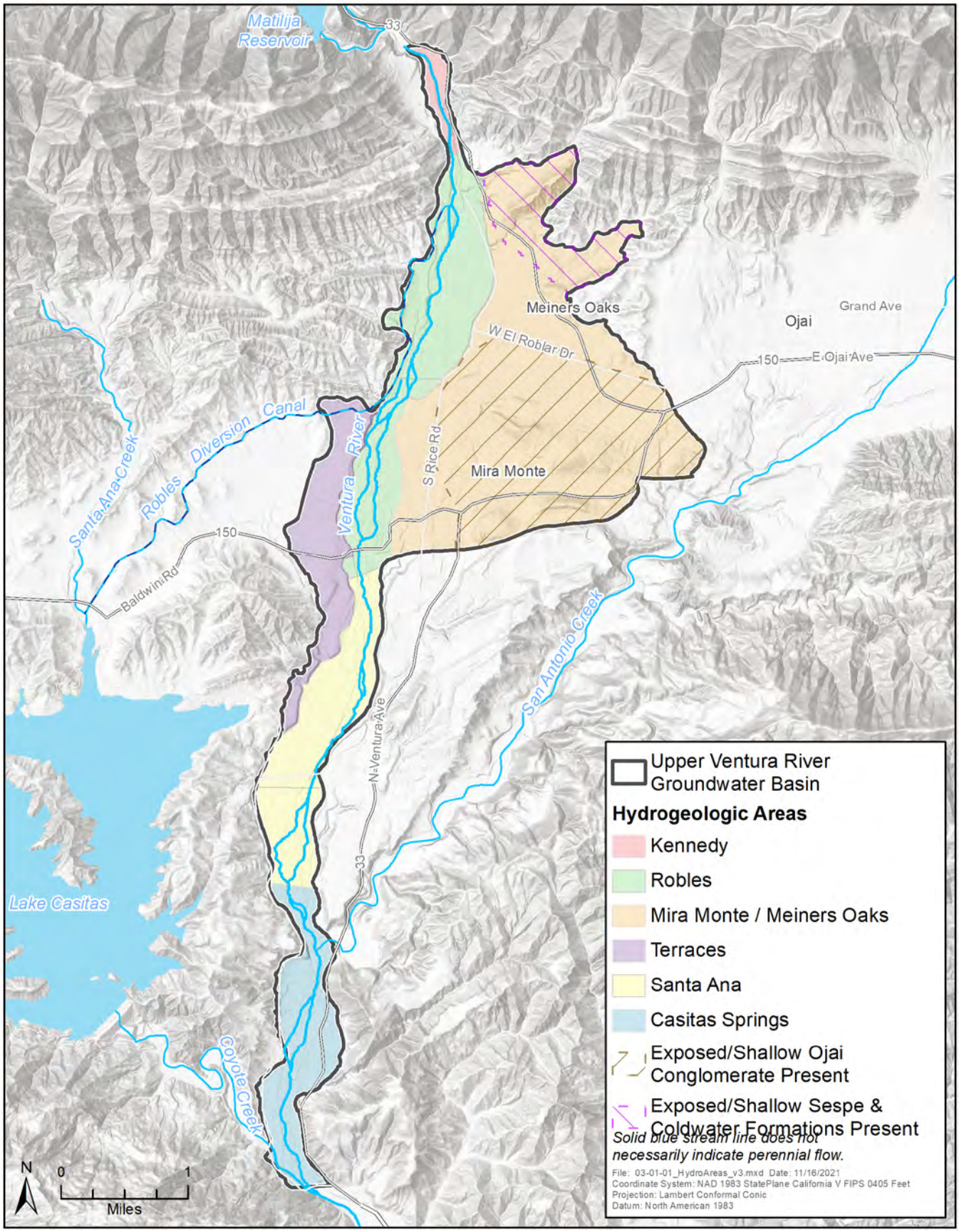
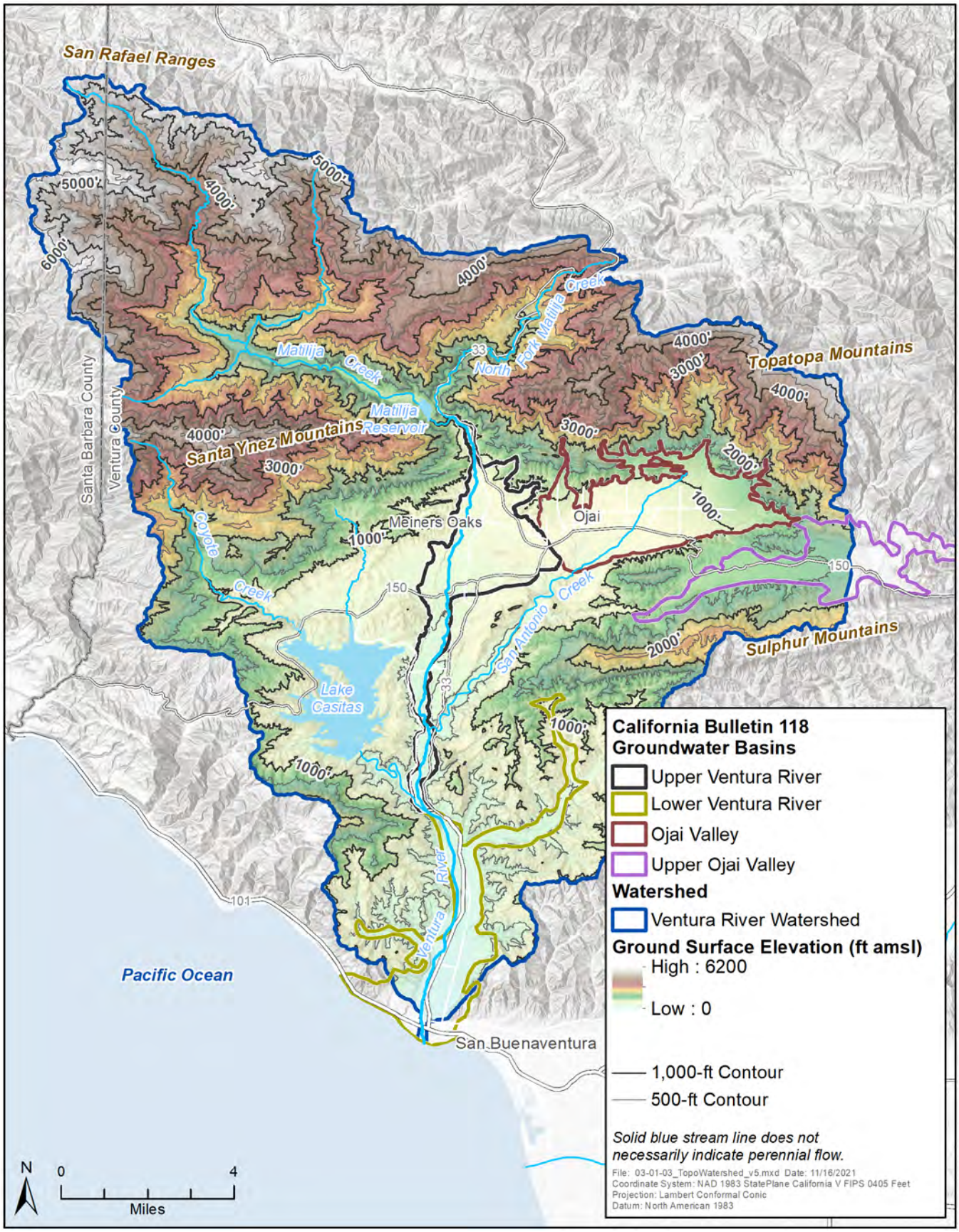


Figure 3.1-01 Hydrogeologic Areas within the UVRGB.

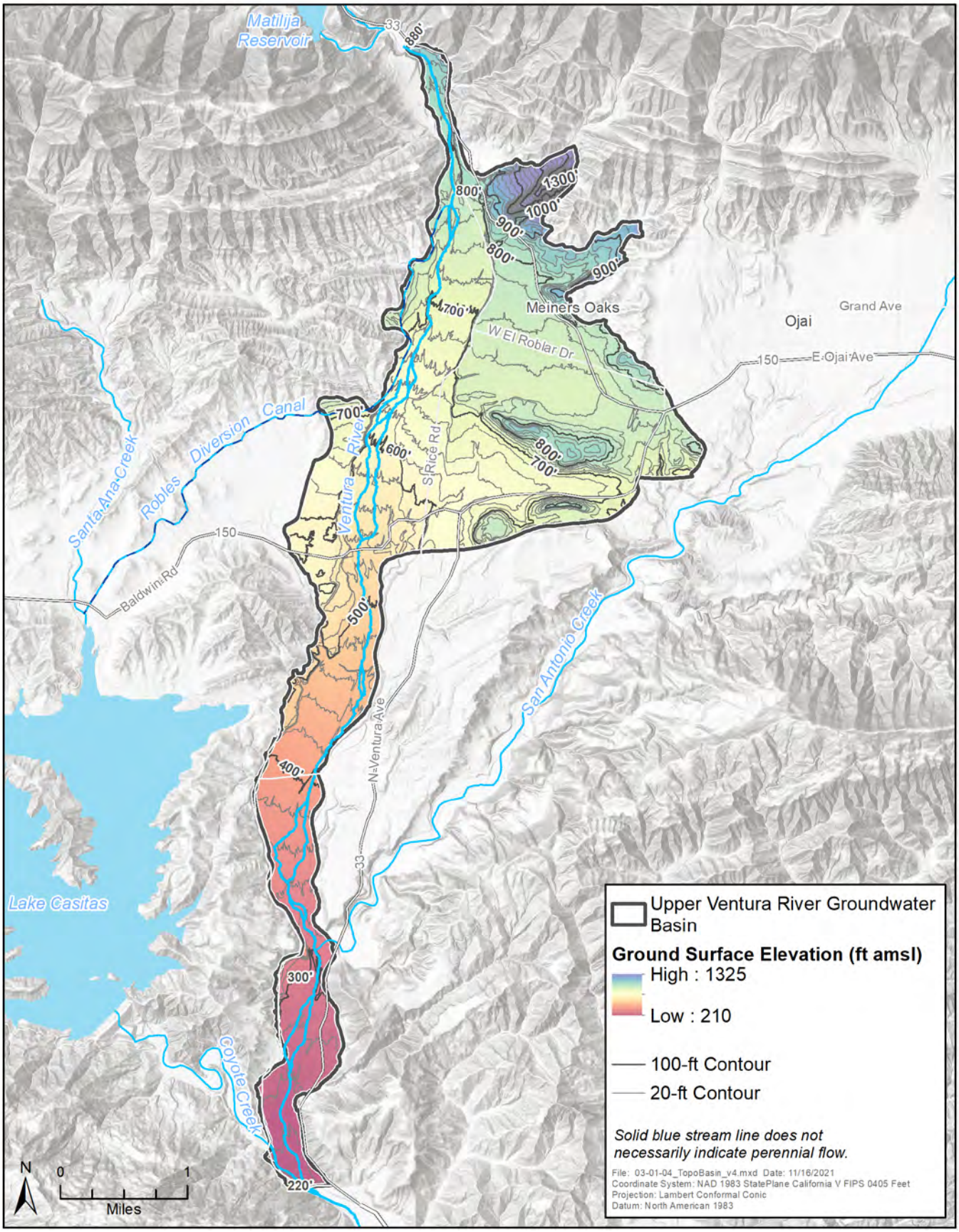
Data Source: VRWC, 2015.

Figure 3.1-02 Location of the Ventura River Watershed.



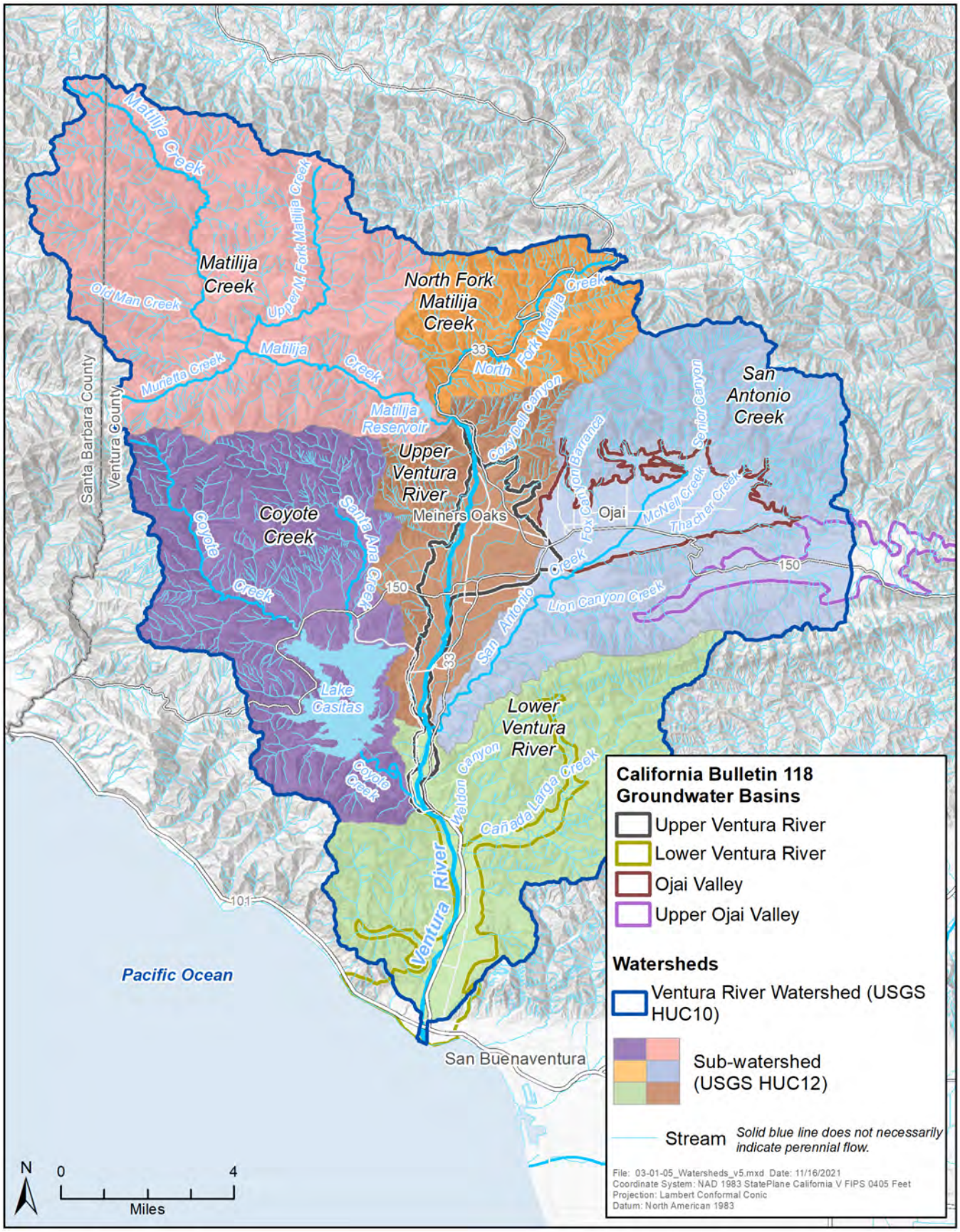
Data Source: DWR, 2016a; USGS, 2016.

Figure 3.1-03 Topographic Map & Boundary of Ventura River Watershed.



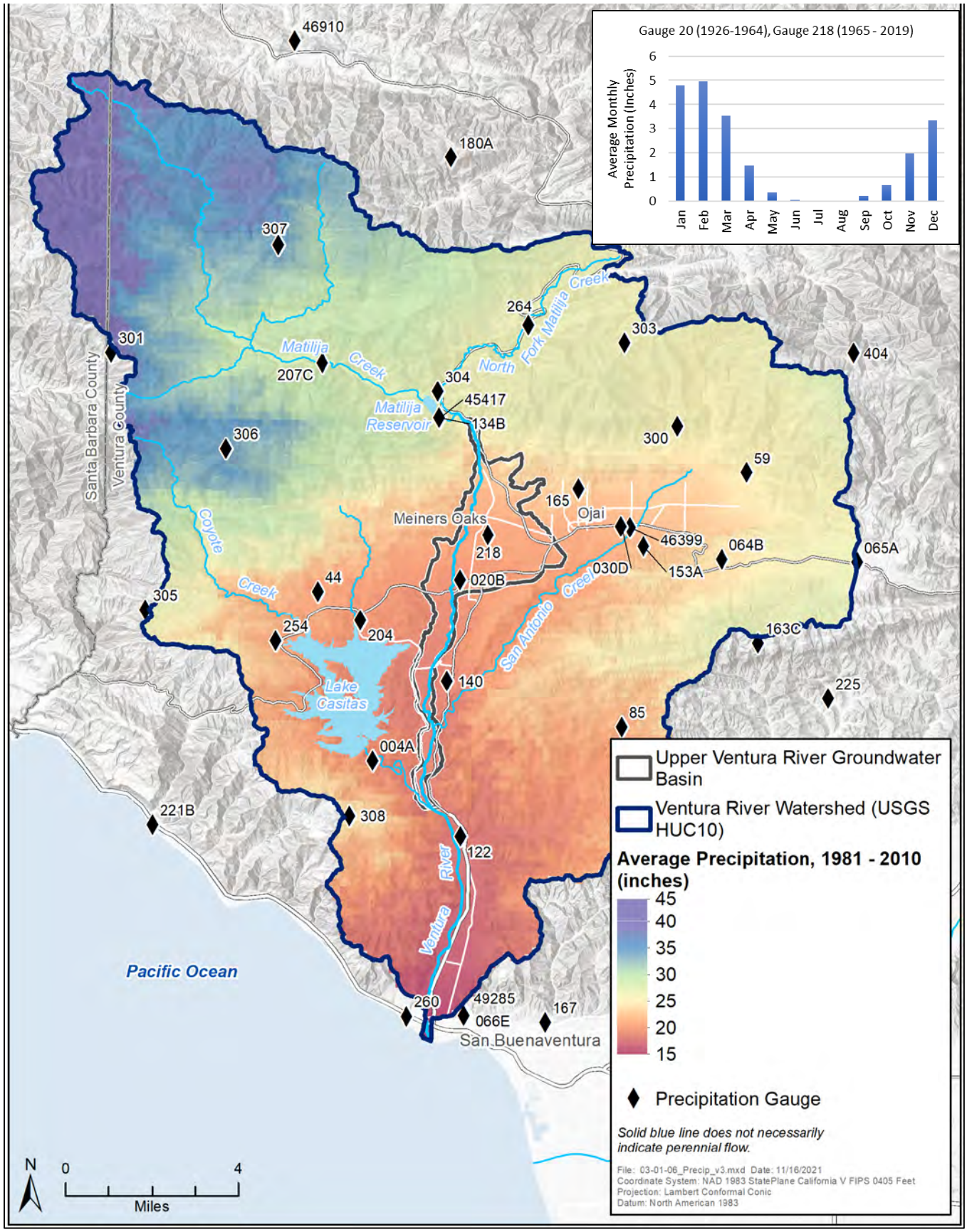
Data Source: SWRCB, 2020.

Figure 3.1-04 Topographic Map & Boundary of Upper Ventura River Groundwater Basin.



Data Source: USGS, 2016; DWR, 2016a.

Figure 3.1-05 Ventura River Watershed and Sub-Watersheds.



Data Source: Flint et al., 2013.

Figure 3.1-06 Precipitation Map in the Ventura River Watershed.

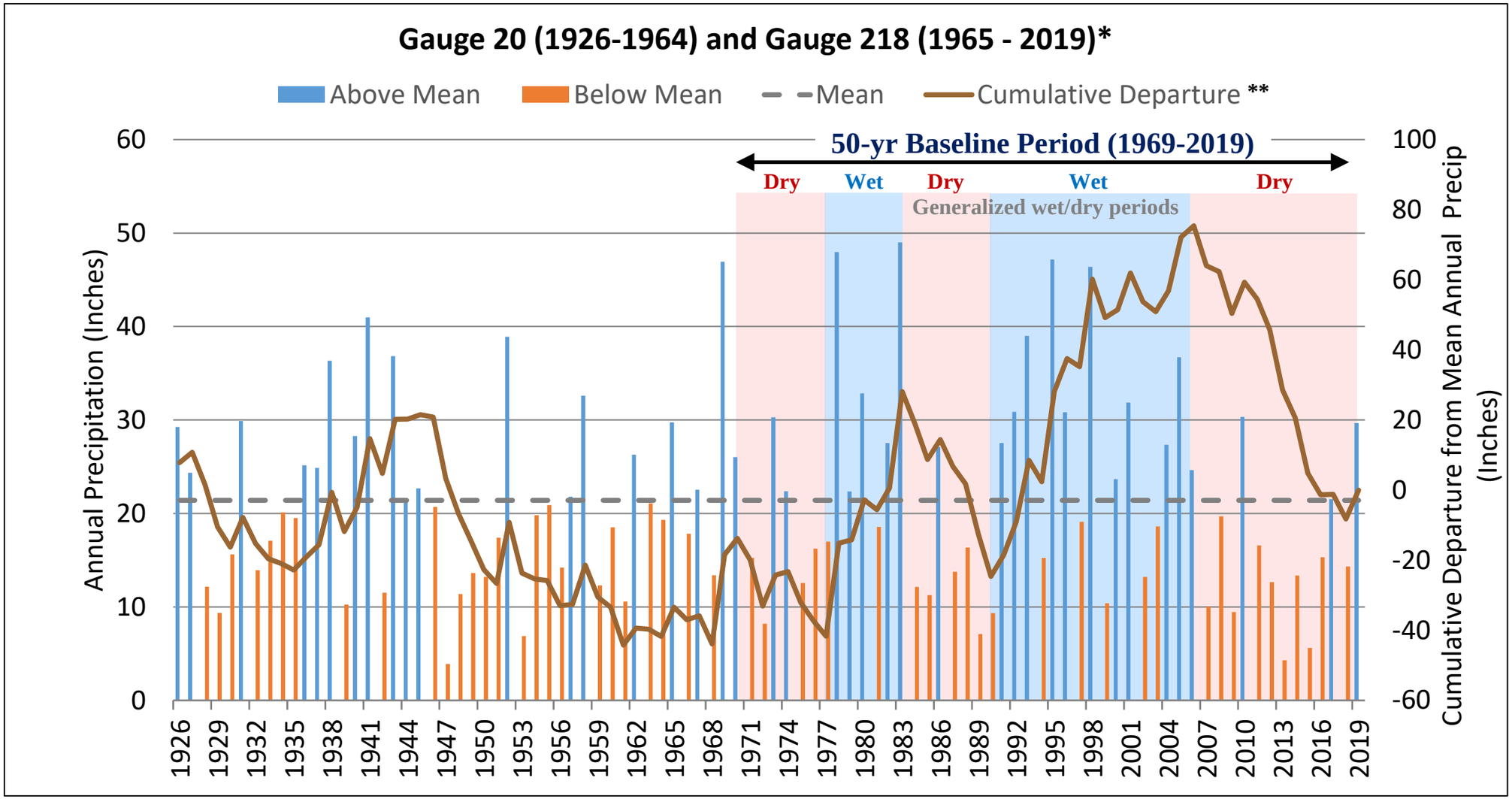


Figure 3.1-07 Annual and Cumulative Departure from Mean Precipitation.

**See Figure 3.1-06 for gage locations.*
***Cumulative Departure is the sum of the current difference from the mean annual precipitation and all the past differences.*

Data Source: VCWPD, 2020.

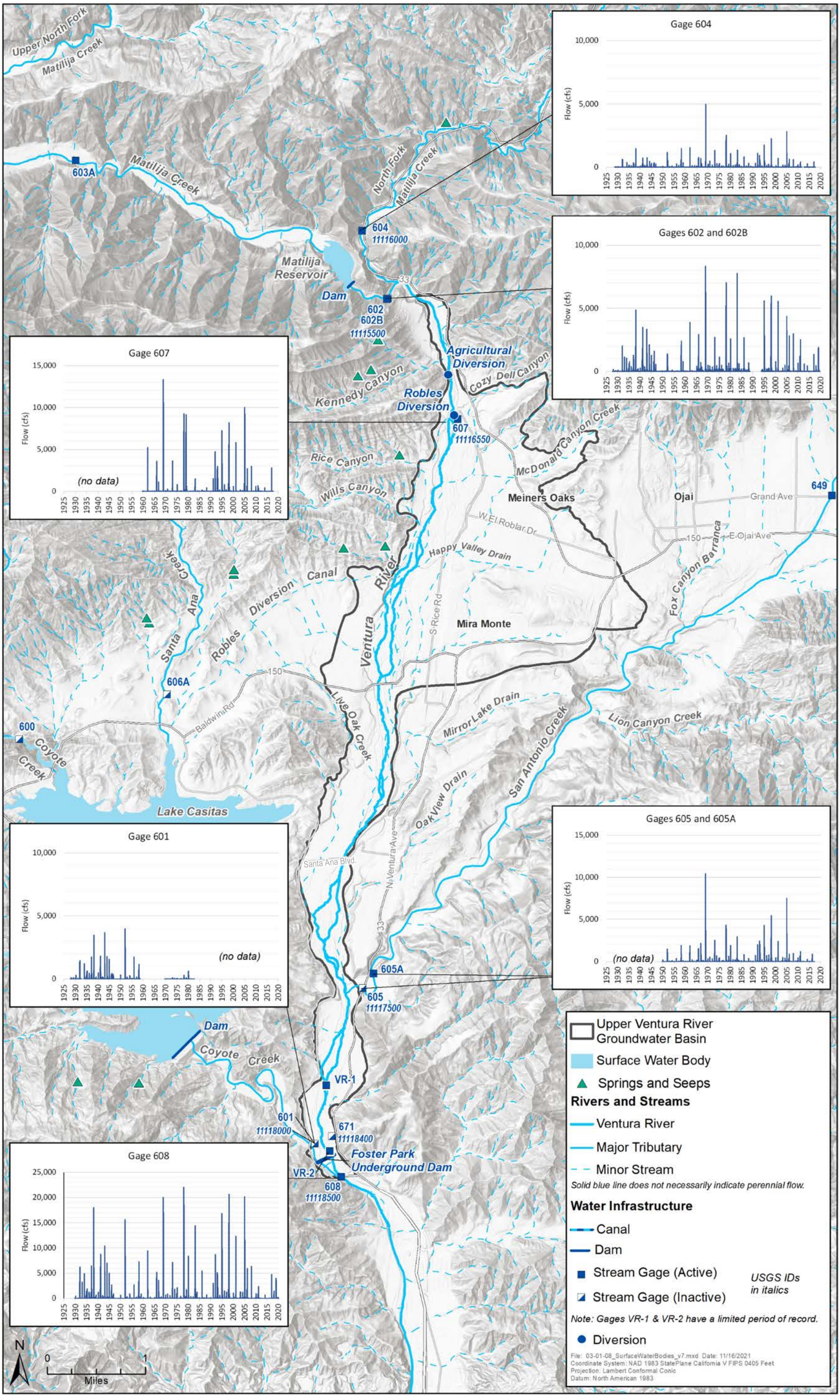
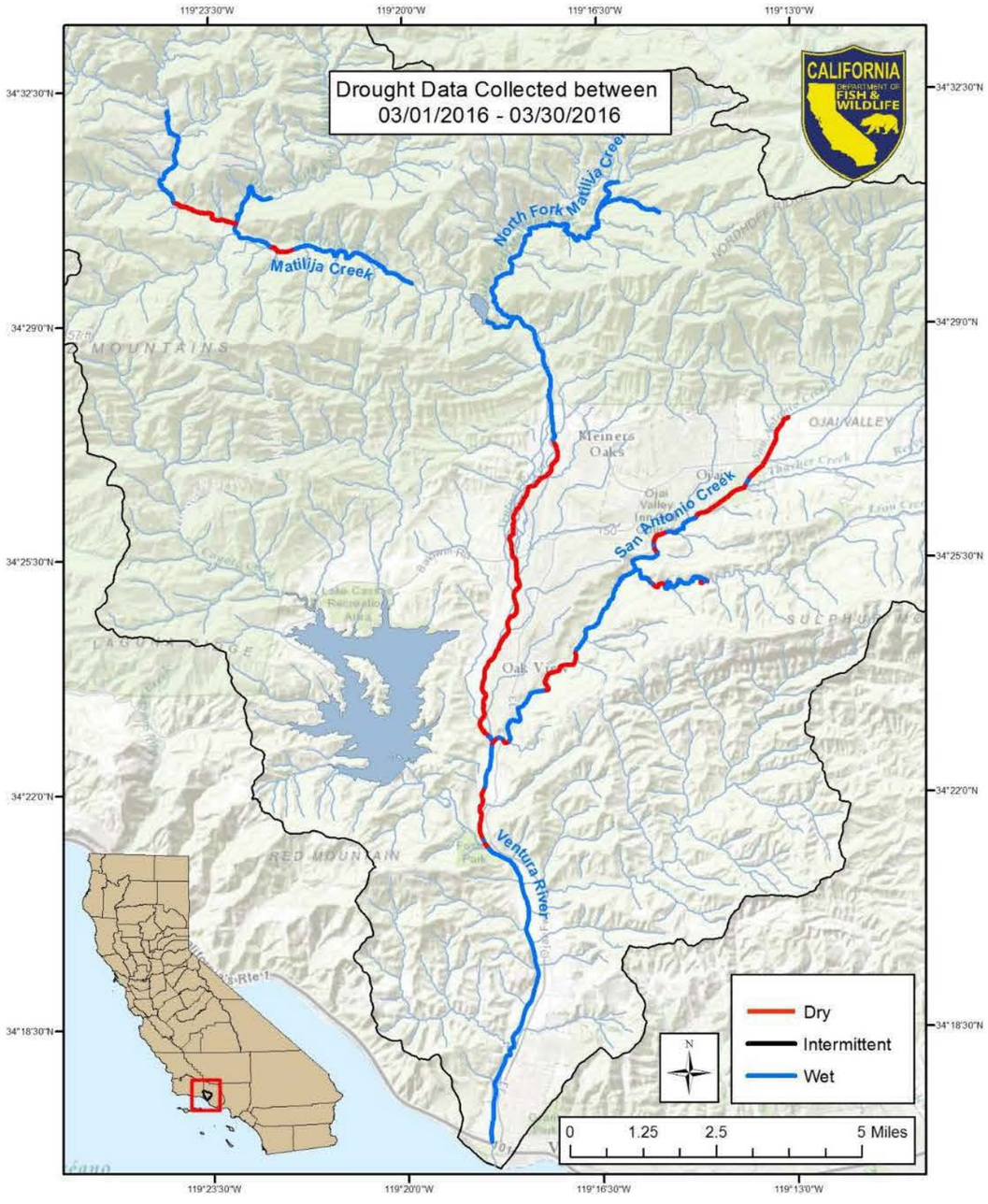


Figure 3.1-08 Surface Water Bodies in the UVRGB.

Data Source: VCWPD, 2020; USGS, 2016a.



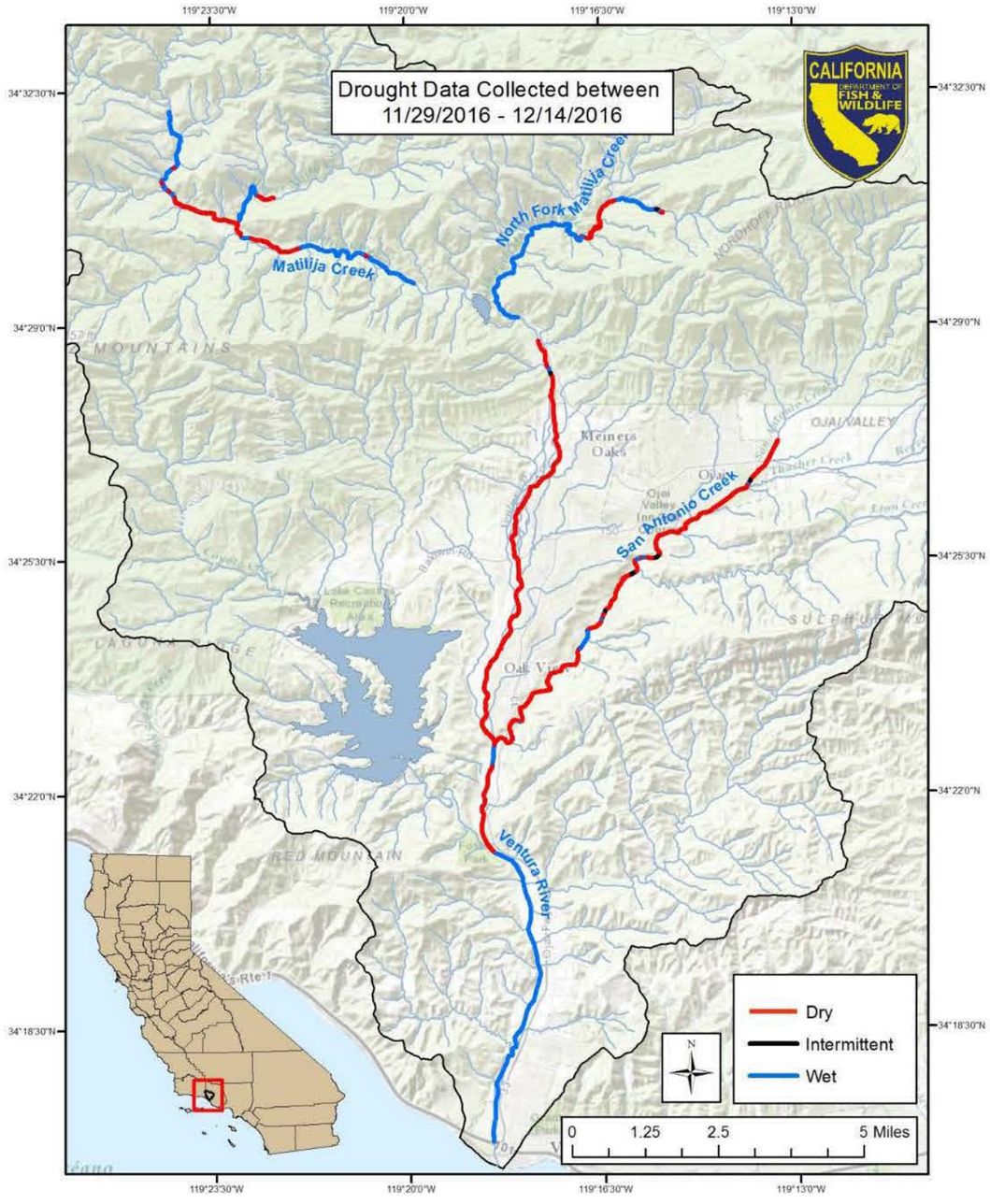


Figure 3.1-09 California Department of Fish and Wildlife 2016 Wet-Dry Mapping of Rivers and Tributaries in the Ventura River Watershed.

Data Source: Geosyntec and DBSA, 2019

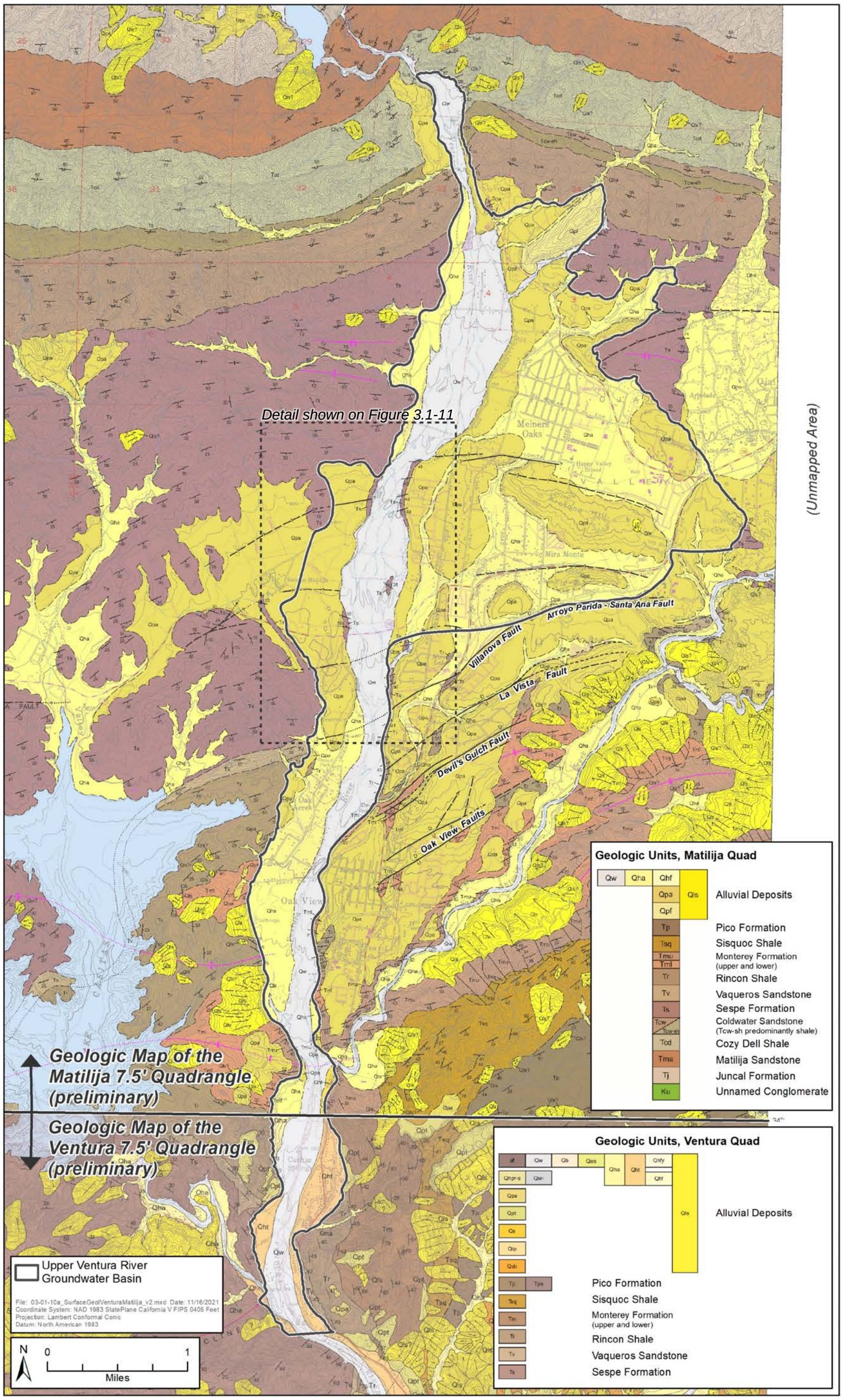


Figure 3.1-10a Regional Surface Geologic Map (Ventura & Matilija). Data Source: CGS, 2003, 2006.

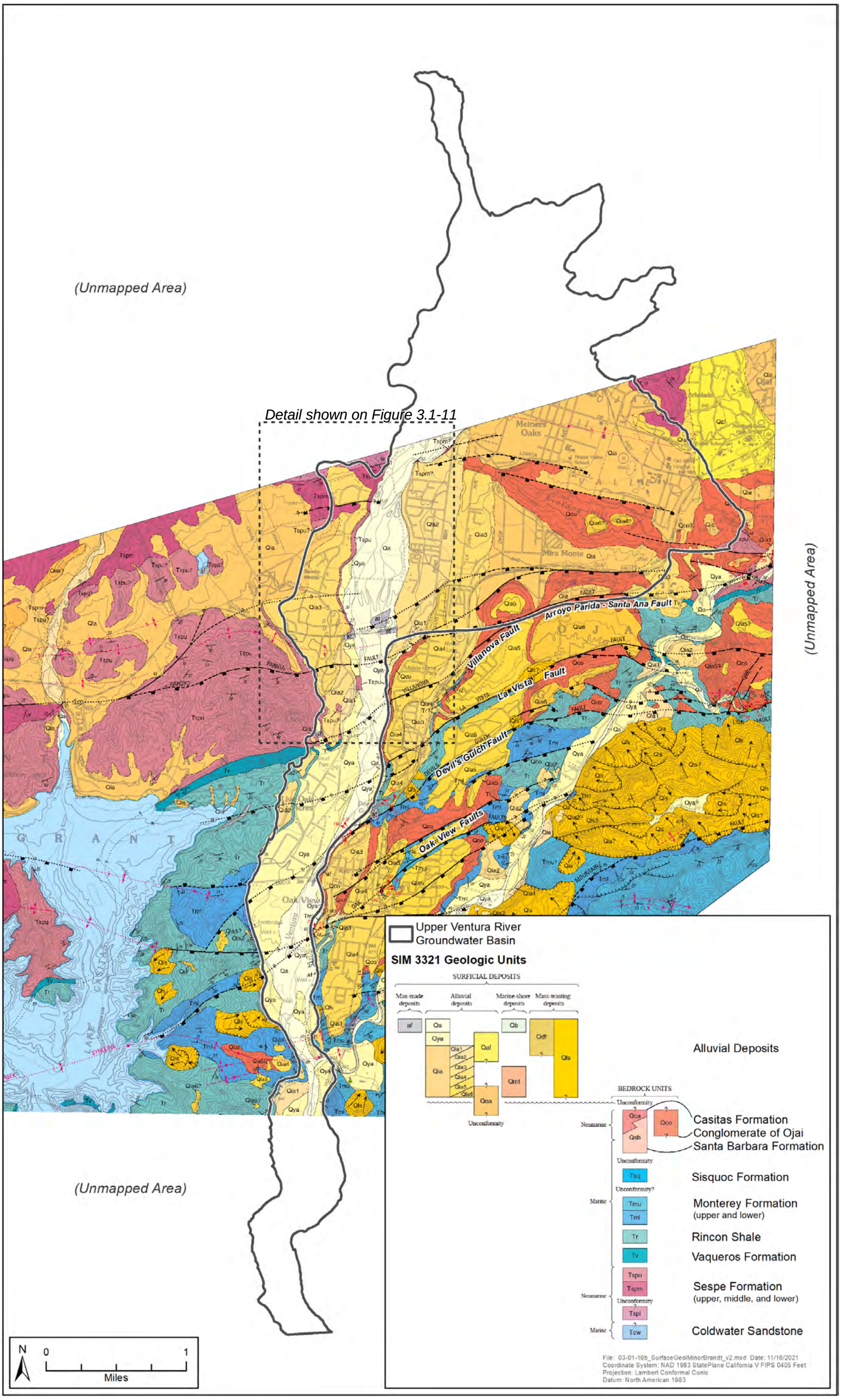


Figure 3.1-10b Regional Surface Geologic Map (Minor & Brandt).

Data Source: USGS, 2015.

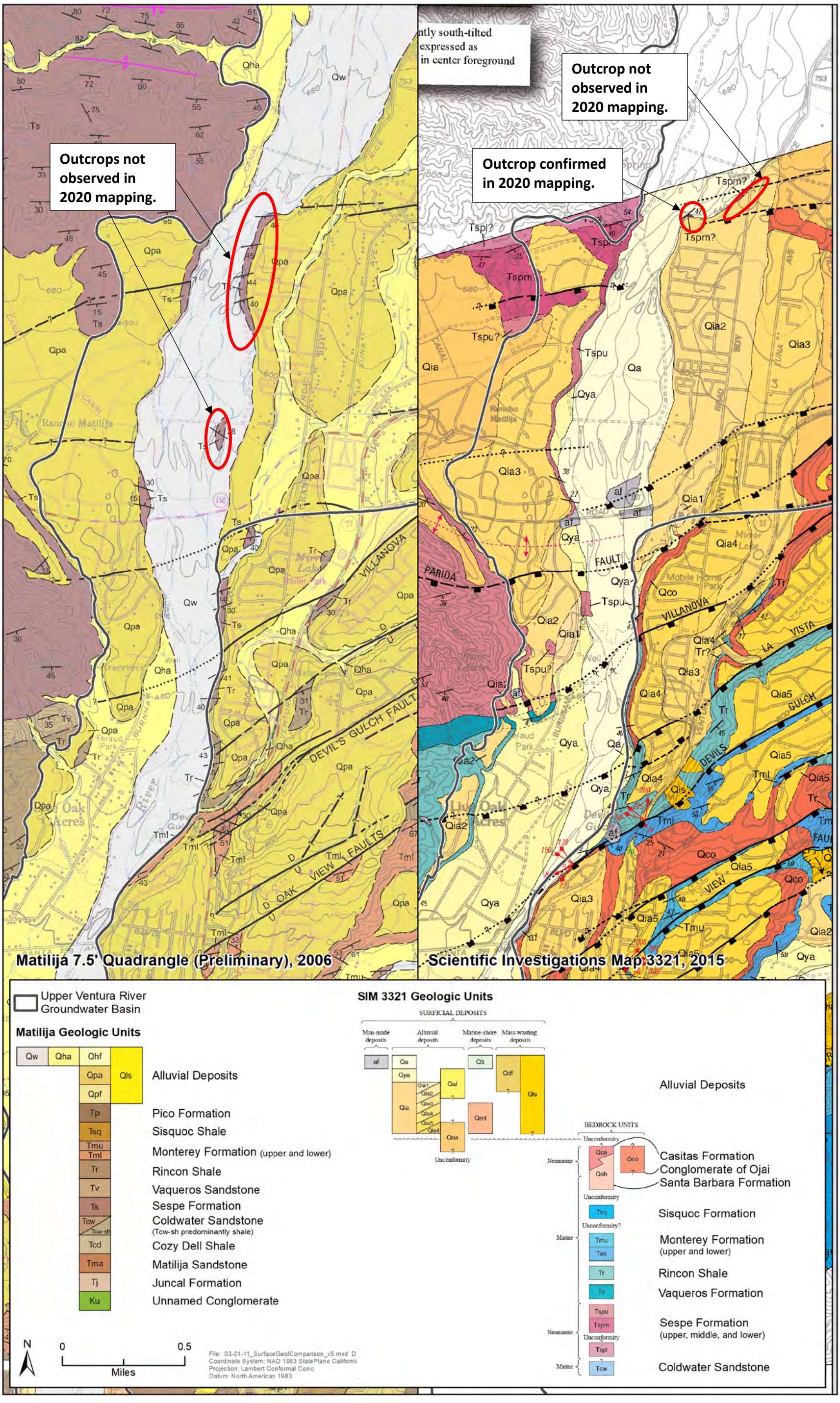


Figure 3.1-11 Comparison of Regional and Refined Surface Geology in the Central Part of the UVRGB.

Data Source: CGS, 2006; USGS, 2015.

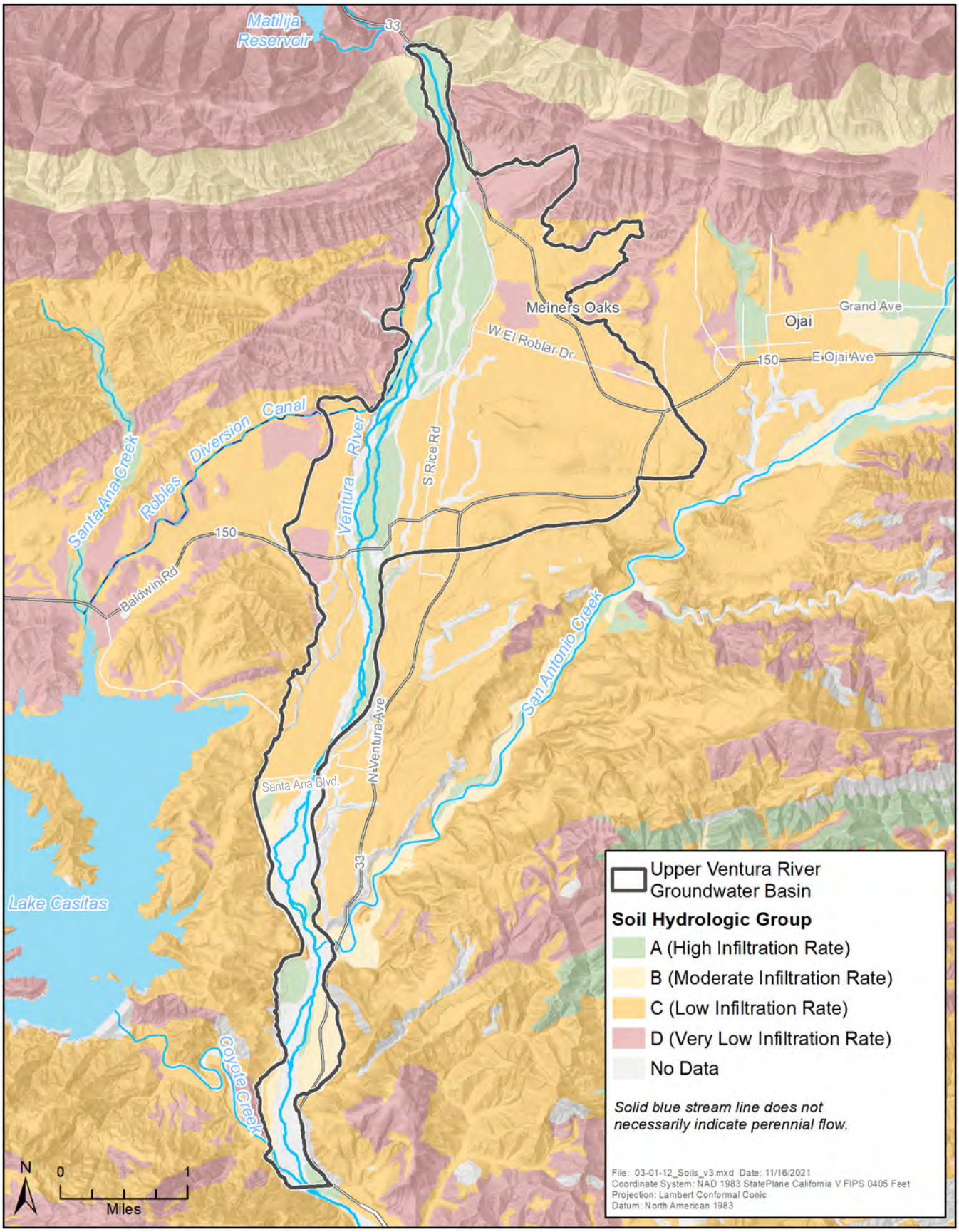


Figure 3.1-12 Soil Characteristics Map.

Data Source: USDA, 2020.

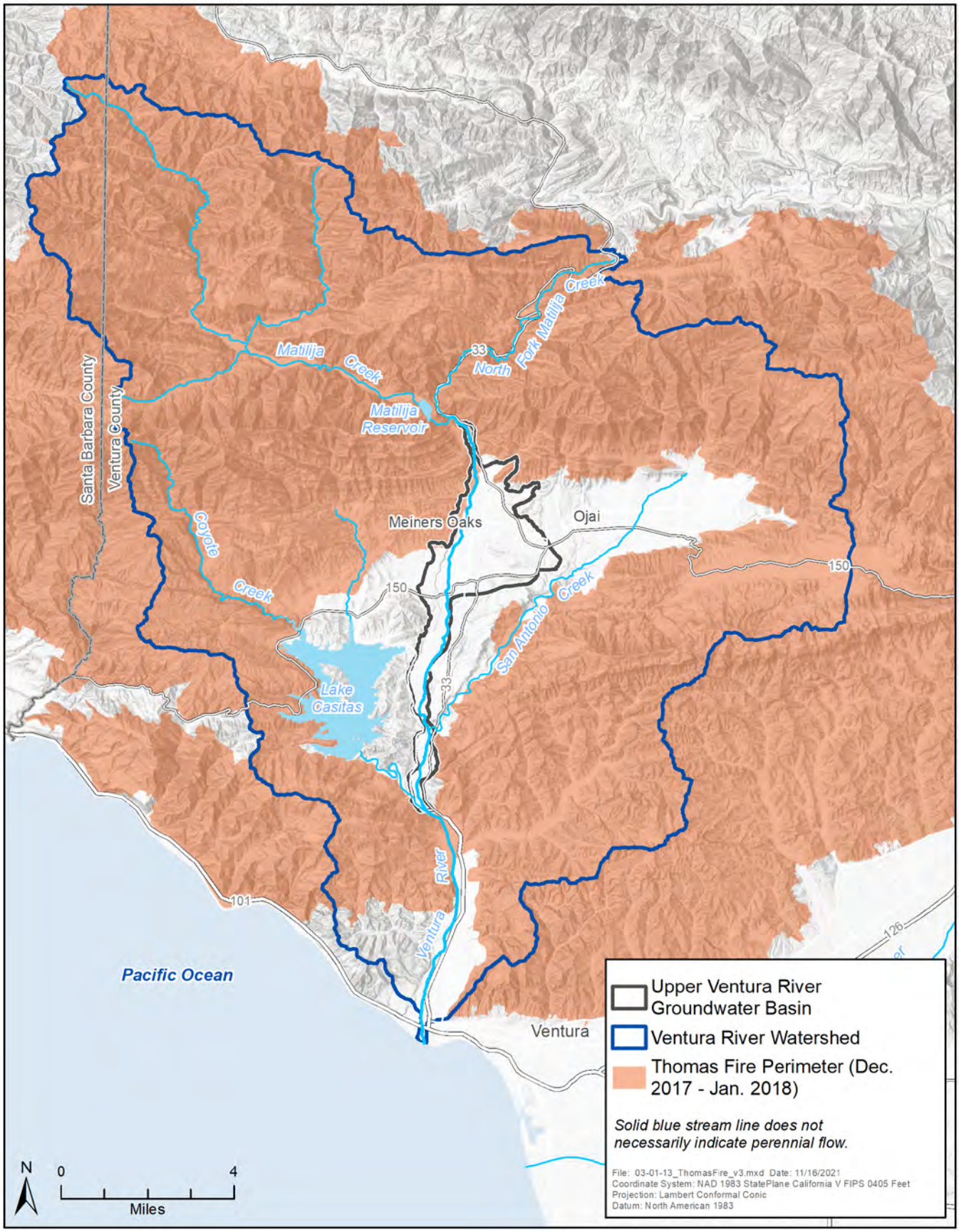


Figure 3.1-13 Areal Extent of the Thomas Fire.

Data Source: CALFIRE, 2020.

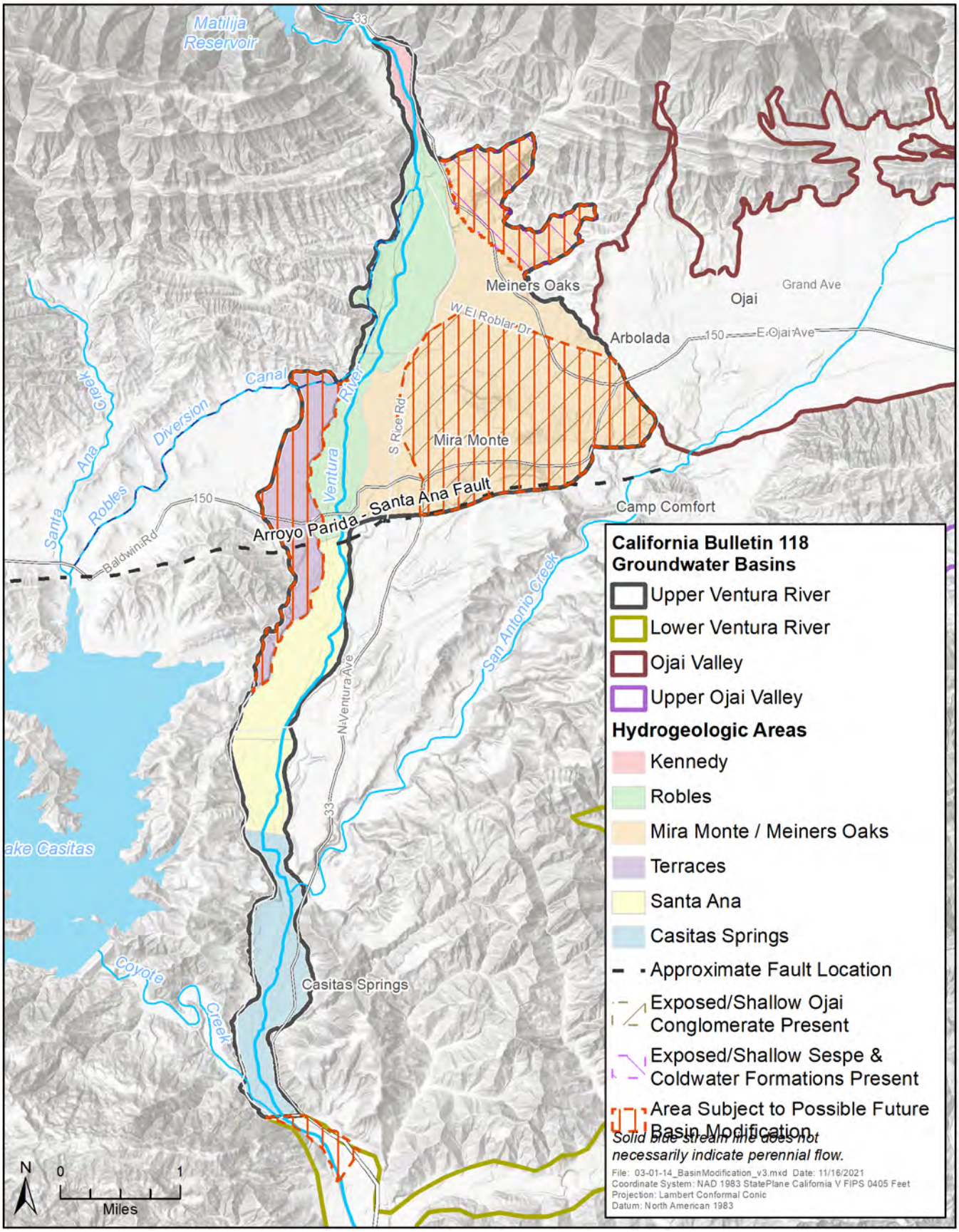


Figure 3.1-14 Current UVRGB Boundary and Adjacent Basins with Potential Areas for Boundary Modifications.

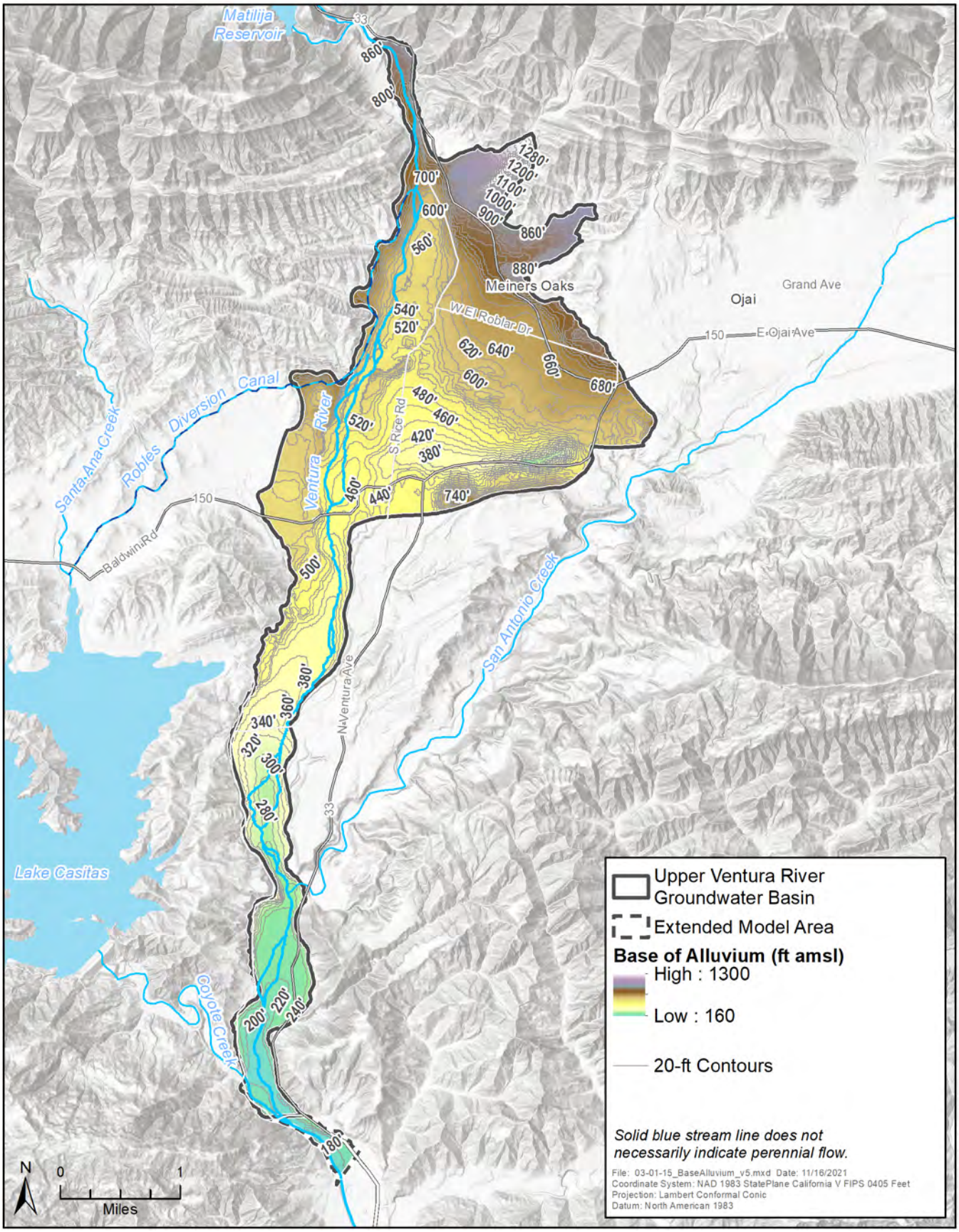


Figure 3.1-15 Bottom of the Basin Elevation Map.

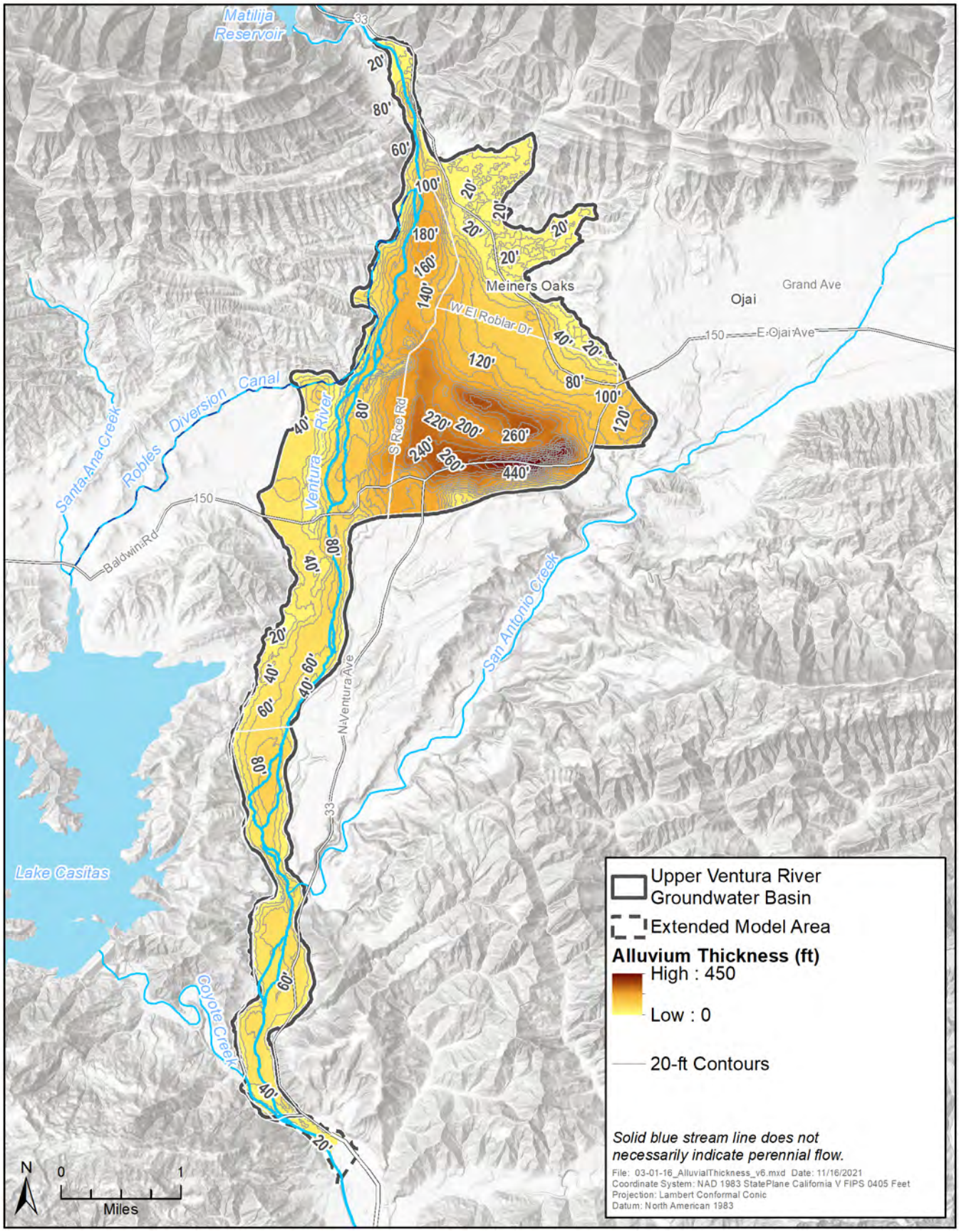


Figure 3.1-16 Basin Thickness Map.

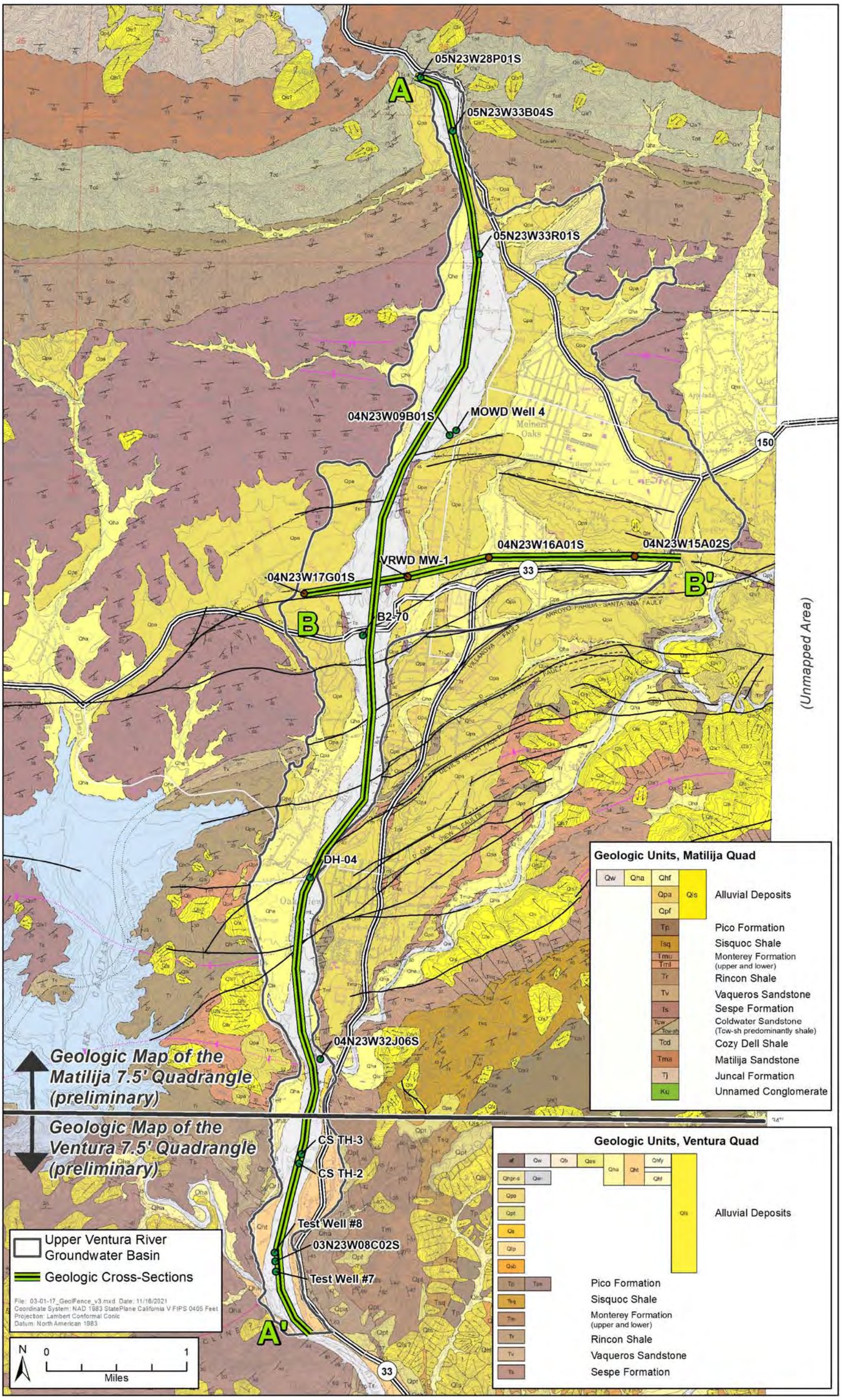


Figure 3.1-17 Locations of NS and EW Cross-Sections.

Data Source: CGS, 2003, 2006.

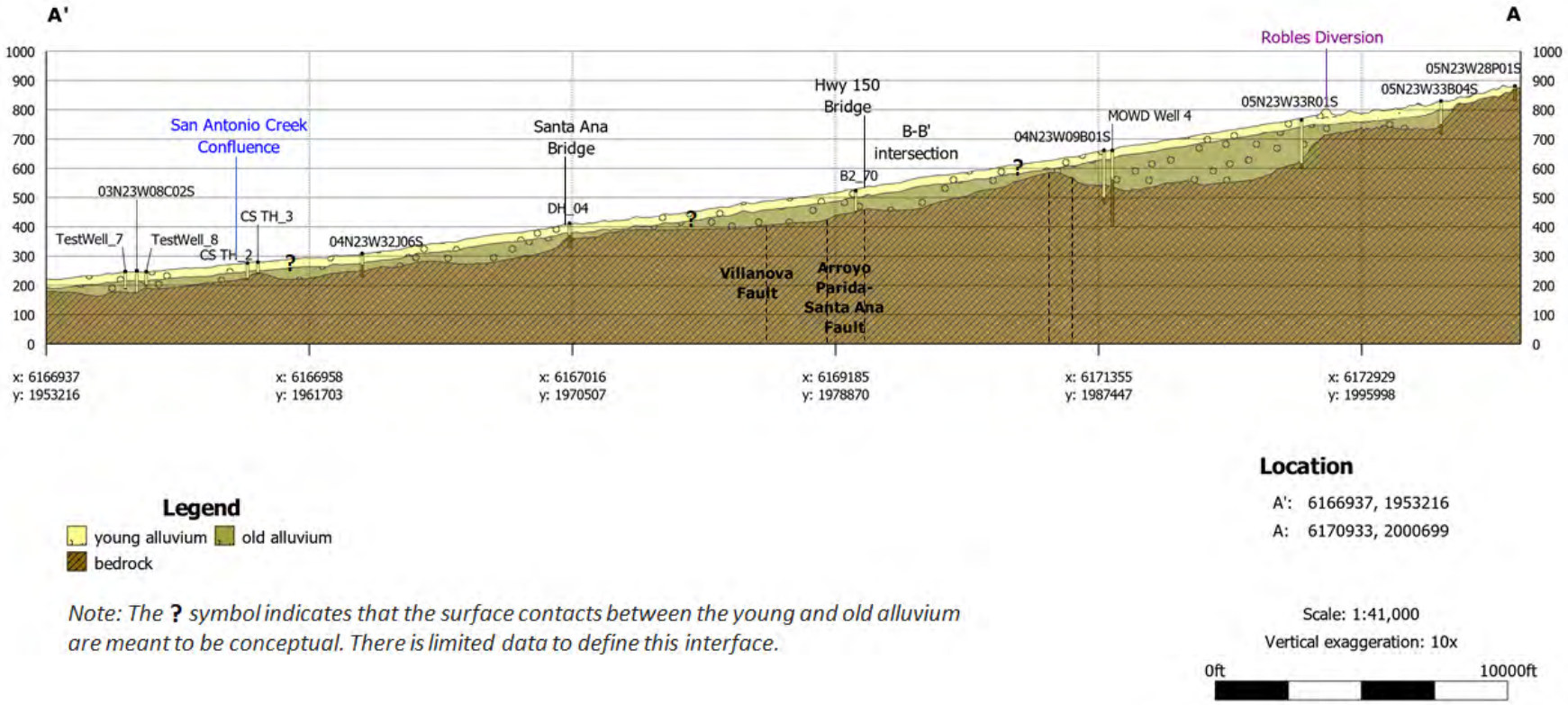


Figure 3.1-18 Cross-Section A-A' (North-South).

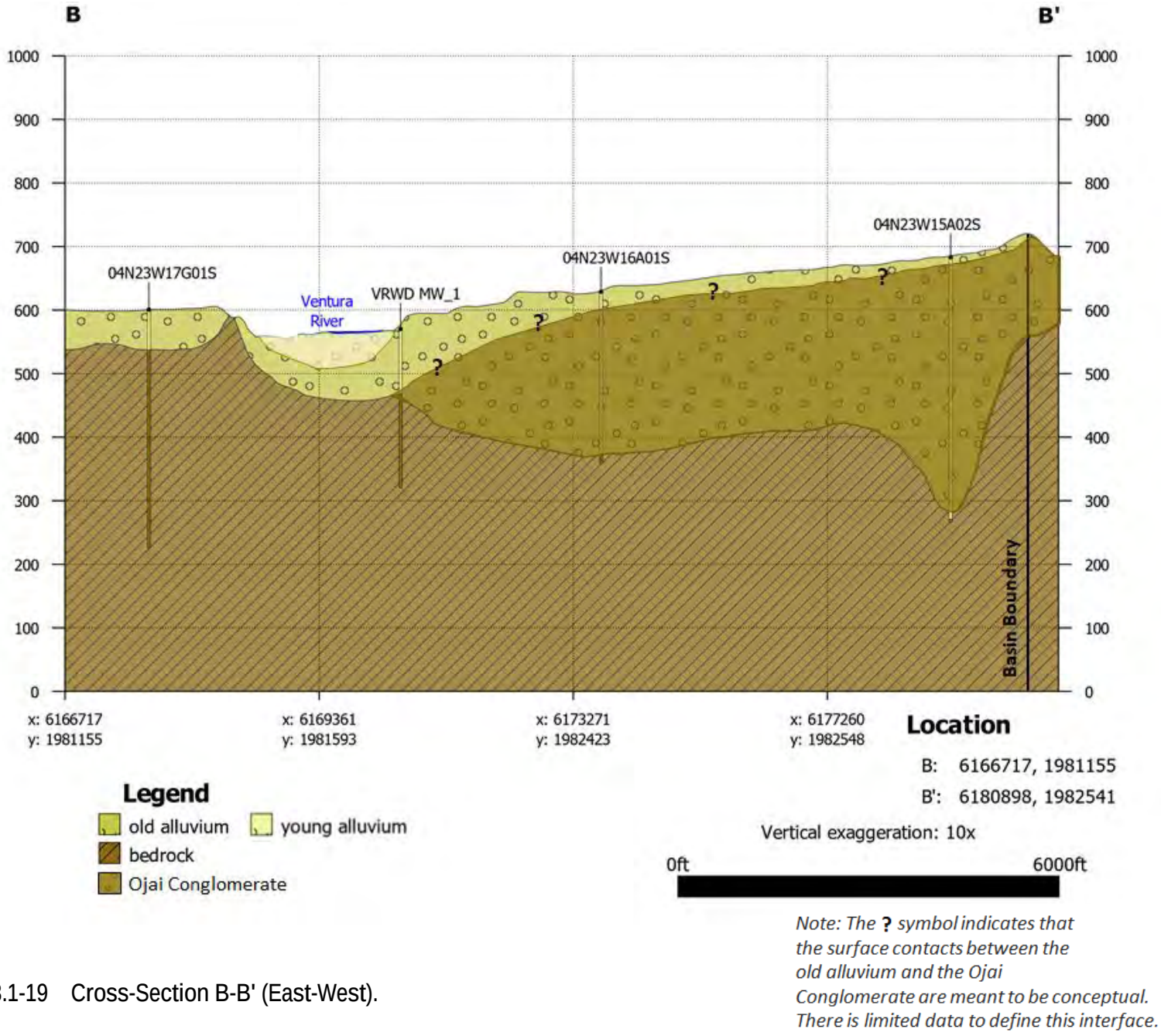


Figure 3.1-19 Cross-Section B-B' (East-West).

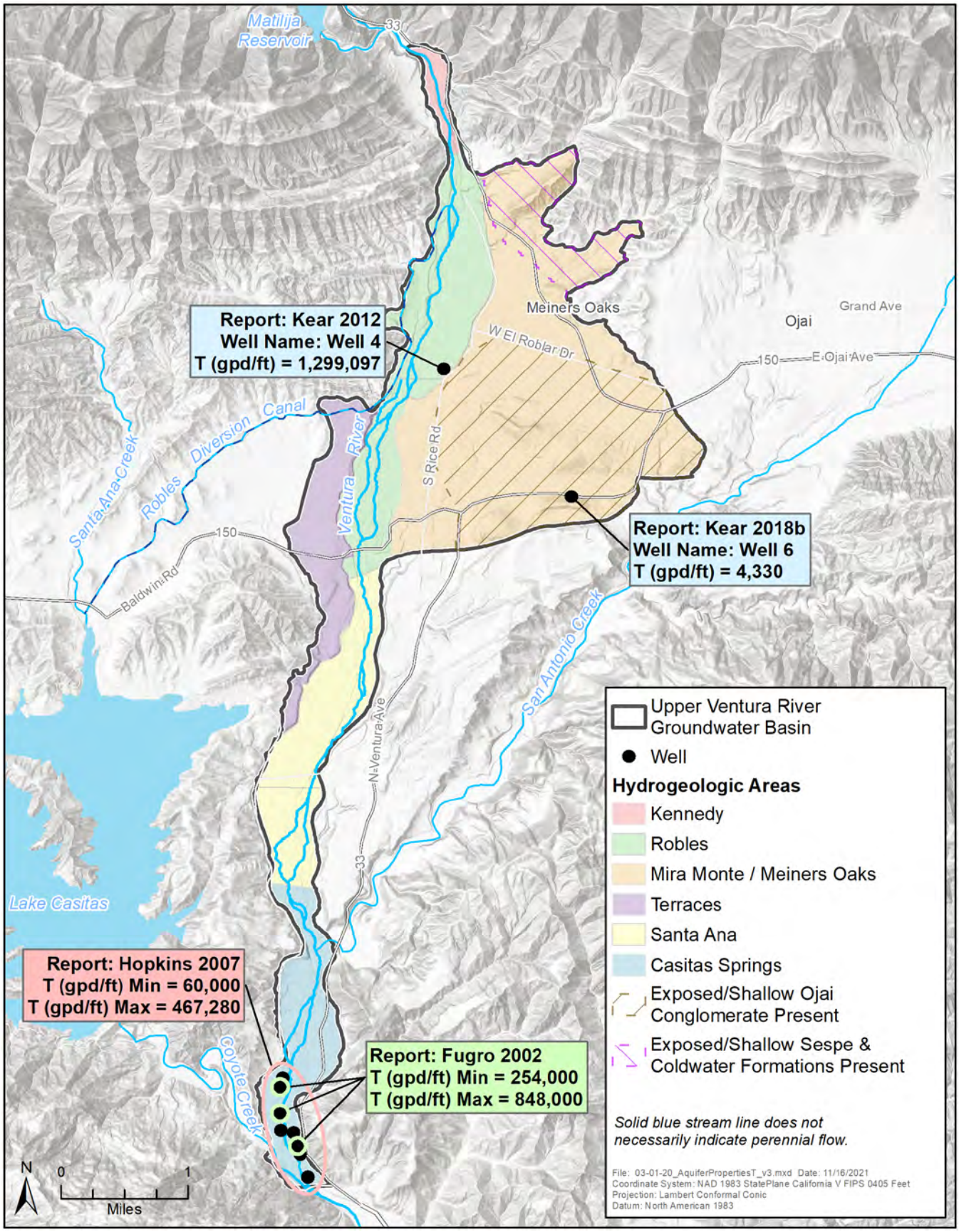


Figure 3.1-20 Transmissivities Estimated from Aquifer and Pump Tests.

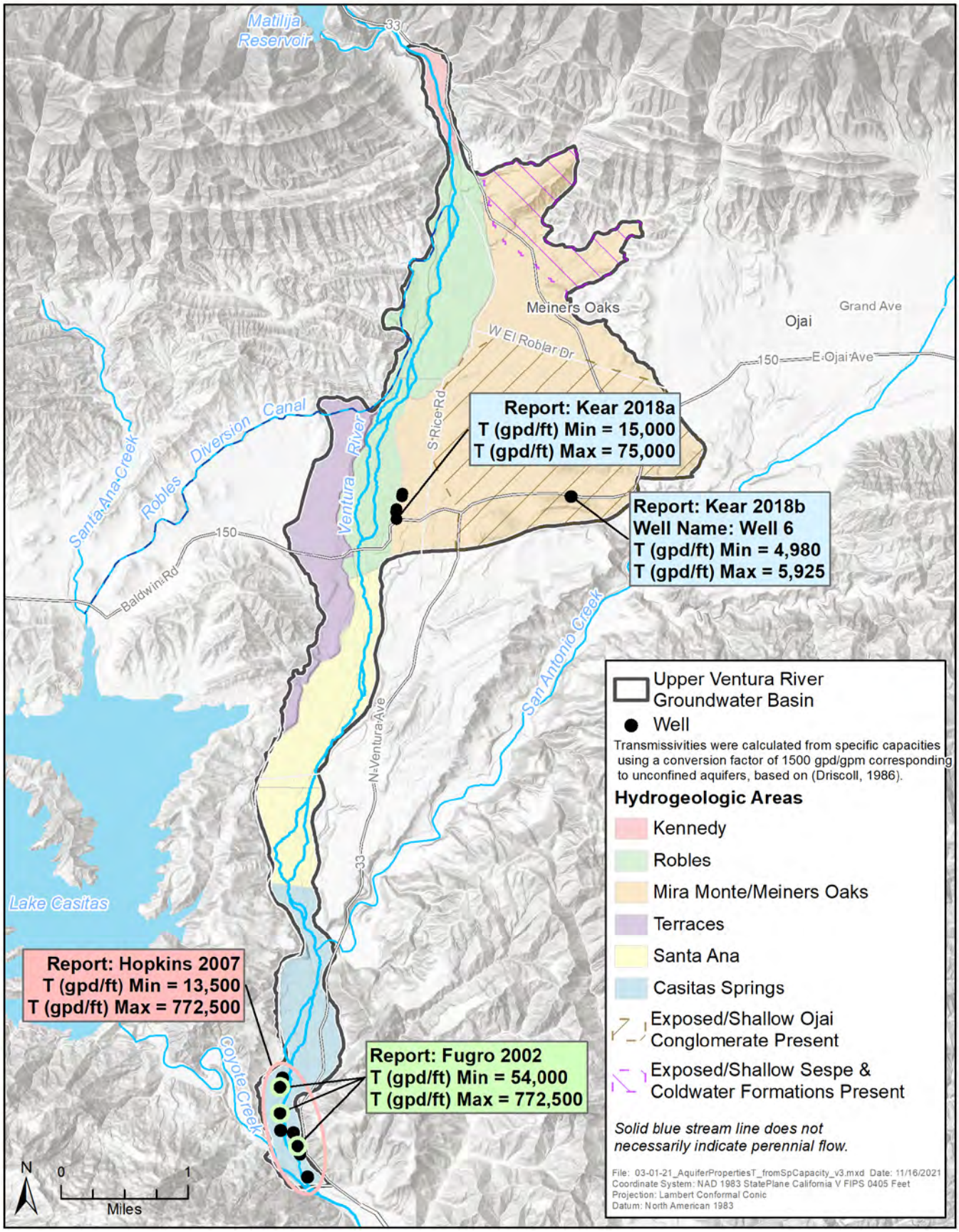


Figure 3.1-21 Transmissivities Converted from Specific Capacity Estimates.

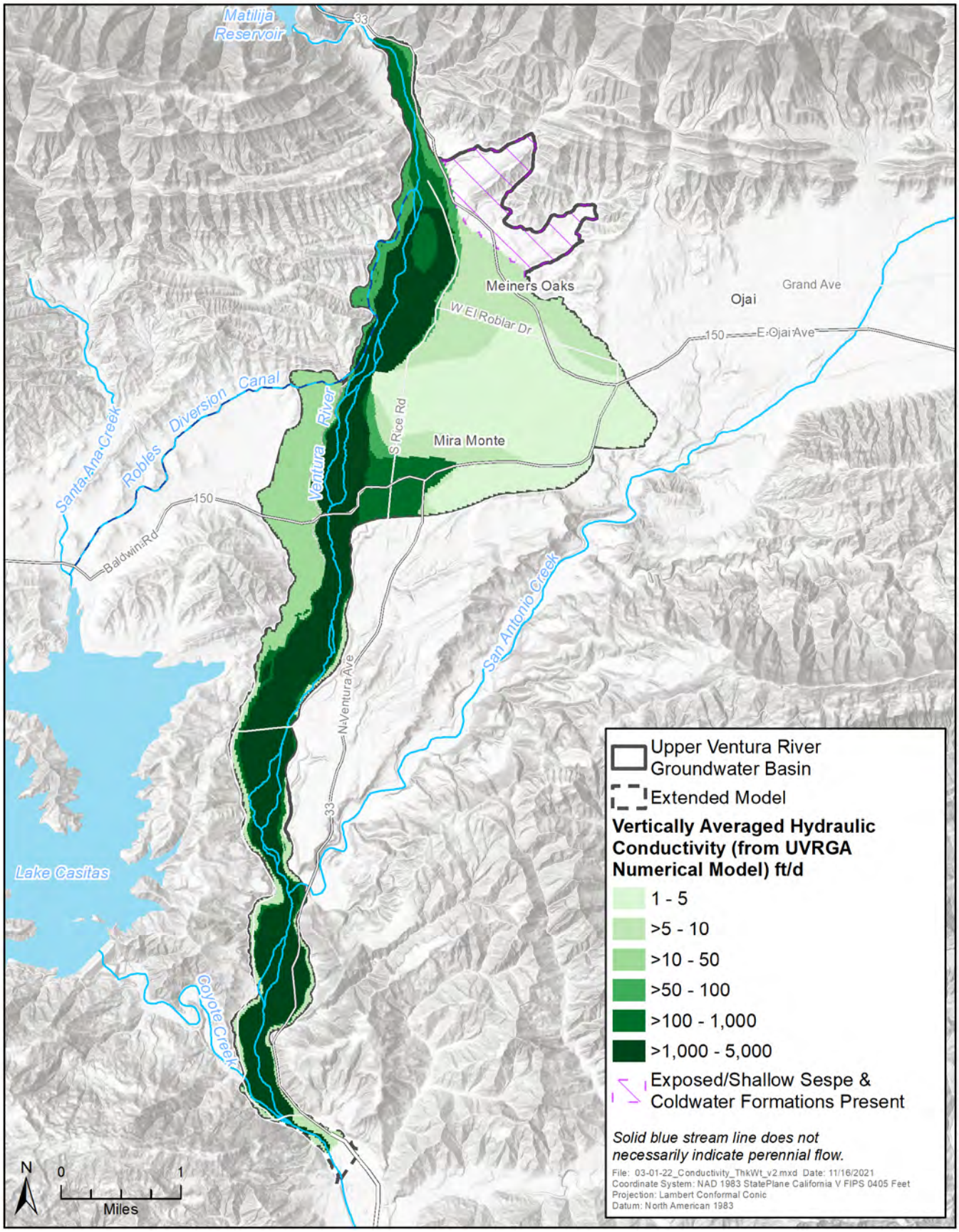


Figure 3.1-22 Vertically Averaged Hydraulic Conductivity from UVRGA Numerical Model.

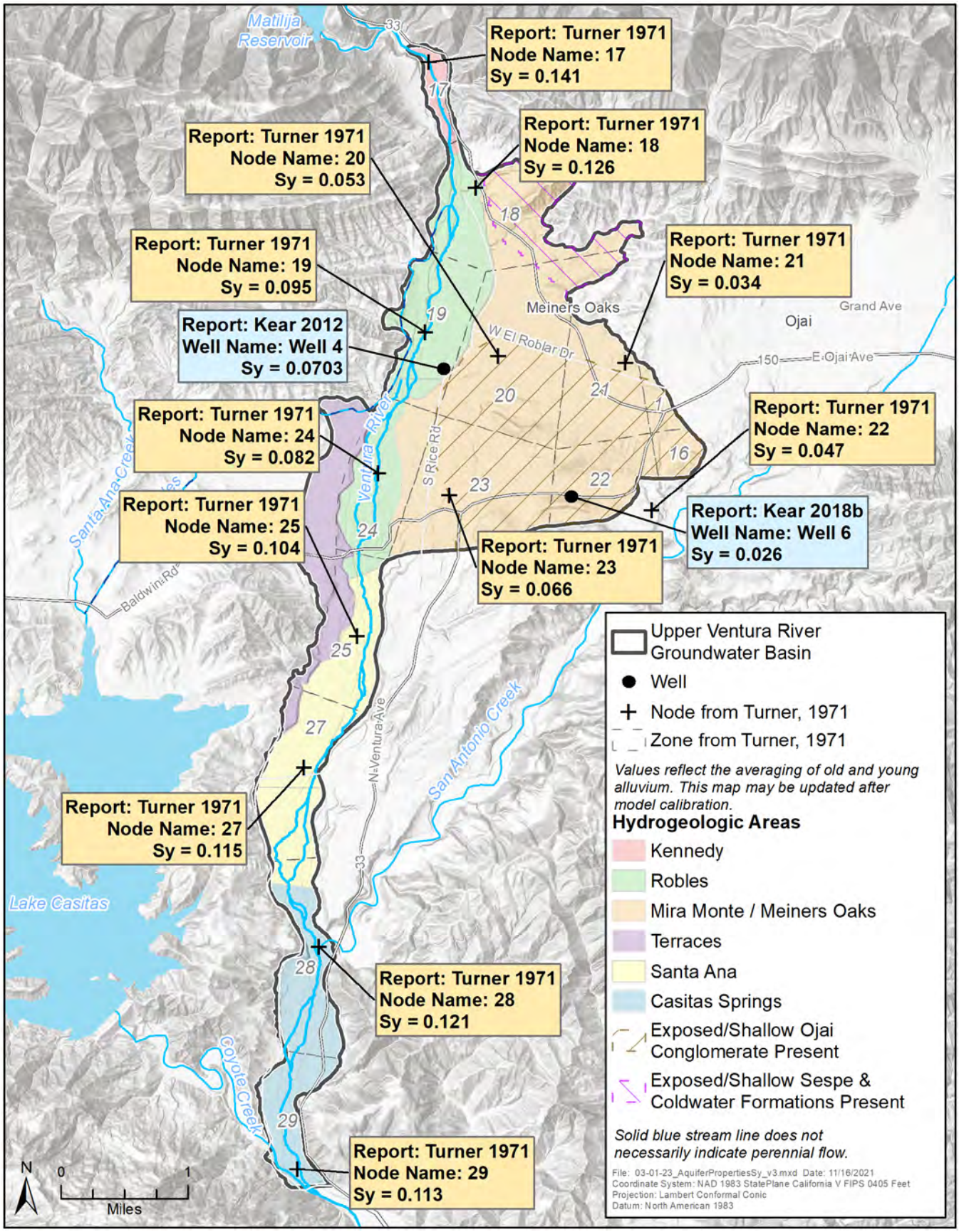


Figure 3.1-23 Specific Yield Estimates.

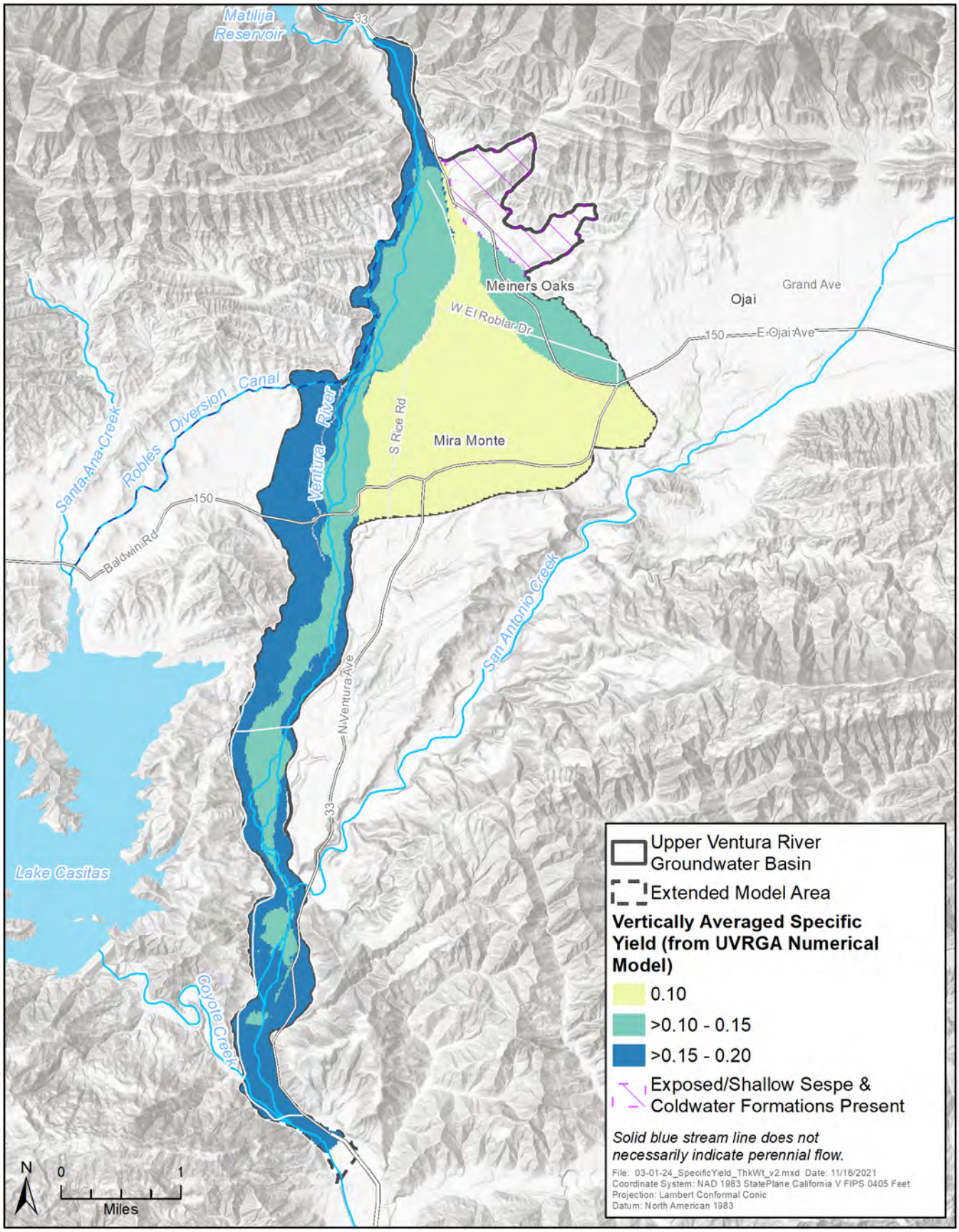
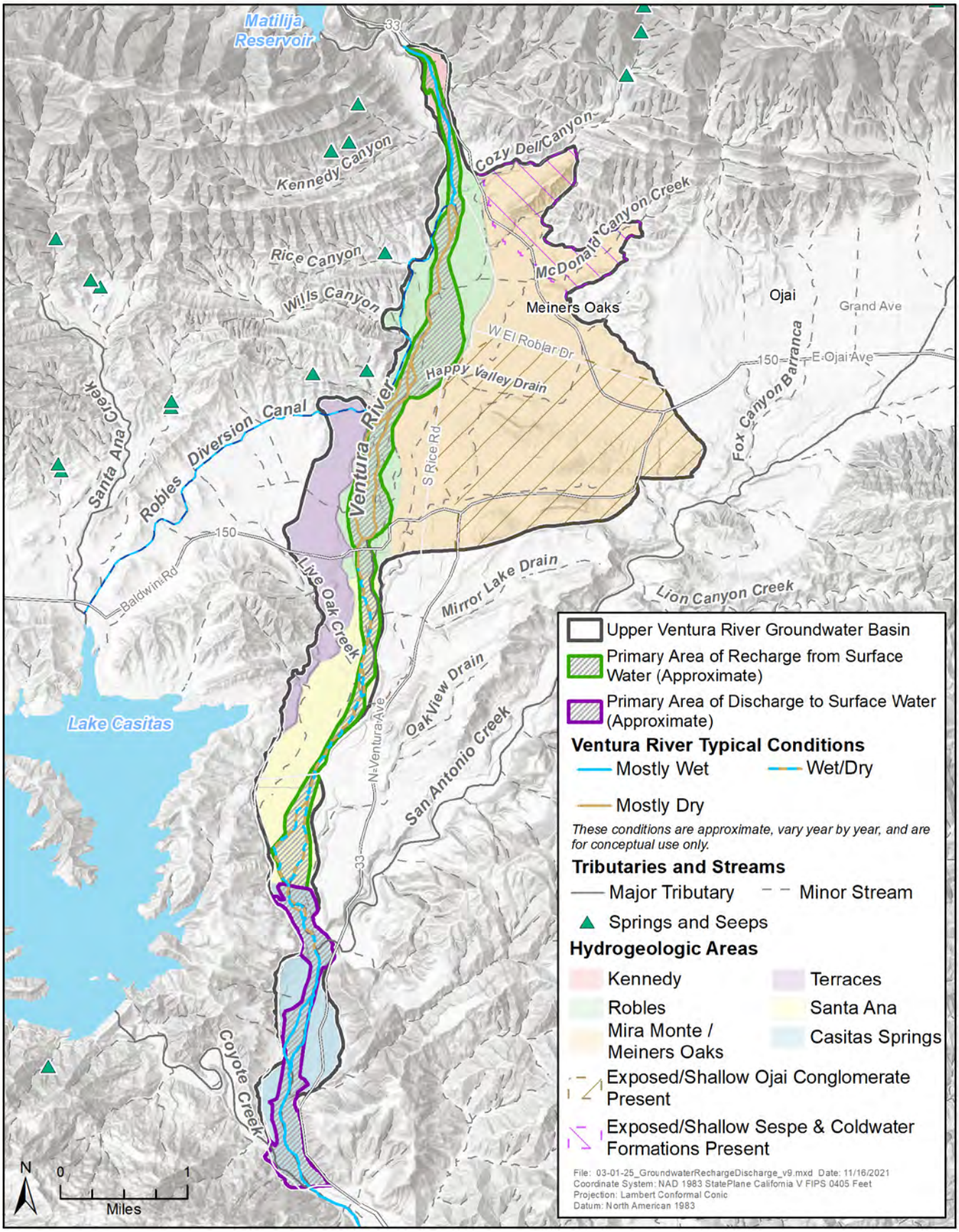
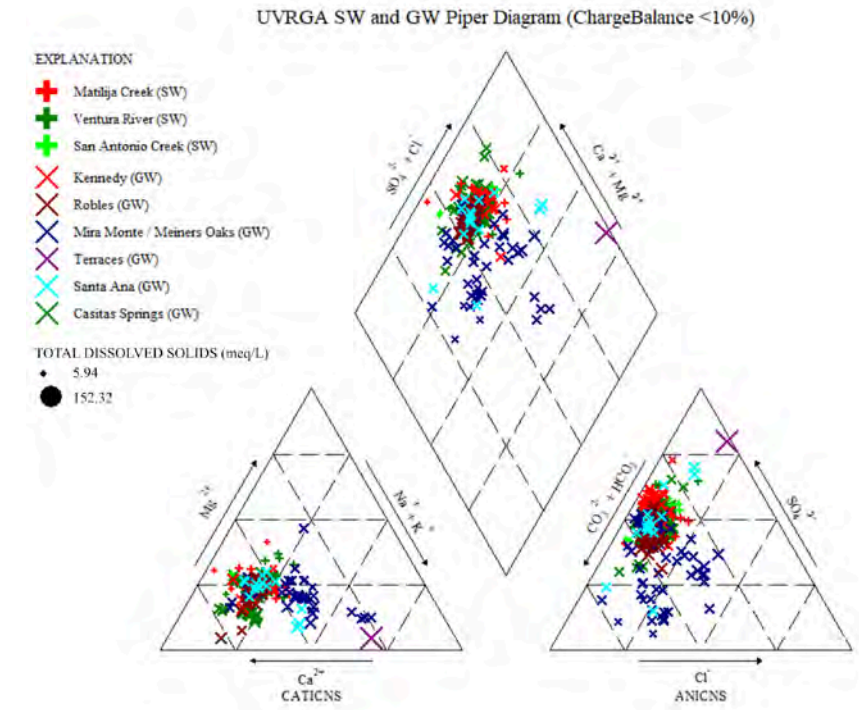


Figure 3.1-24 Vertically Averaged Specific Yield from UVRGA Numerical Model.



Data Source: USGS, 2016.

Figure 3.1-25 Primary Groundwater Recharge and Discharge Processes and Areas.



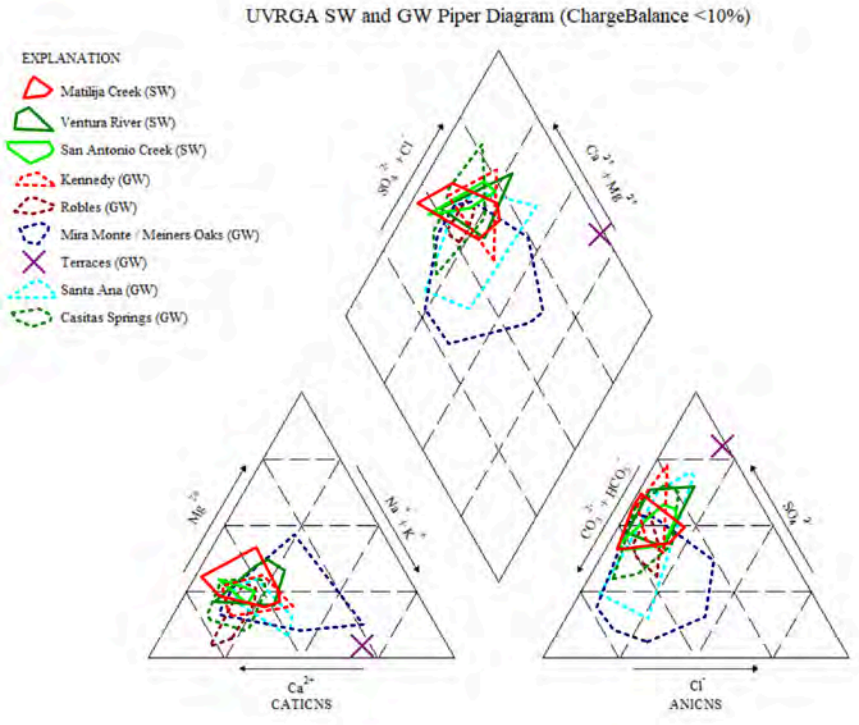


Figure 3.1-26 General Water Chemistry Characteristics of the Groundwater and Surface Water in the UVRGB.

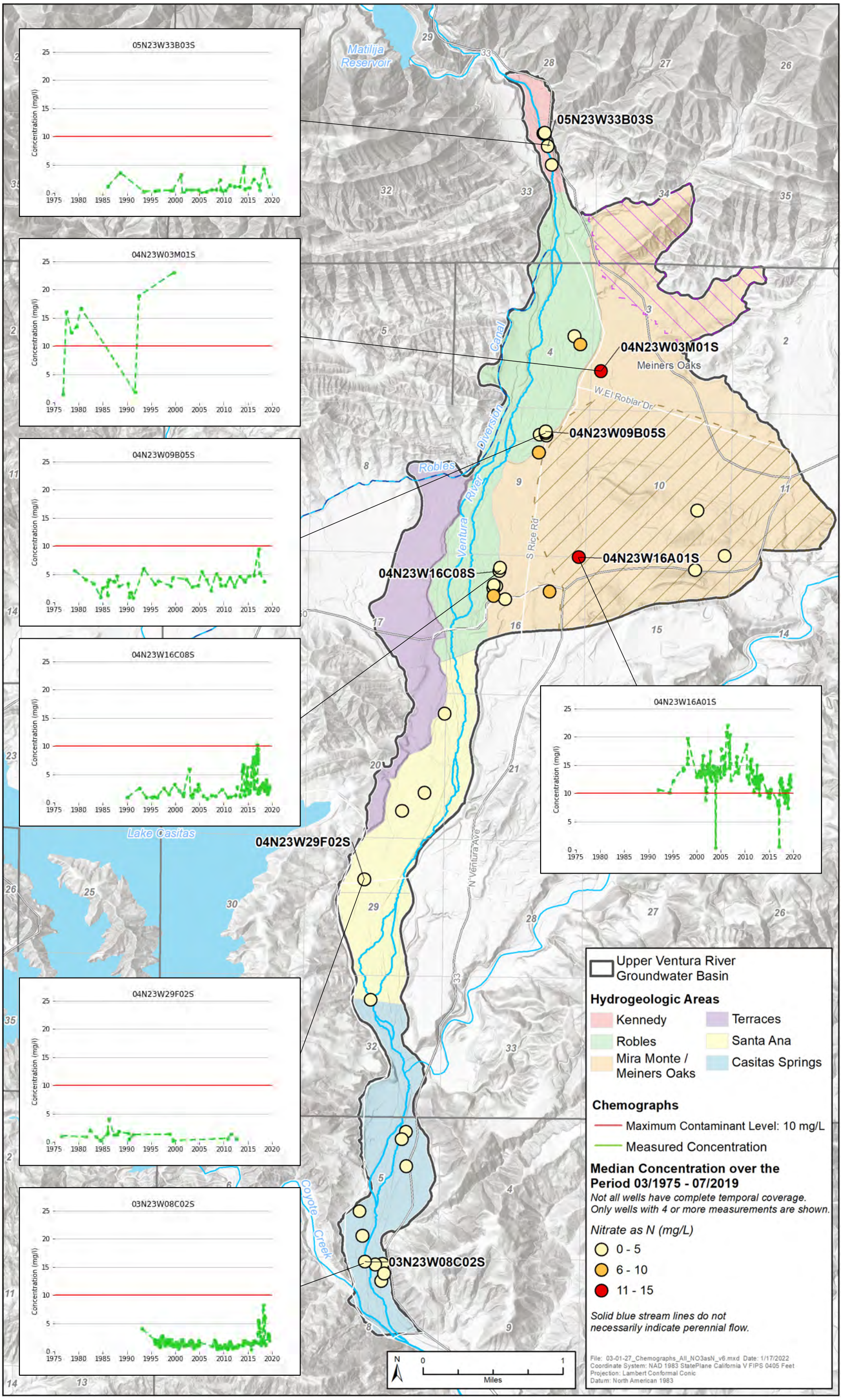


Figure 3.1-27 Median Nitrate as N Concentration, 1975–2019.

Data Source: SWRCB, 2019; Ventura County, 2019.

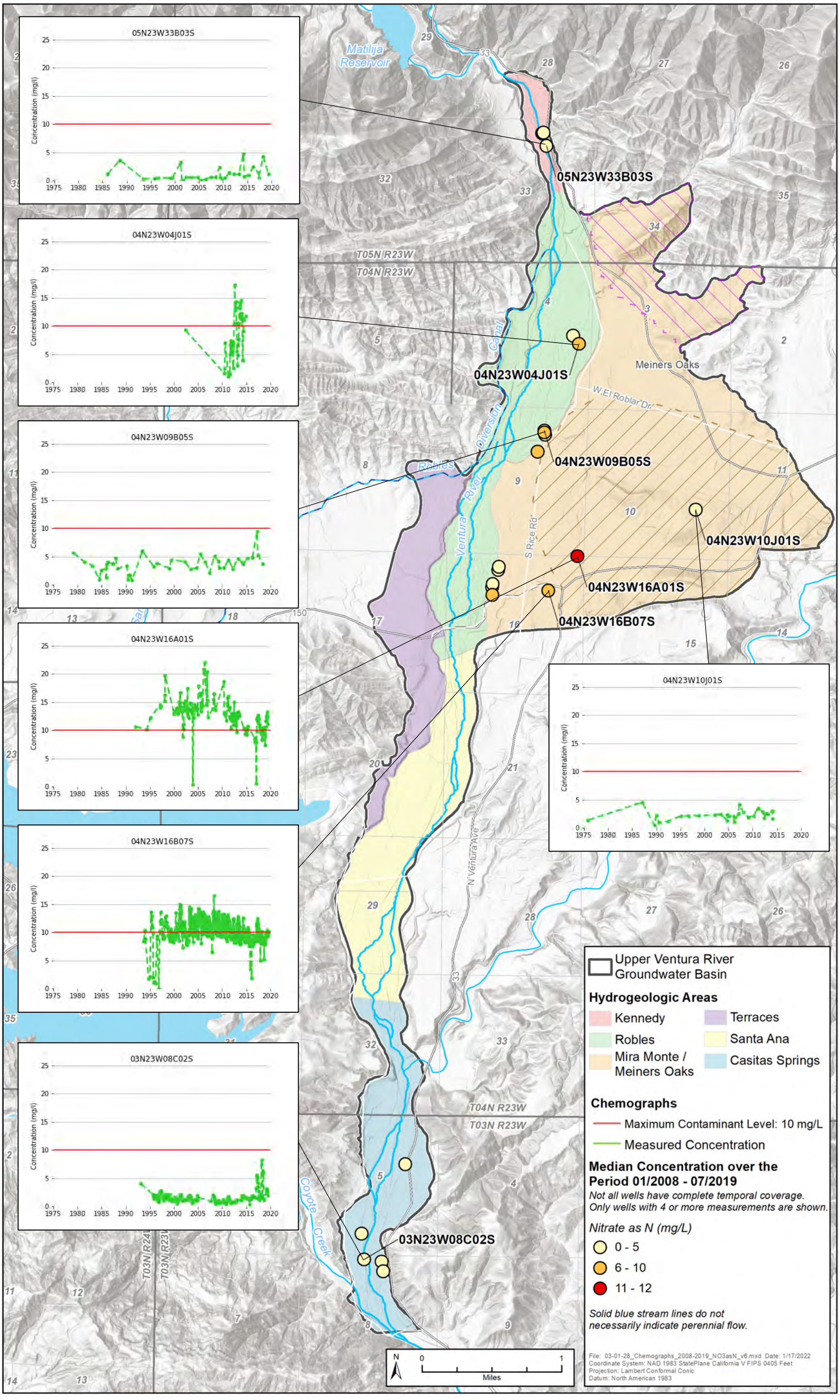


Figure 3.1-28 Median Nitrate as N Concentration, 2008–2019.

Data Source: SWRCB, 2019; Ventura County, 2019.

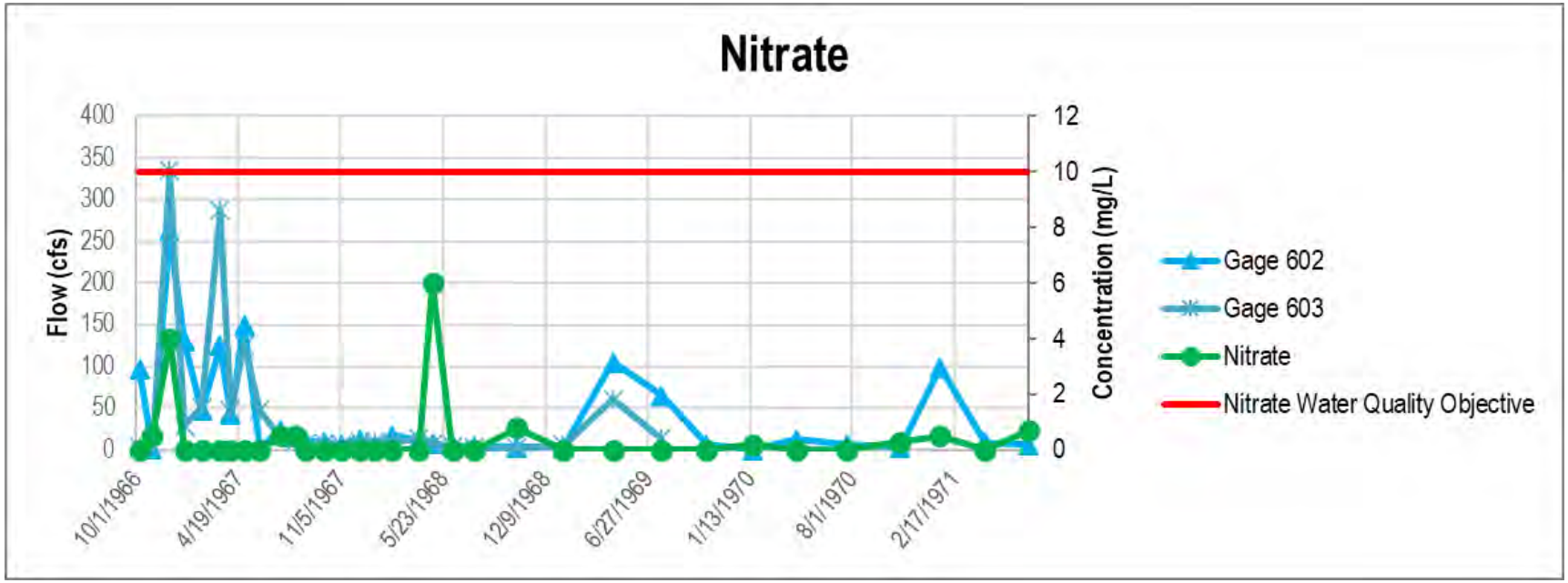


Figure 3.1-29 Surface Water Quality (Nitrate) and Flow Available Time Series Data - Matilija Creek.

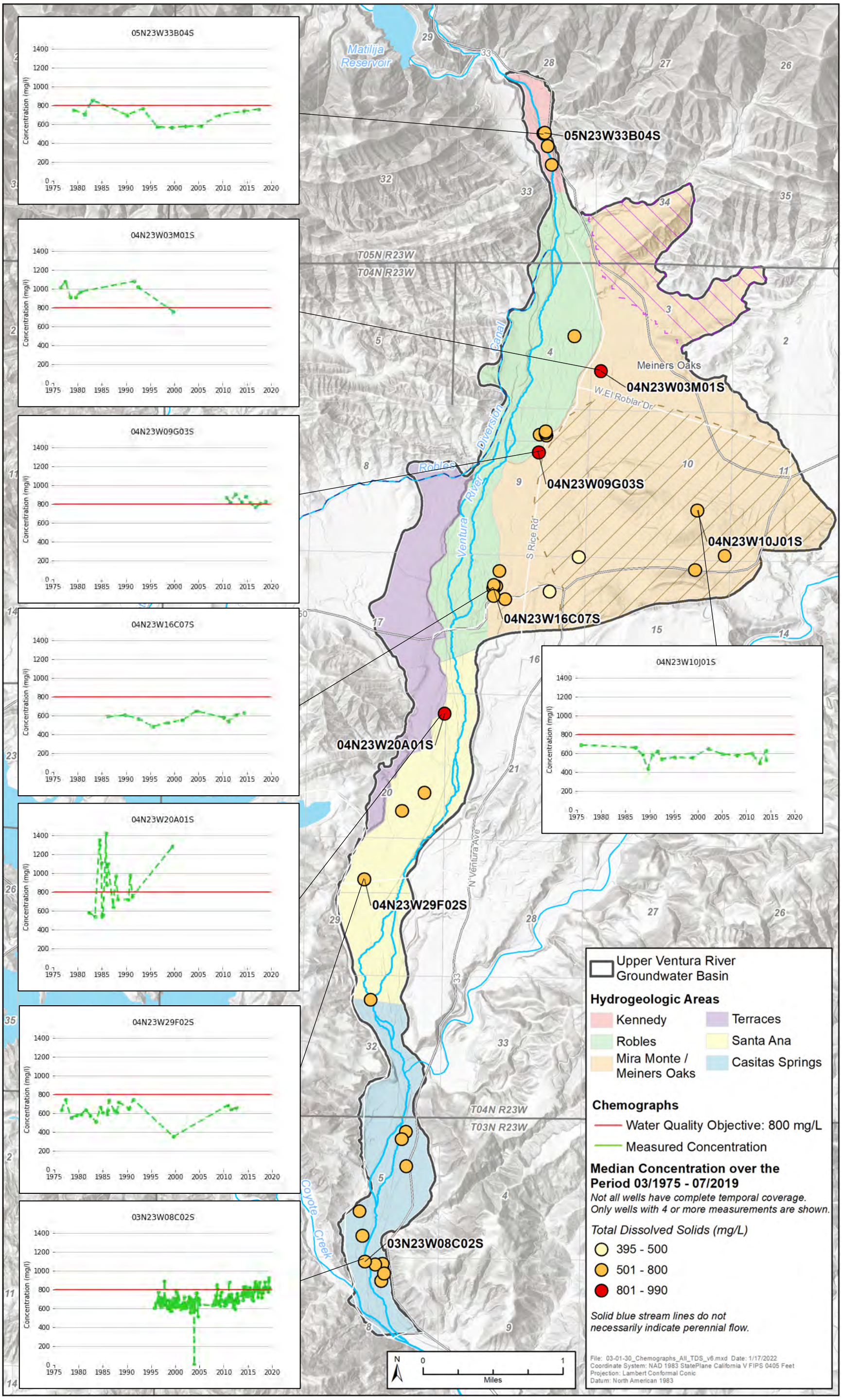
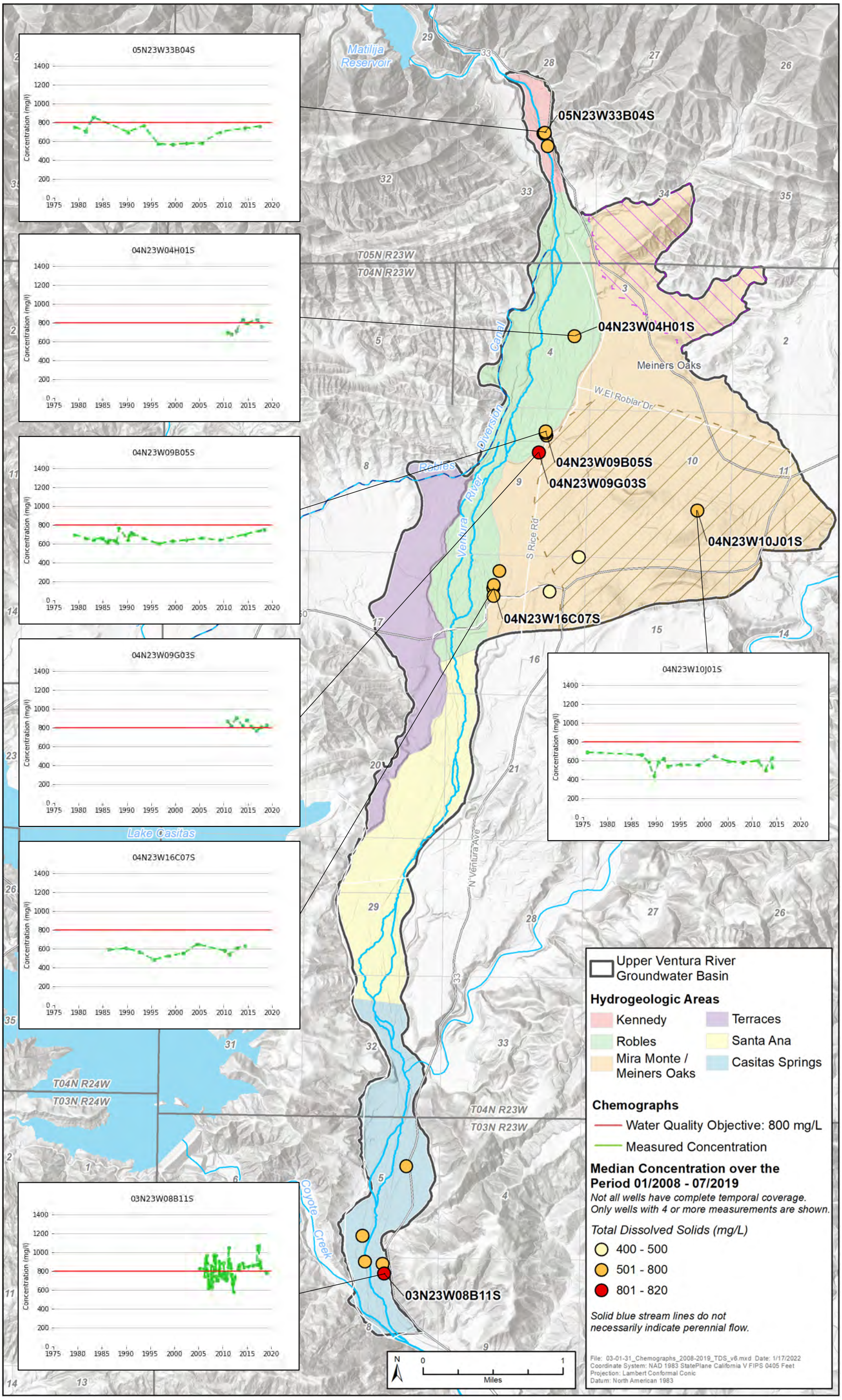


Figure 3.1-30 Median Total Dissolved Solids Concentration, 1975–2019.

Data Source: SWRCB, 2019; Ventura County, 2019.



Data Source: SWRCB, 2019; Ventura County, 2019.

Figure 3.1-31 Median Total Dissolved Solids Concentration, 2008–2019.

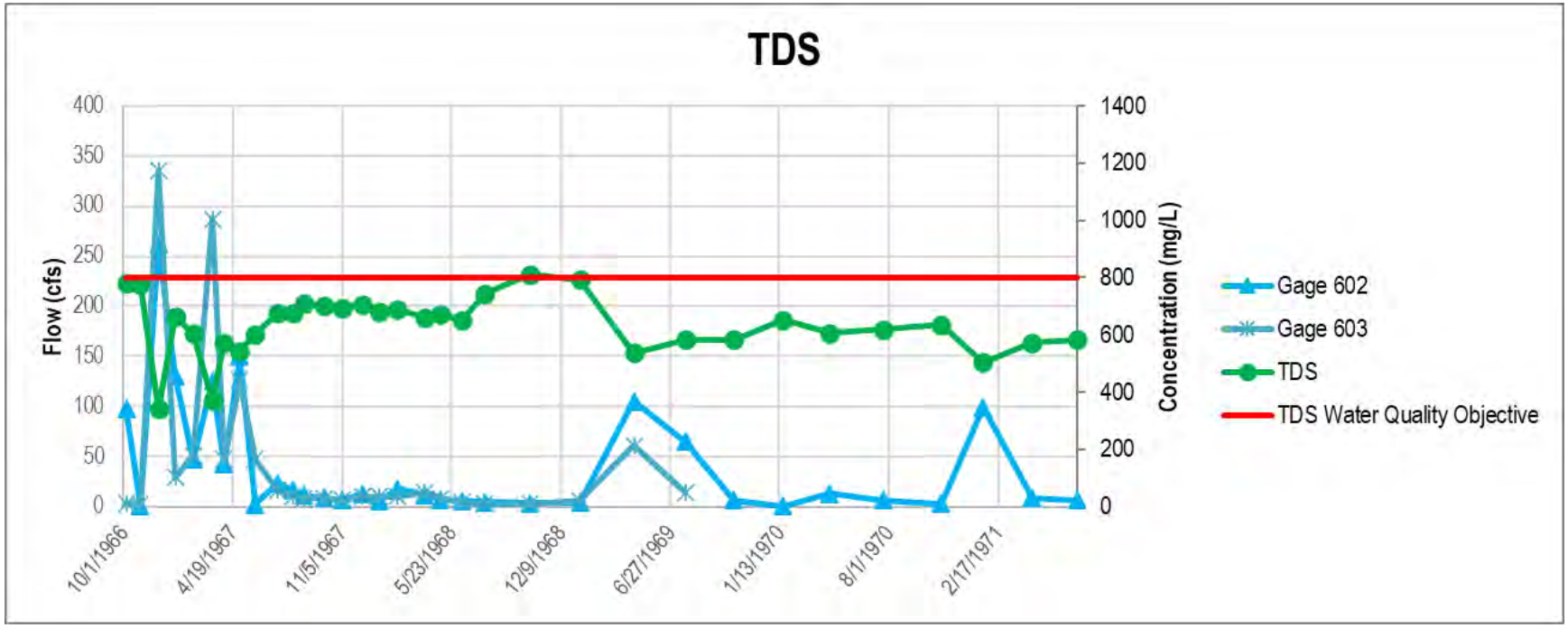
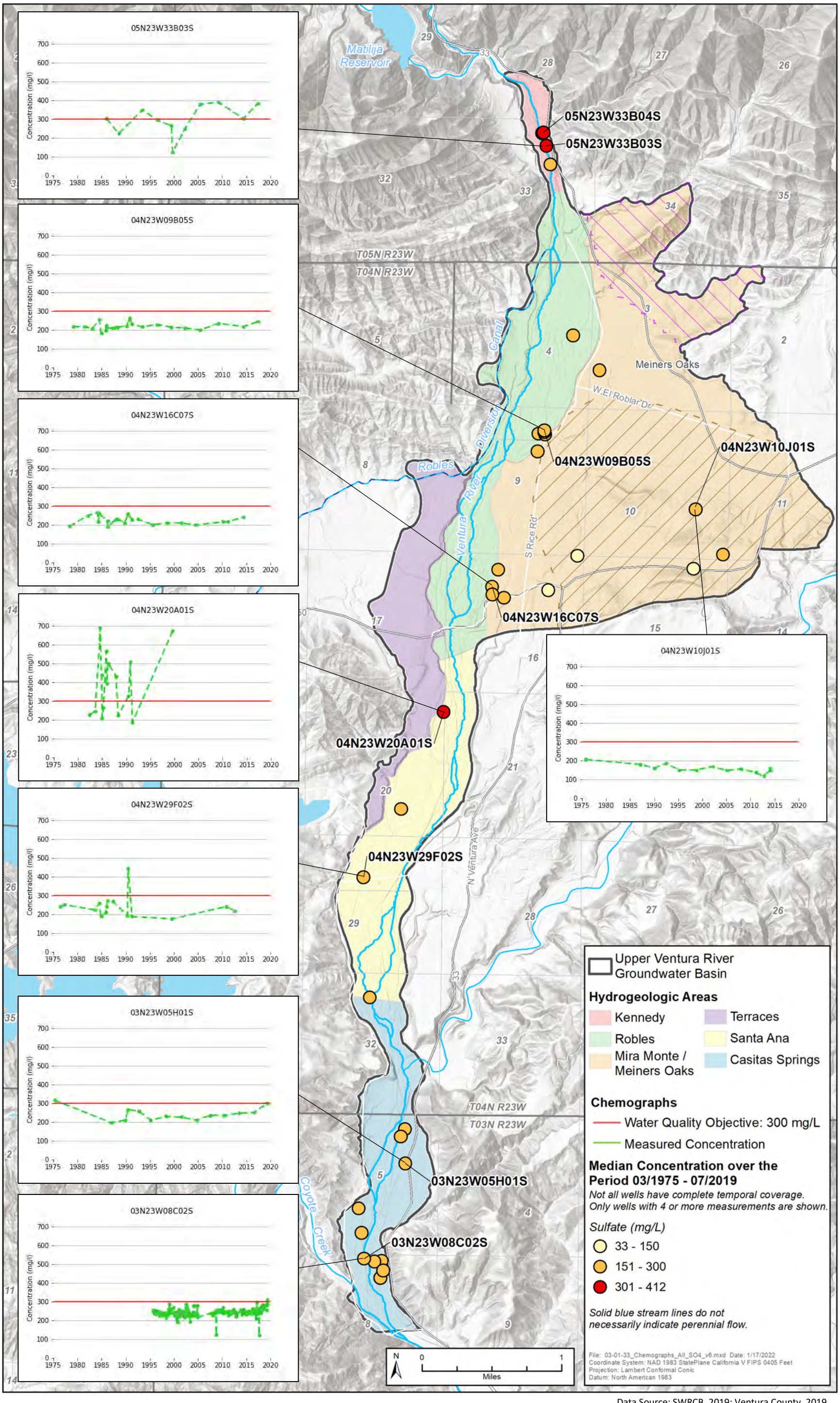


Figure 3.1-32 Surface Water Quality (TDS) and Flow Available Time Series Data - Matilija Creek.



Data Source: SWRCB, 2019; Ventura County, 2019.

Figure 3.1-33 Median Sulfate Concentration, 1975–2019.

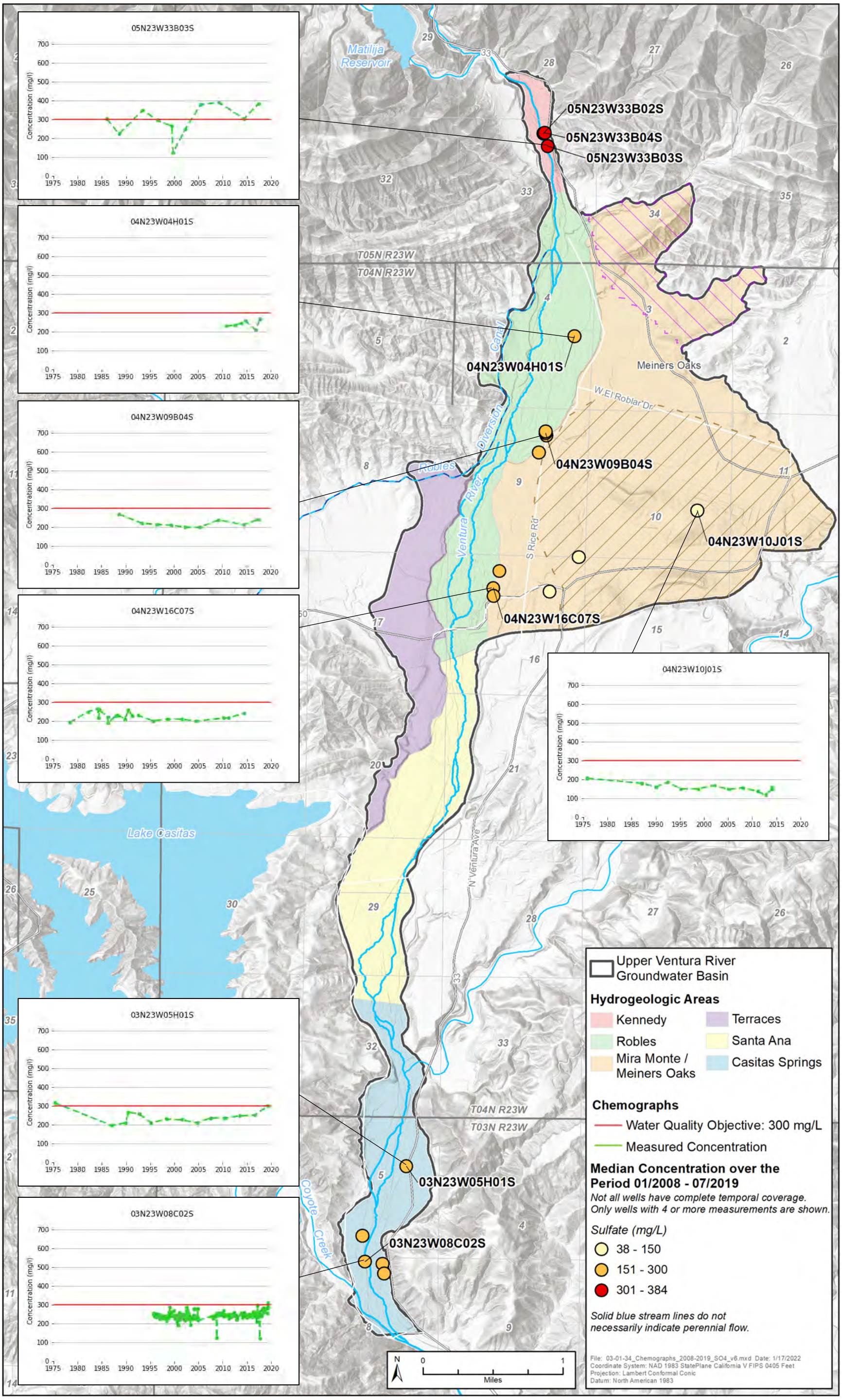


Figure 3.1-34 Median Sulfate Concentration, 2008–2019.

Data Source: SWRCB, 2019; Ventura County, 2019.

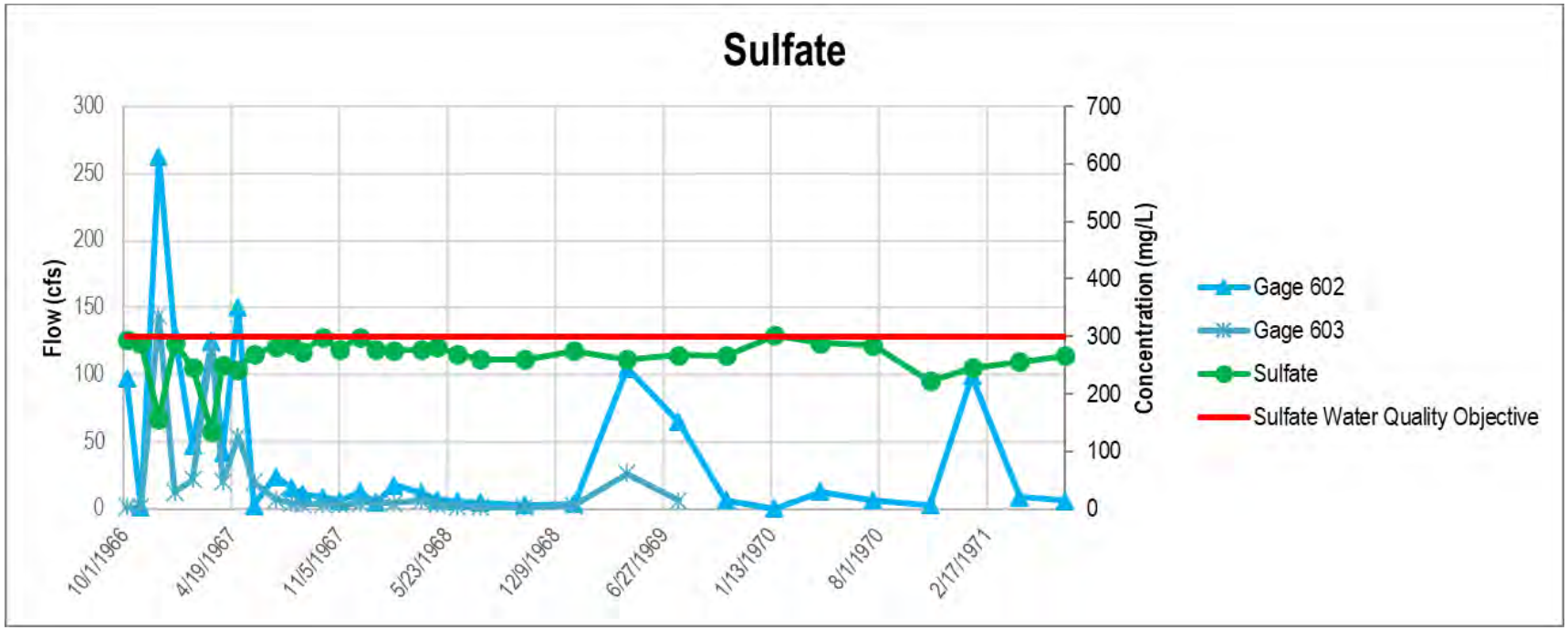


Figure 3.1-35 Surface Water Quality (Sulfate) and Flow Available Time Series Data - Matilija Creek.

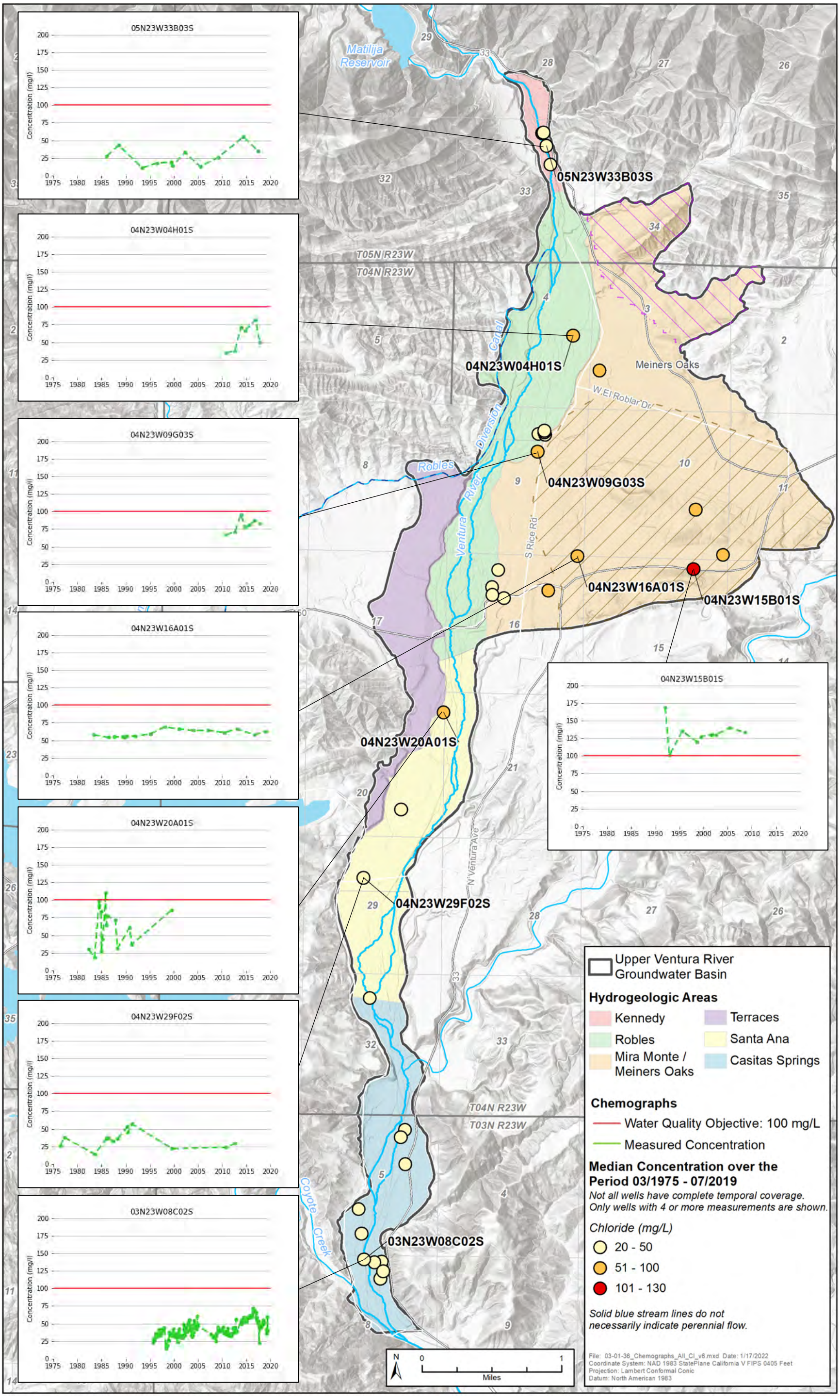


Figure 3.1-36 Median Chloride Concentration, 1975–2019.

Data Source: SWRCB, 2019; Ventura County, 2019.

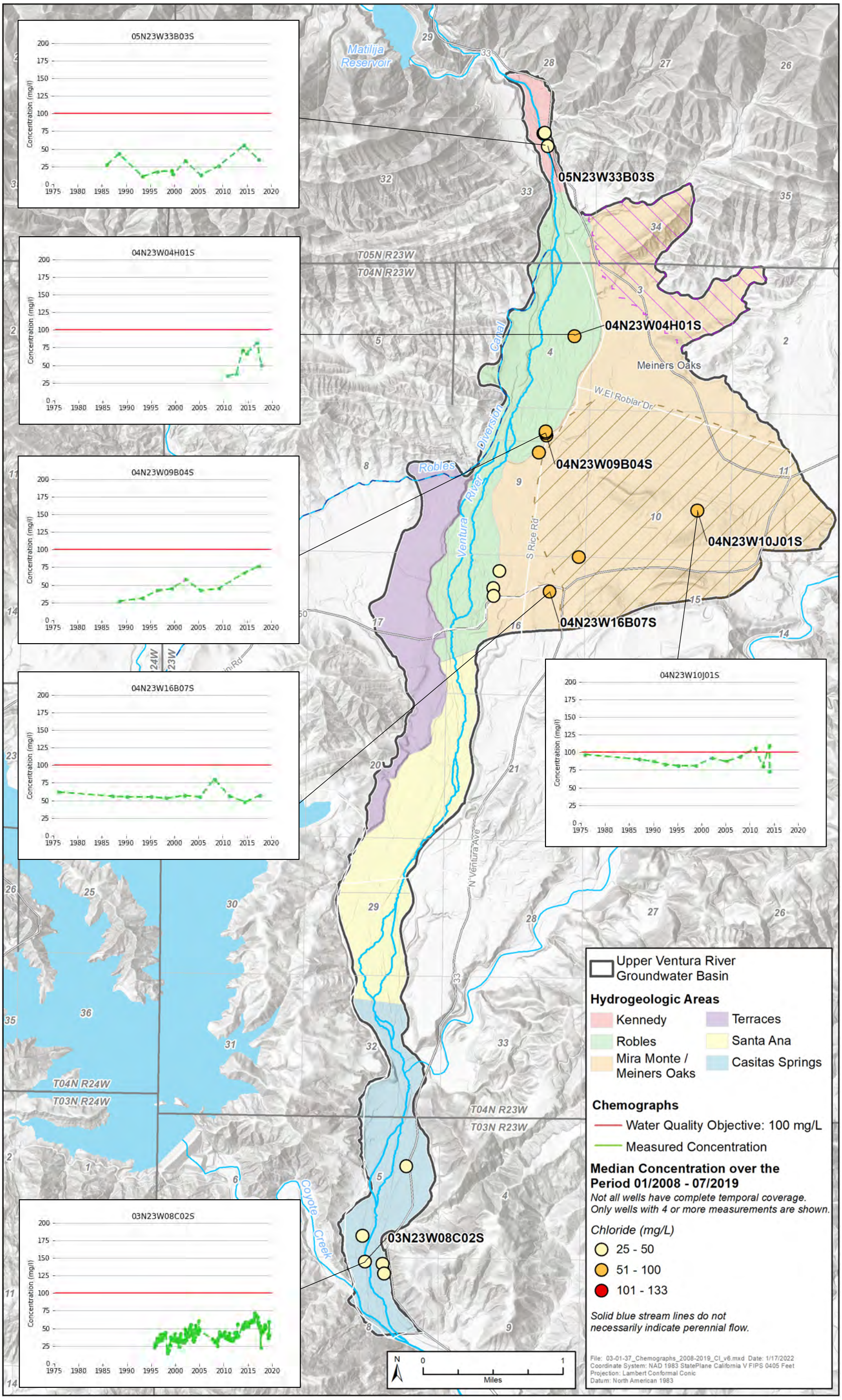


Figure 3.1-37 Median Chloride Concentration, 2008–2019.

Data Source: SWRCB, 2019; Ventura County, 2019.

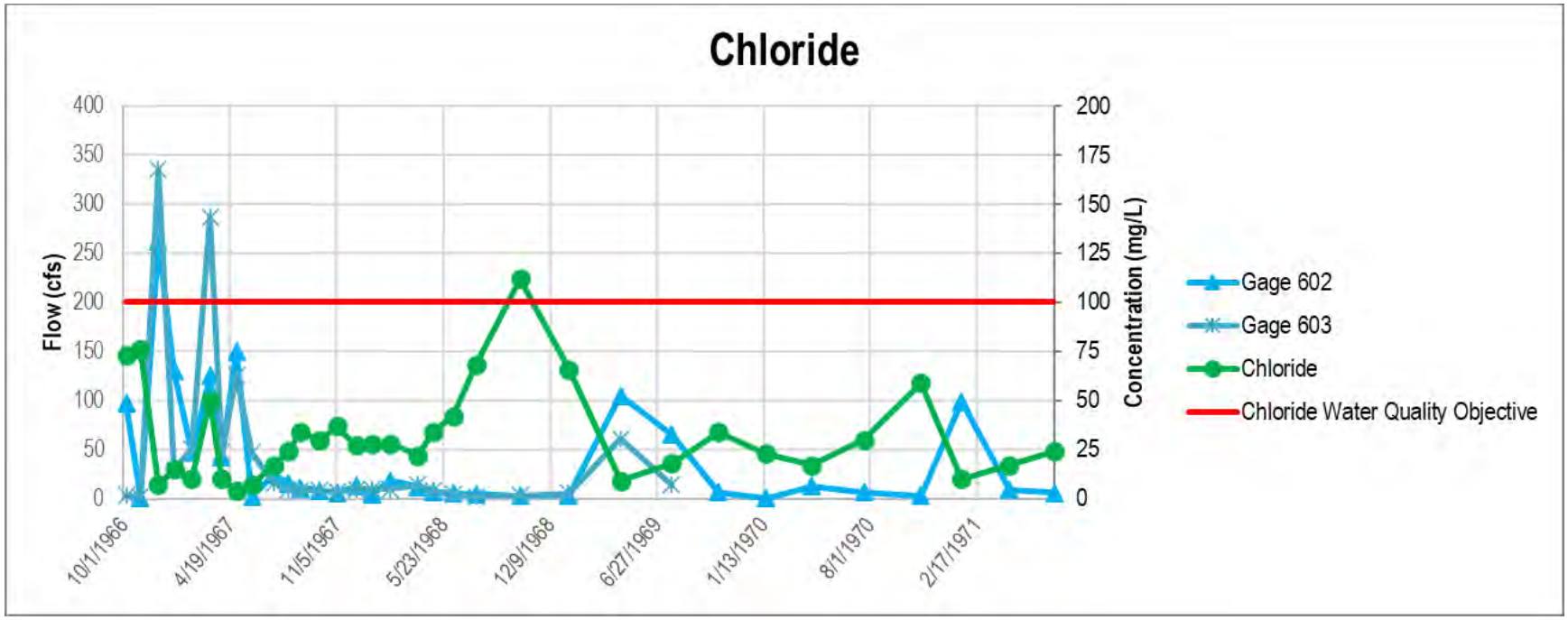


Figure 3.1-38 Surface Water Quality (Chloride) and Flow Available Time Series Data - Matilija Creek.

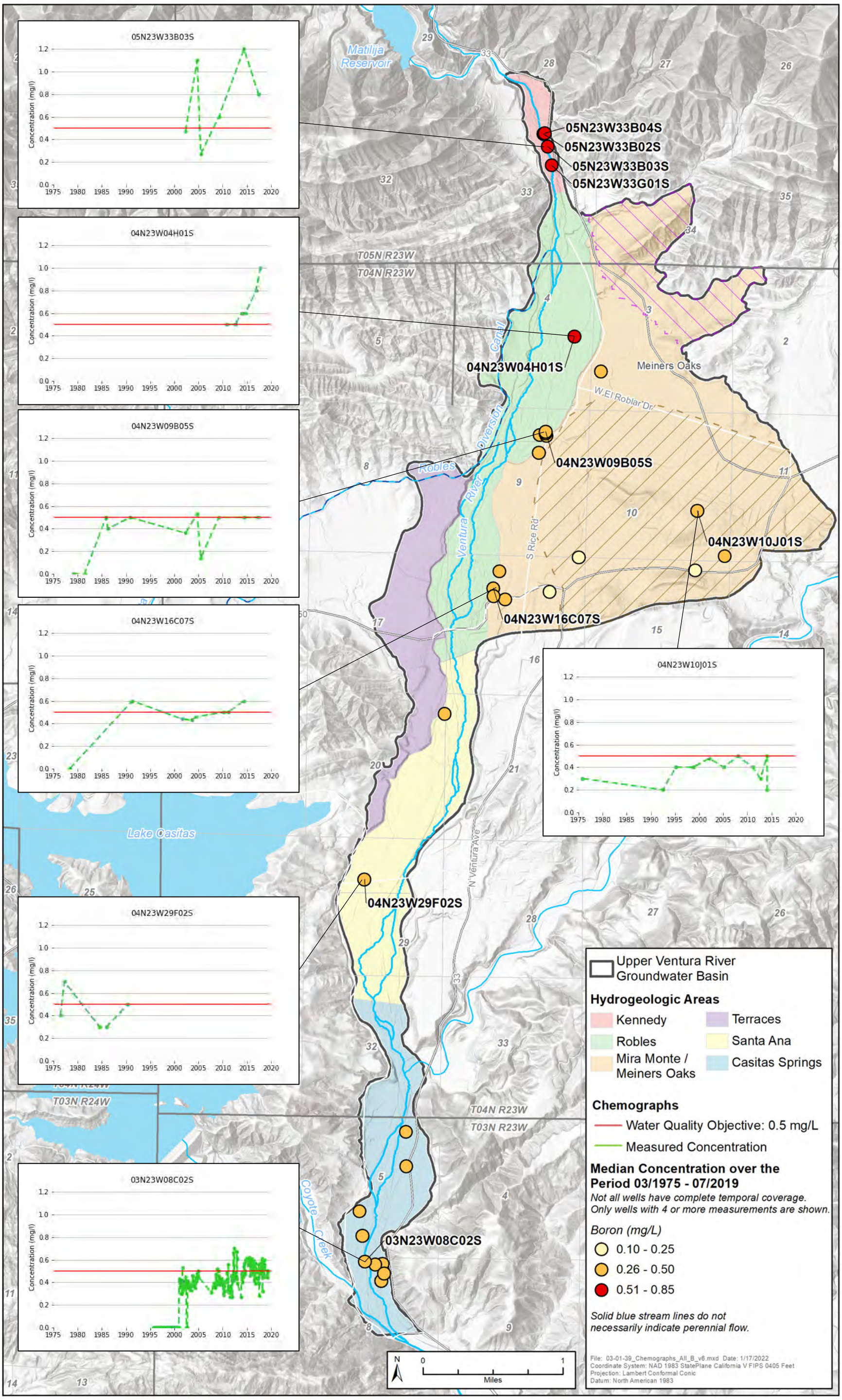


Figure 3.1-39 Median Boron Concentration, 1975–2019.

Data Source: SWRCB, 2019; Ventura County, 2019.

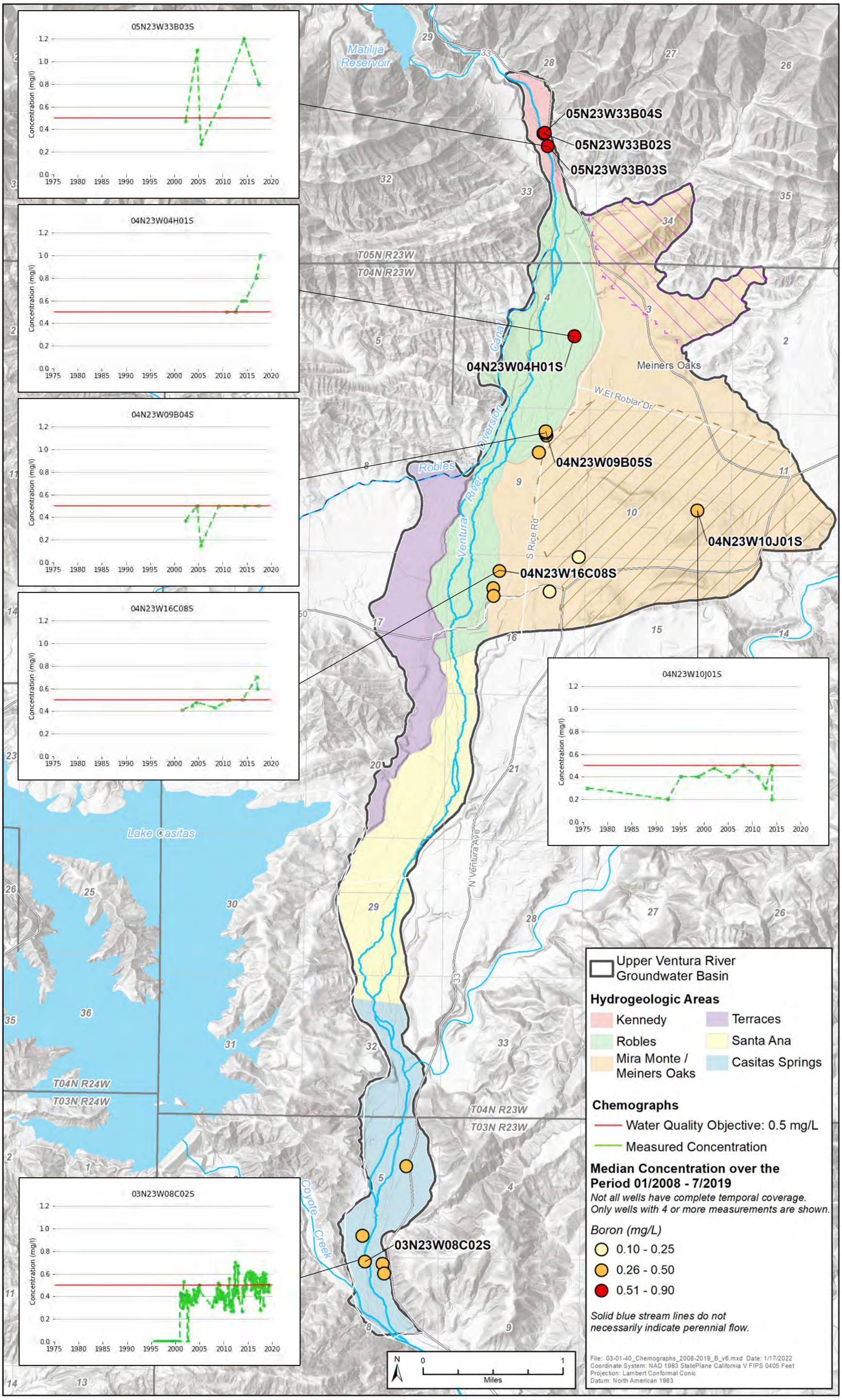


Figure 3.1-40 Median Boron Concentration, 2008–2019.

Data Source: SWRCB, 2019; Ventura County, 2019.

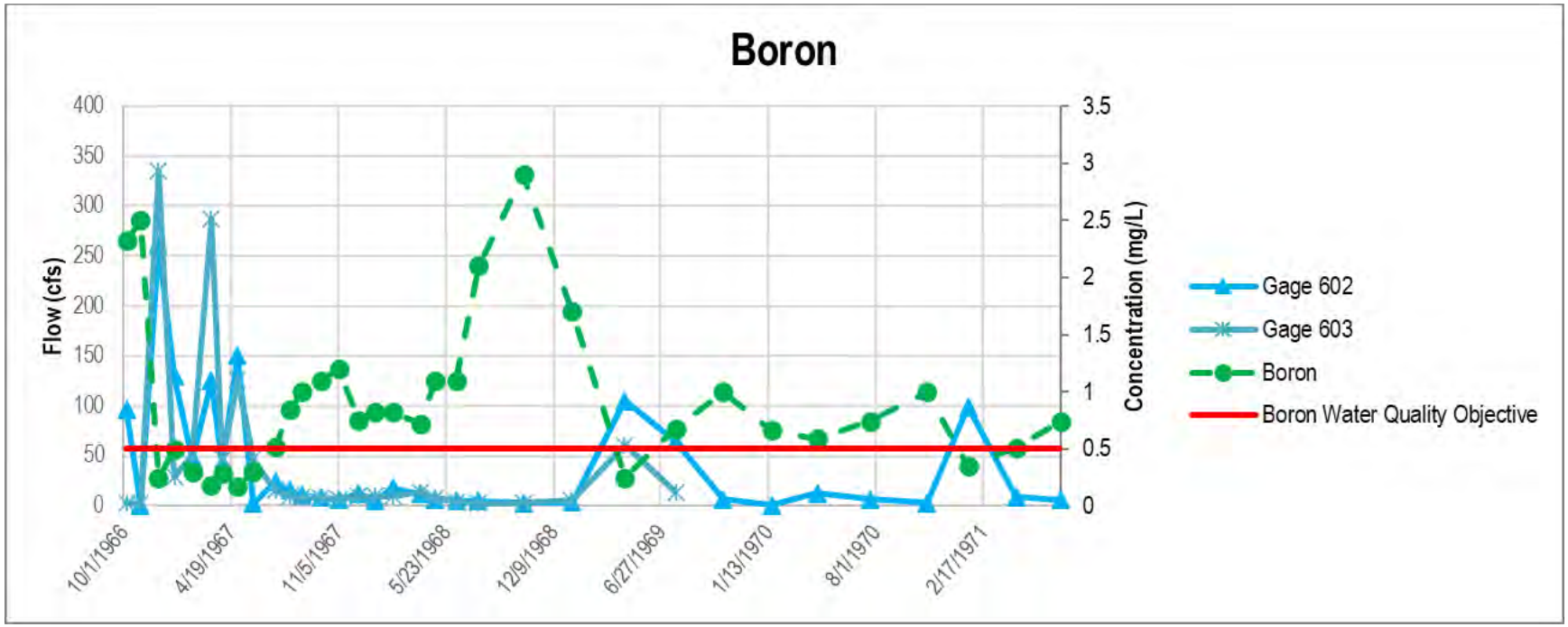


Figure 3.1-41 Surface Water Quality (Boron) and Flow Available Time Series Data - Matilija Creek.

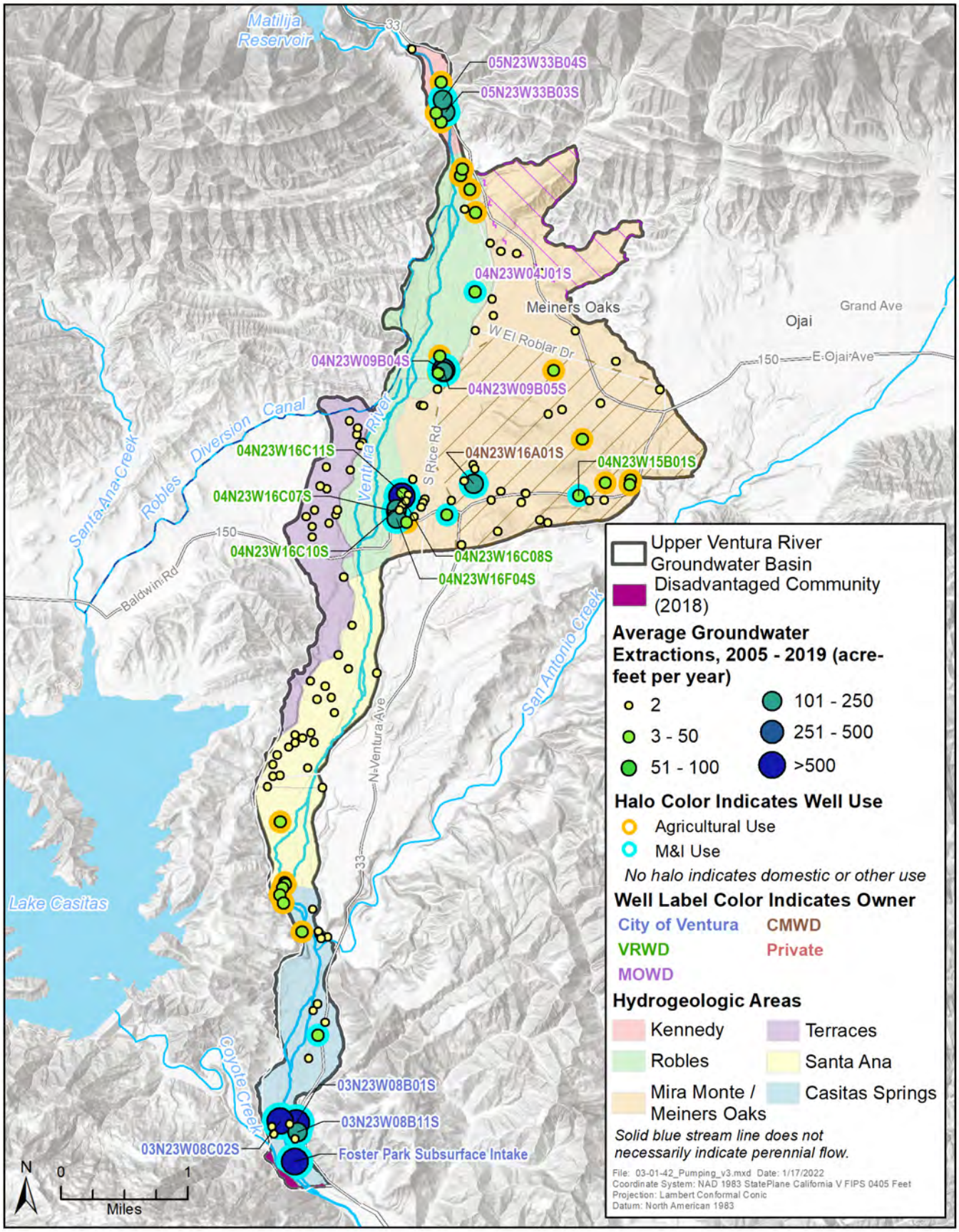


Figure 3.1-42 Pumping Wells with General Rates.

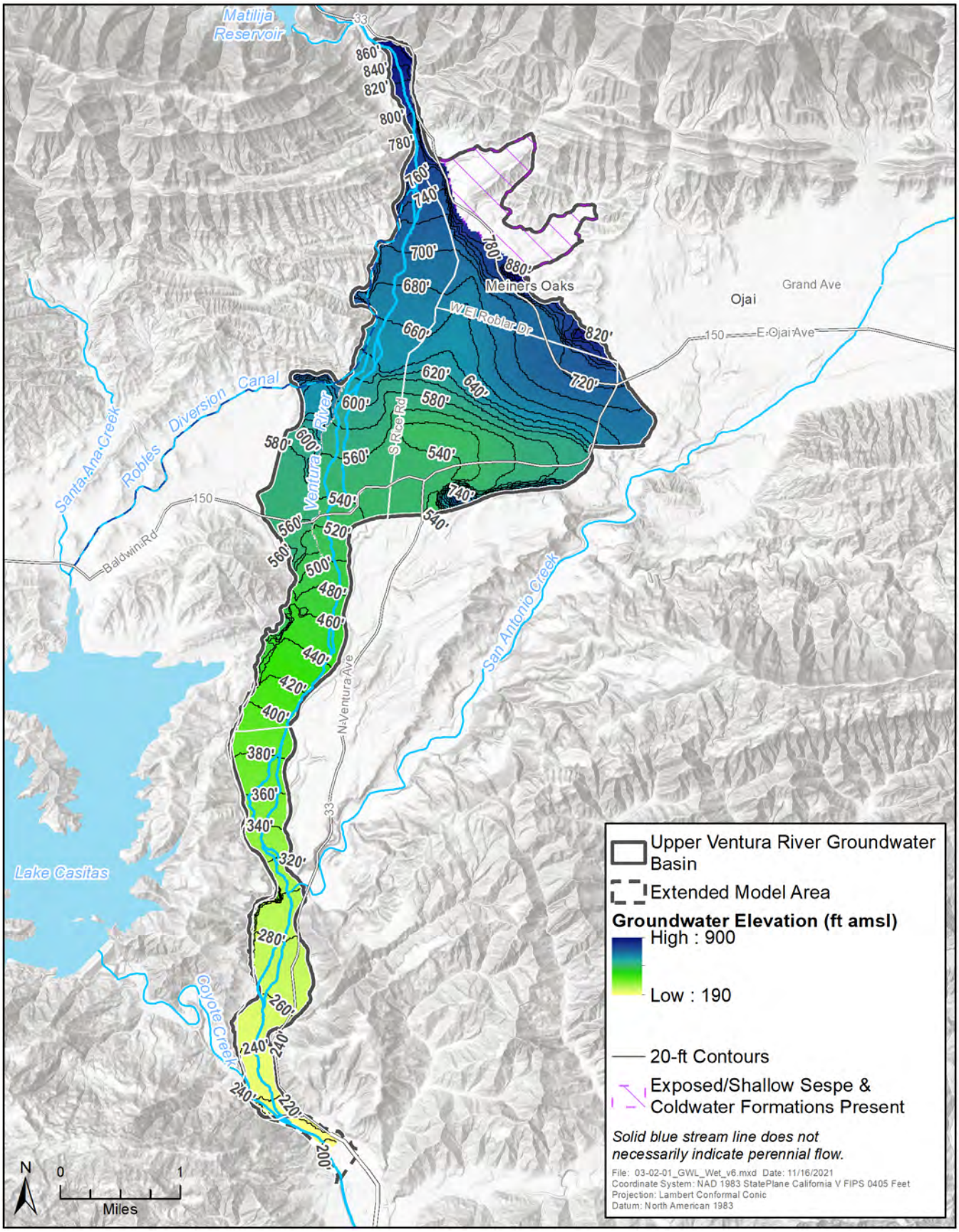


Figure 3.2-01 Contour Map for Low Modeled Water Levels (Wet Season) - March 2019.

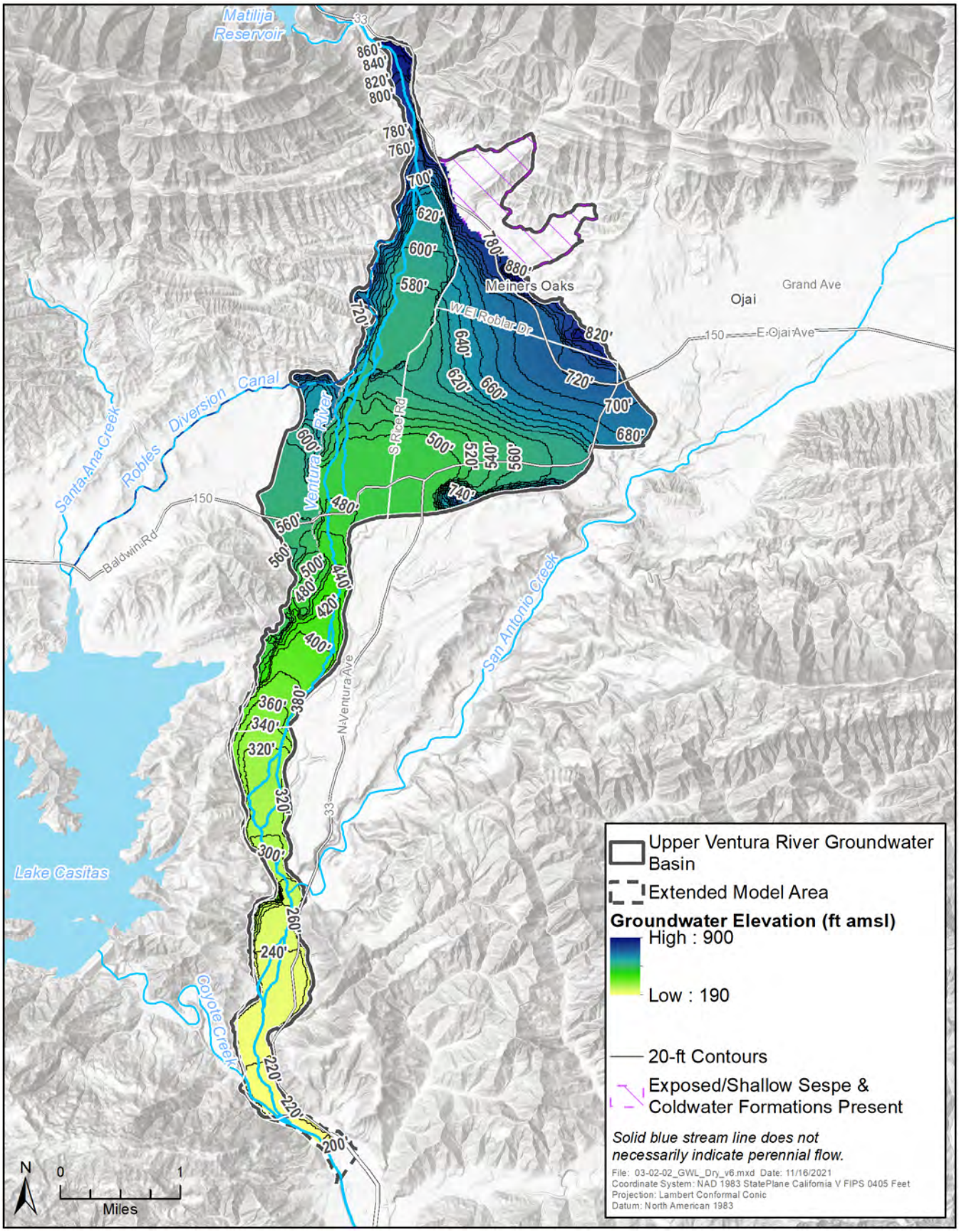


Figure 3.2-02 Contour Map for Low Modeled Water Levels (Dry Season) - September 2016.

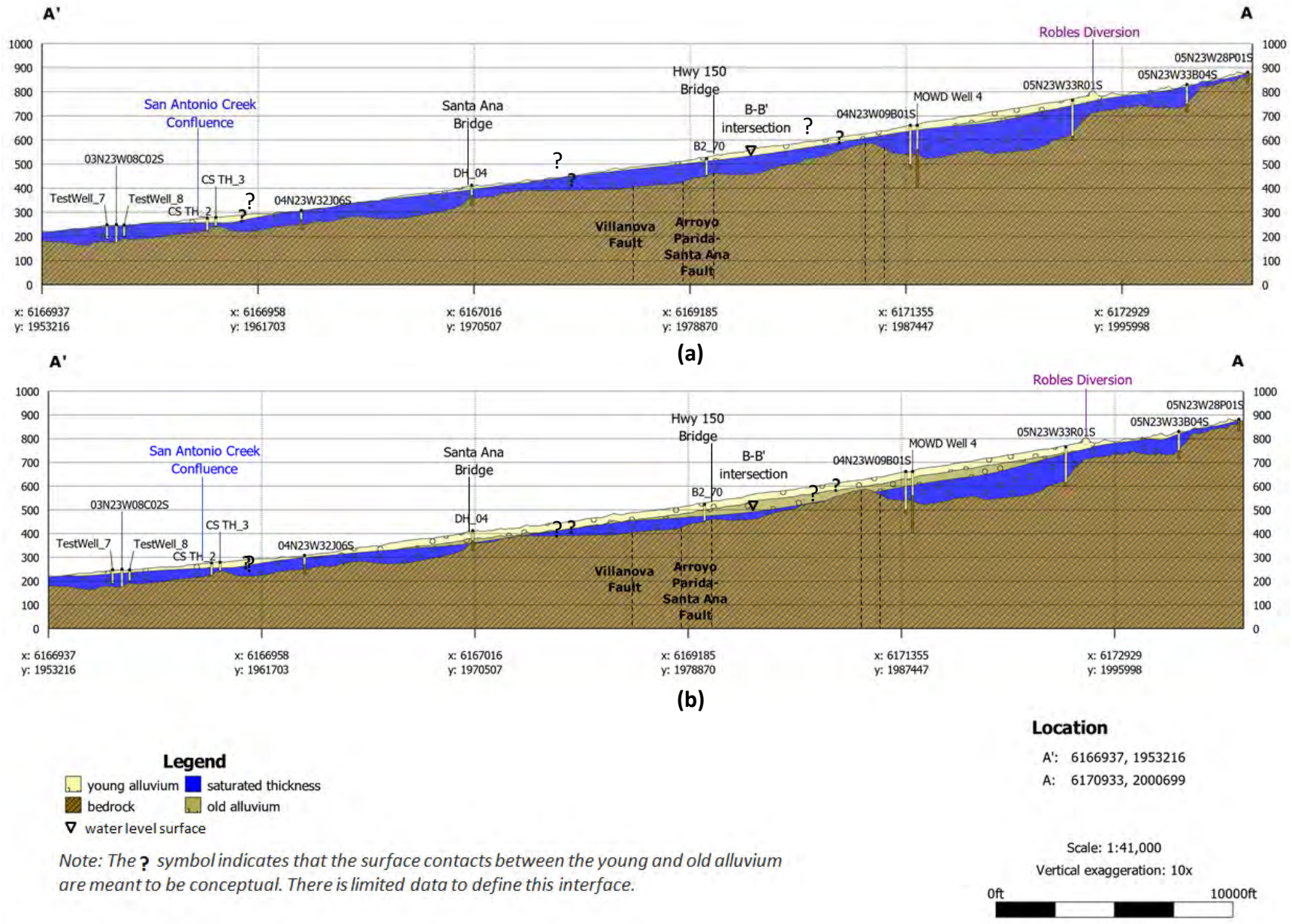
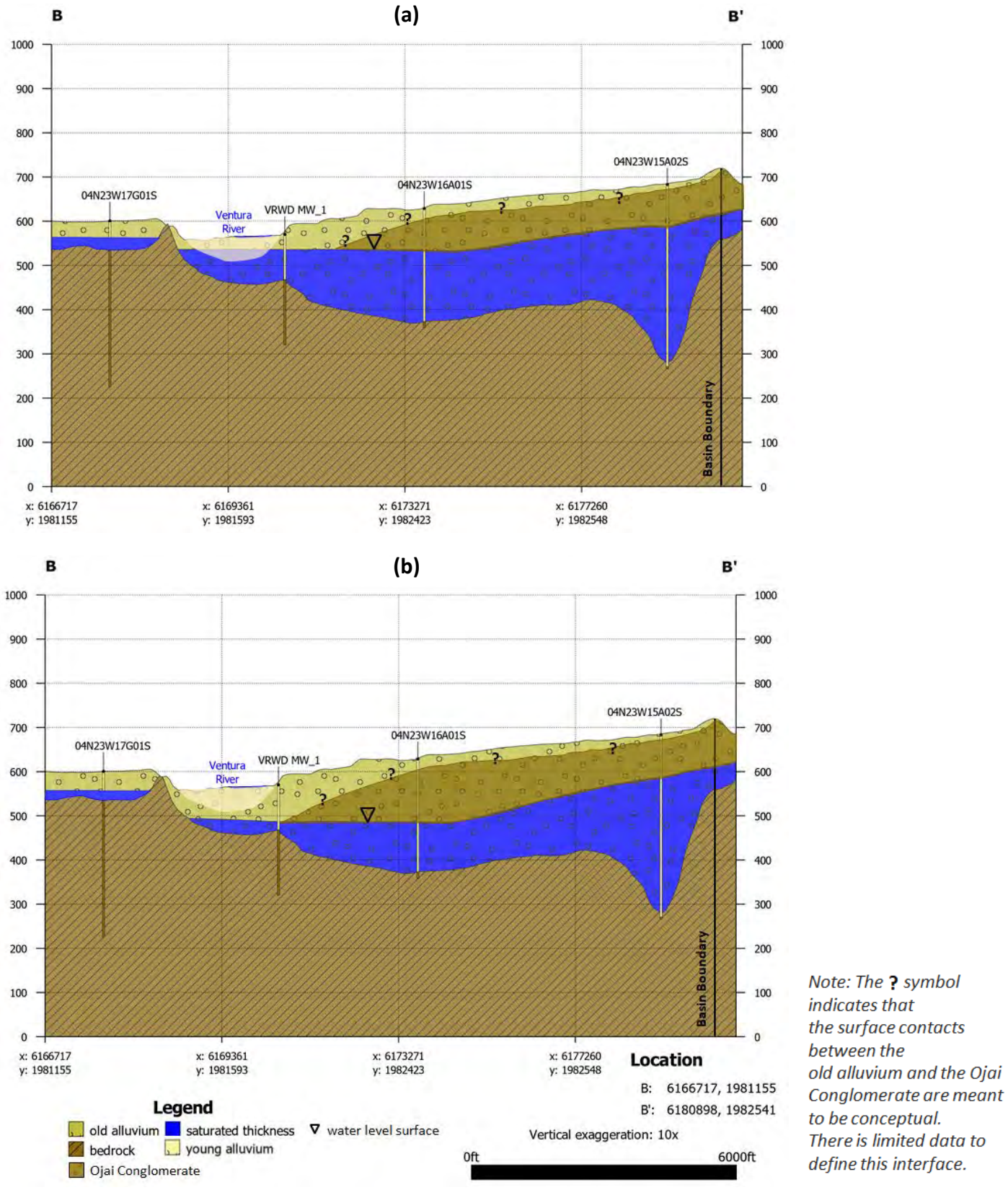
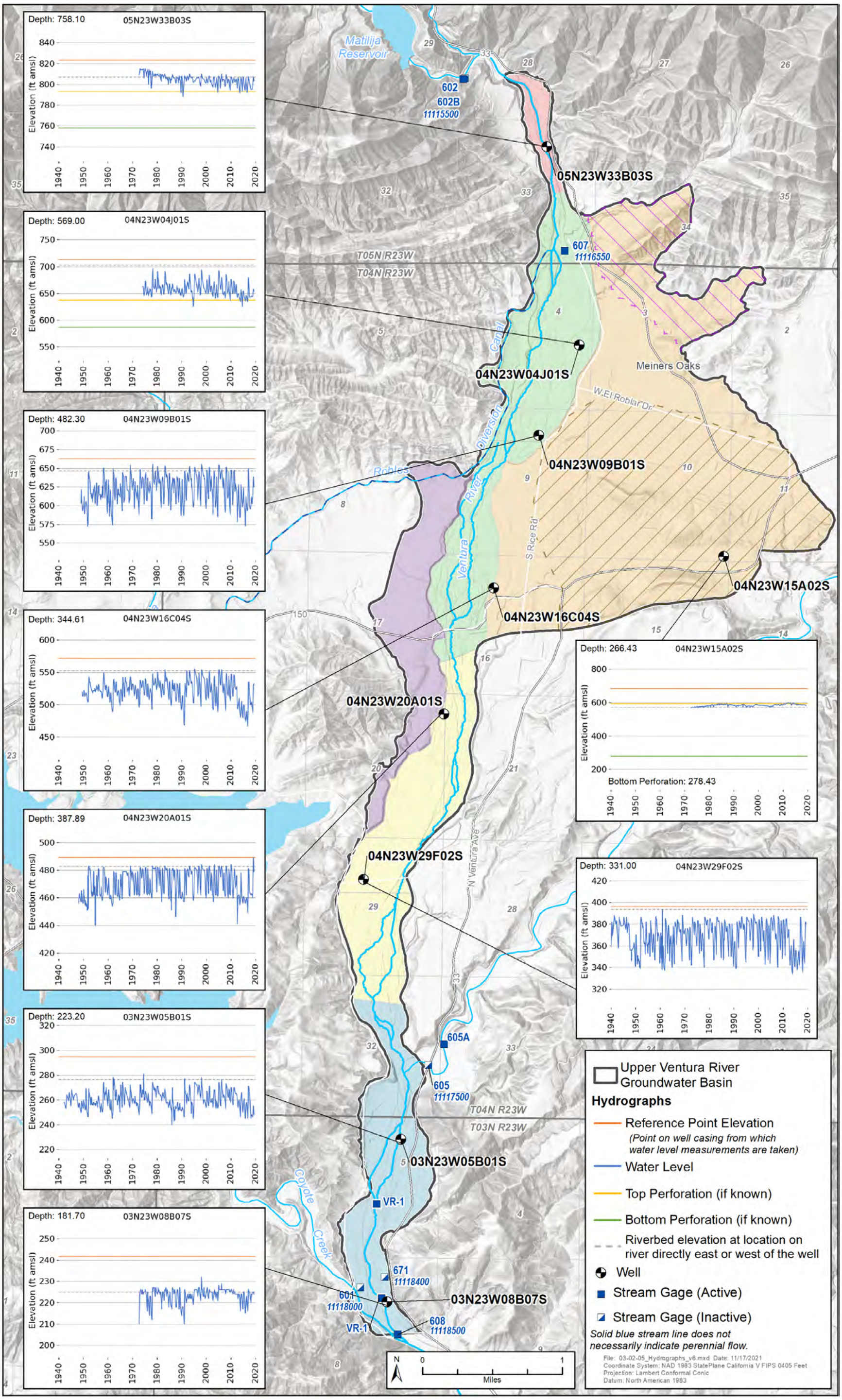


Figure 3.2-03 Water Levels along North-South Cross-Sections for Wet (Top) and Dry (Bottom) Conditions.



Note: The ? symbol indicates that the surface contacts between the old alluvium and the Ojai Conglomerate are meant to be conceptual. There is limited data to define this interface.

Figure 3.2-04 Water Levels along East-West Cross-Sections for Wet (Top) and Dry (Bottom) Conditions.



Data Source: VCWPD, 2019.

Figure 3.2-05 Groundwater Level Hydrographs for Key Wells in the UVRGB.

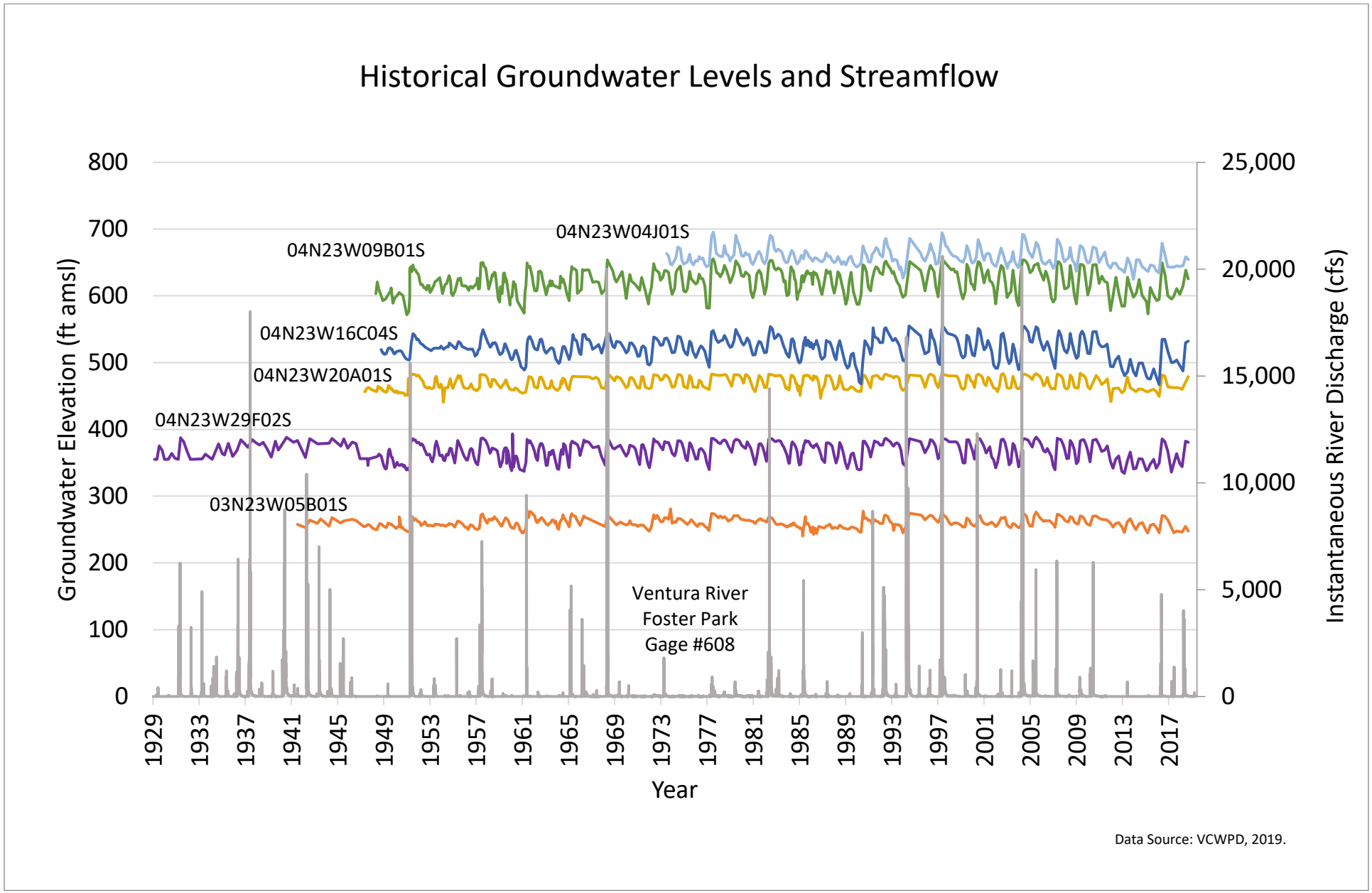


Figure 3.2-06 Combined Hydrographs from Key Wells.

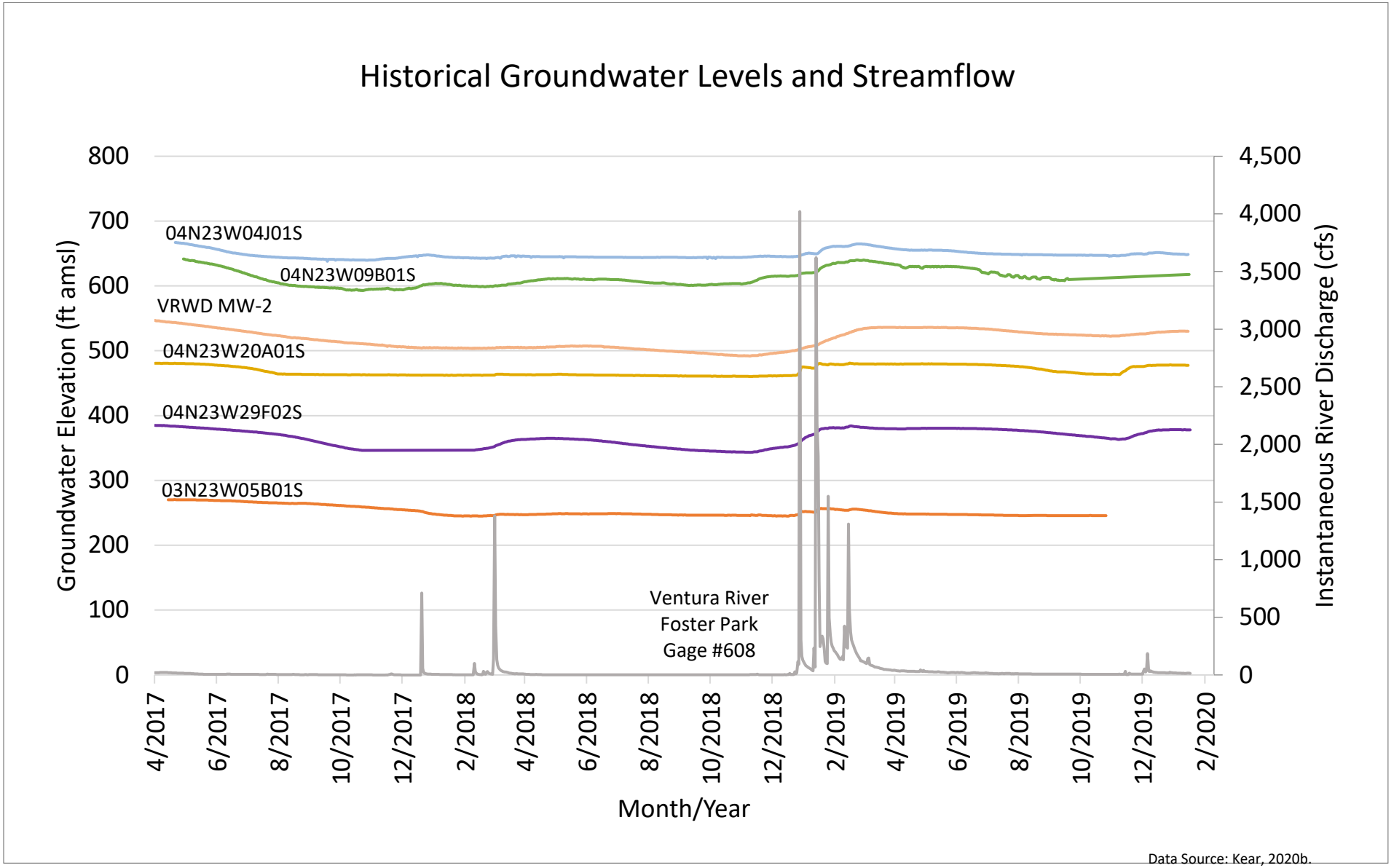


Figure 3.2-07 Combined Hydrographs from Data-Logger Equipped Wells.

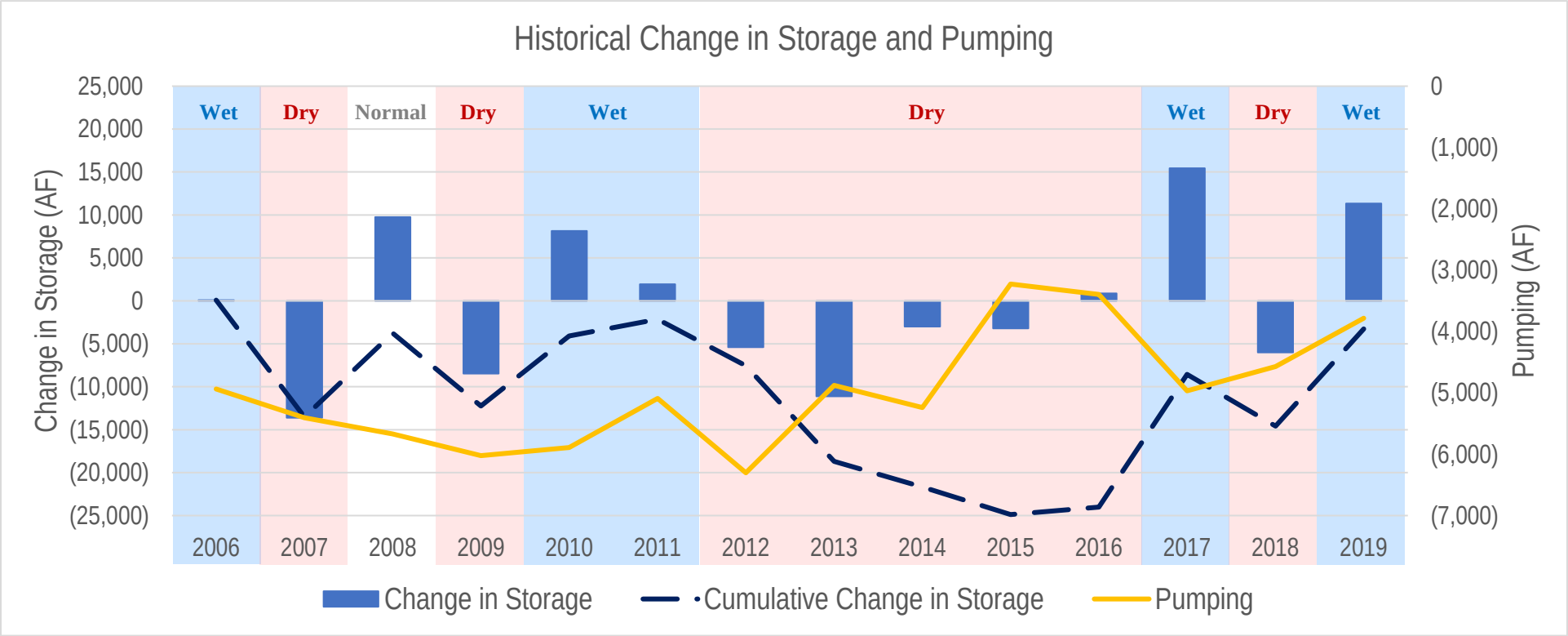


Figure 3.2-08 Historical Change in Groundwater Storage with Annual Groundwater Use and Water Year Type.

Data Source: Kear, 2020b.

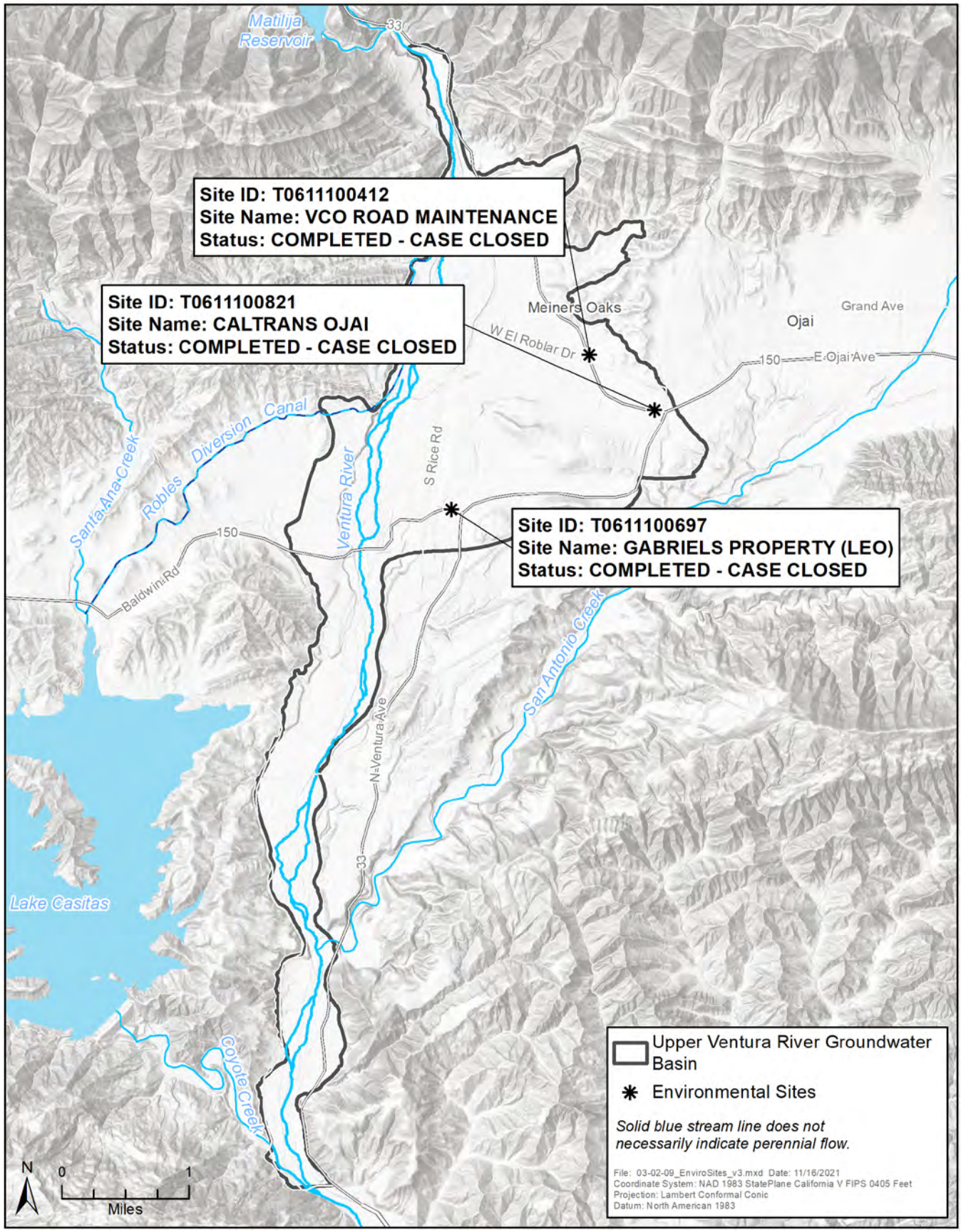
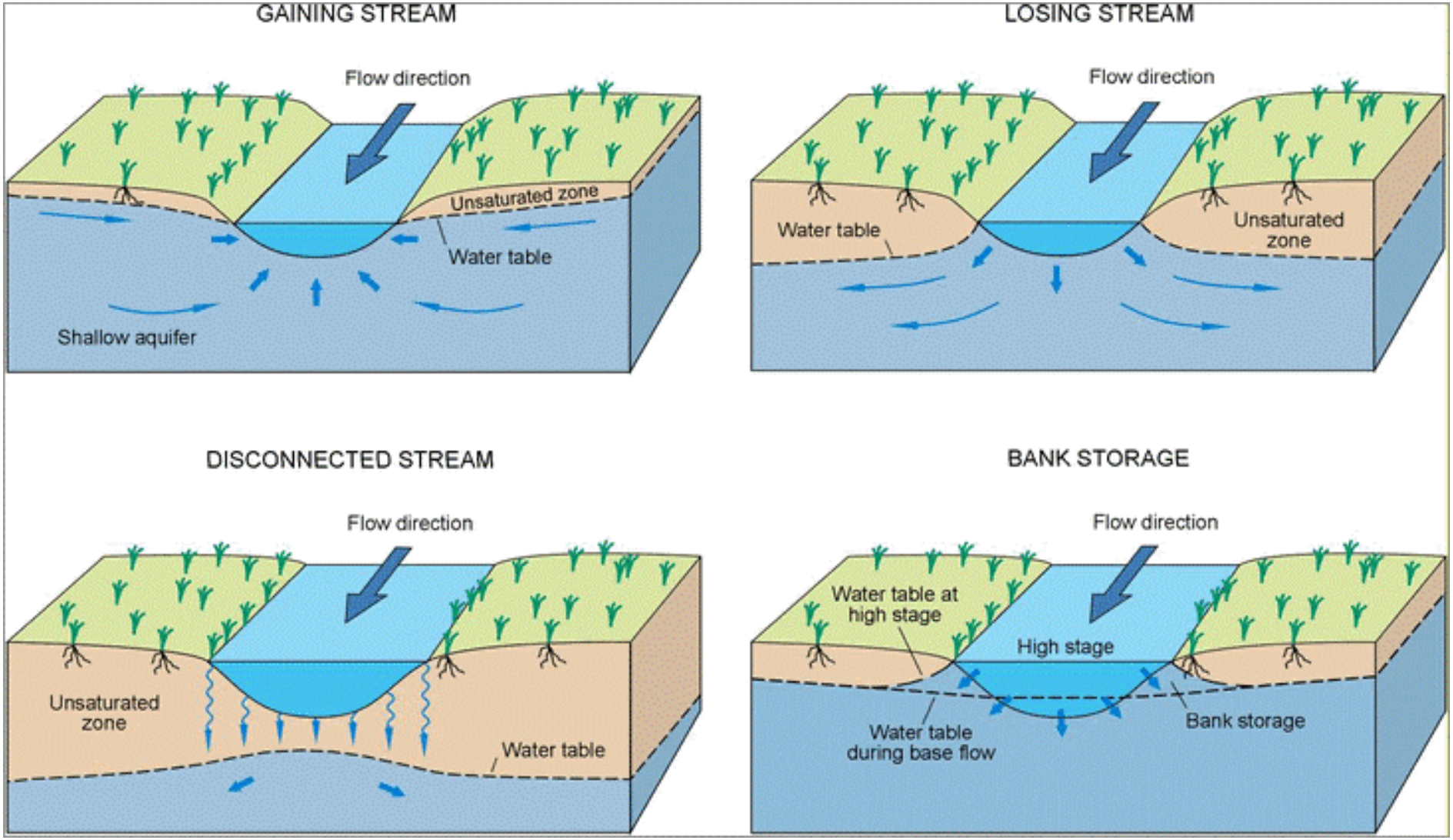
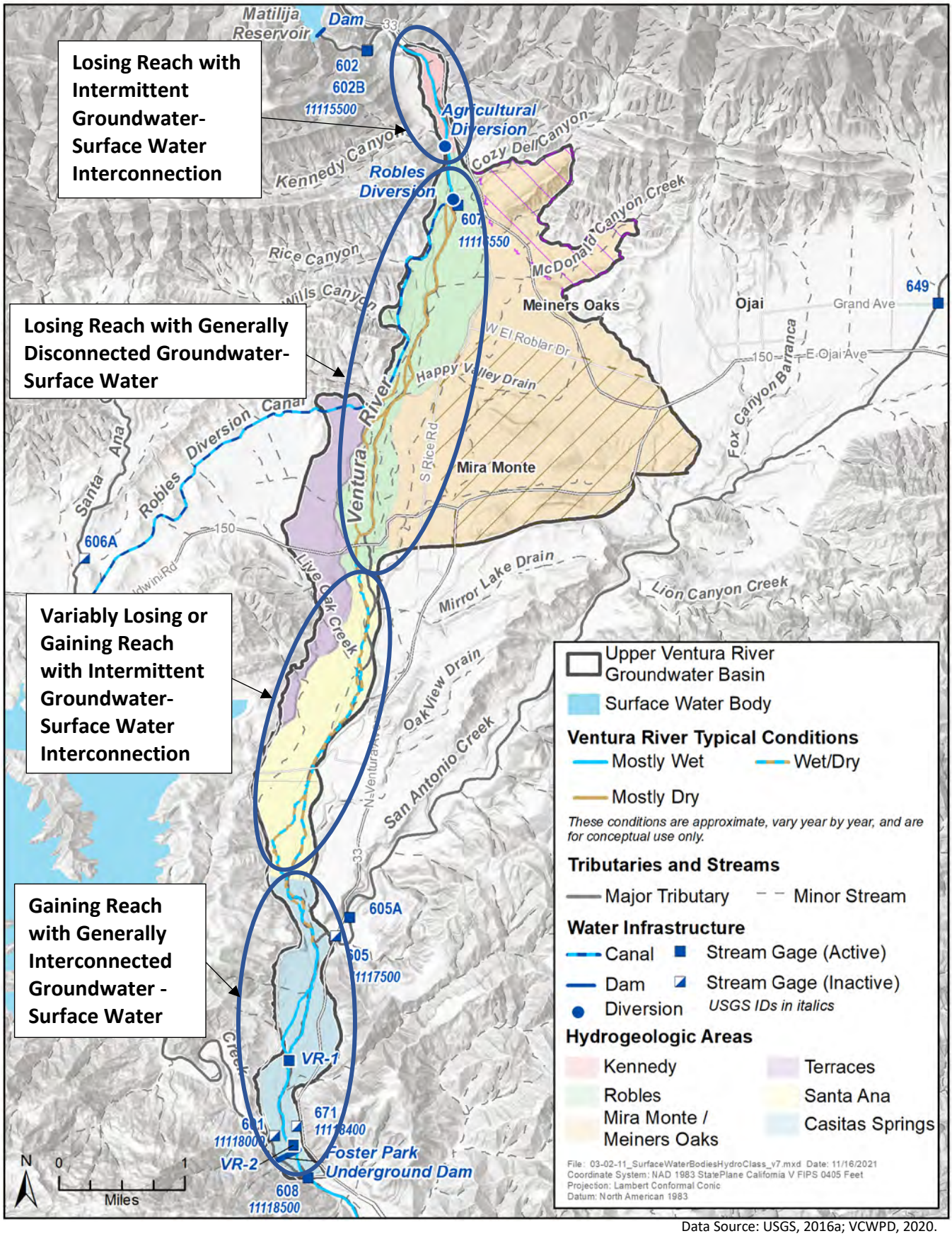


Figure 3.2-09 Location and Status of Environmental Sites within the UVRGB. Data Source: State of California, 2021.



Data Source: USGS, 1998.

Figure 3.2-10 Interaction of Groundwater and Surface Water.



Data Source: USGS, 2016a; VCWPD, 2020.

Figure 3.2-11 Surface Water Bodies – Hydrologic Conditions.

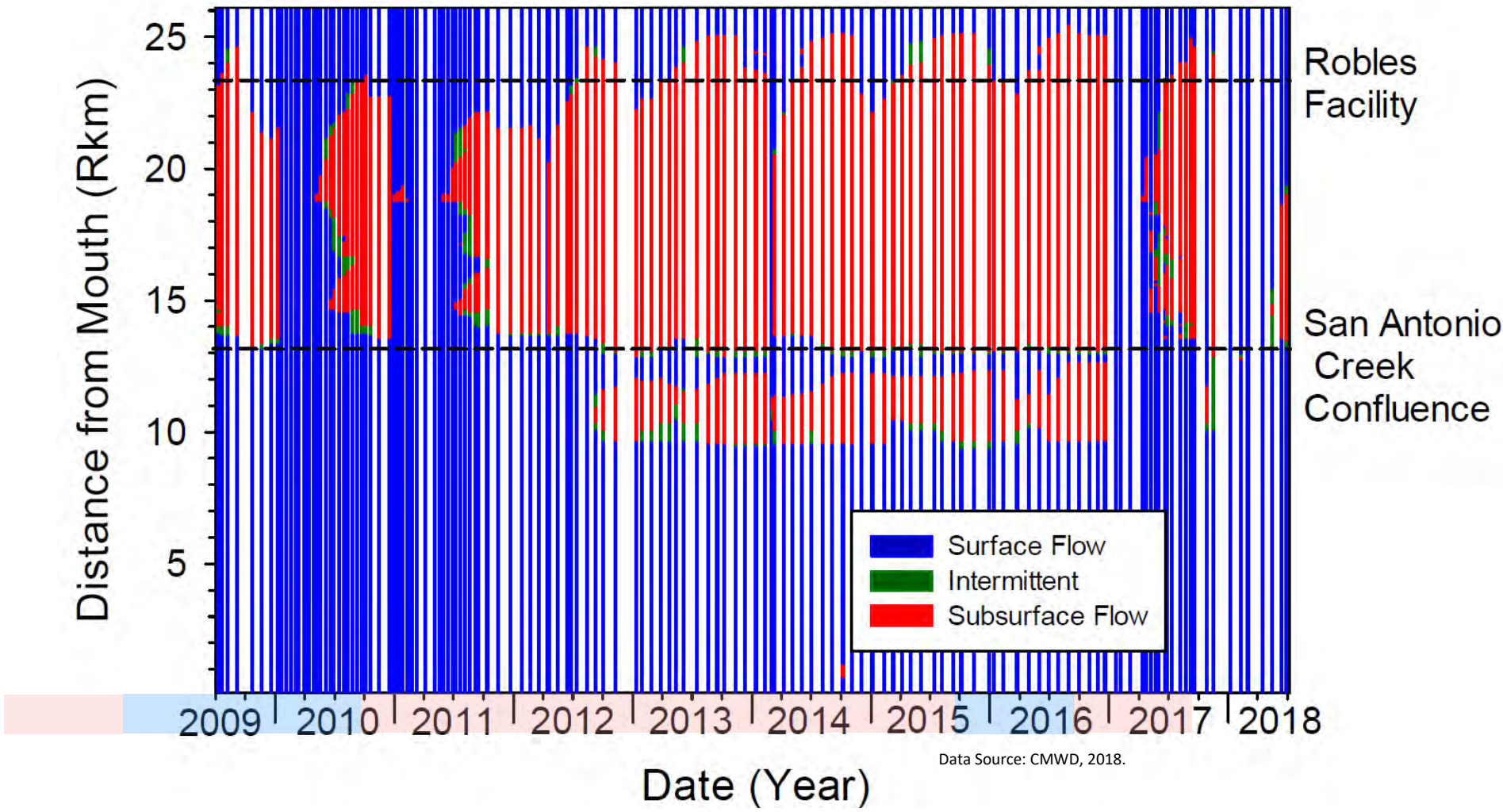
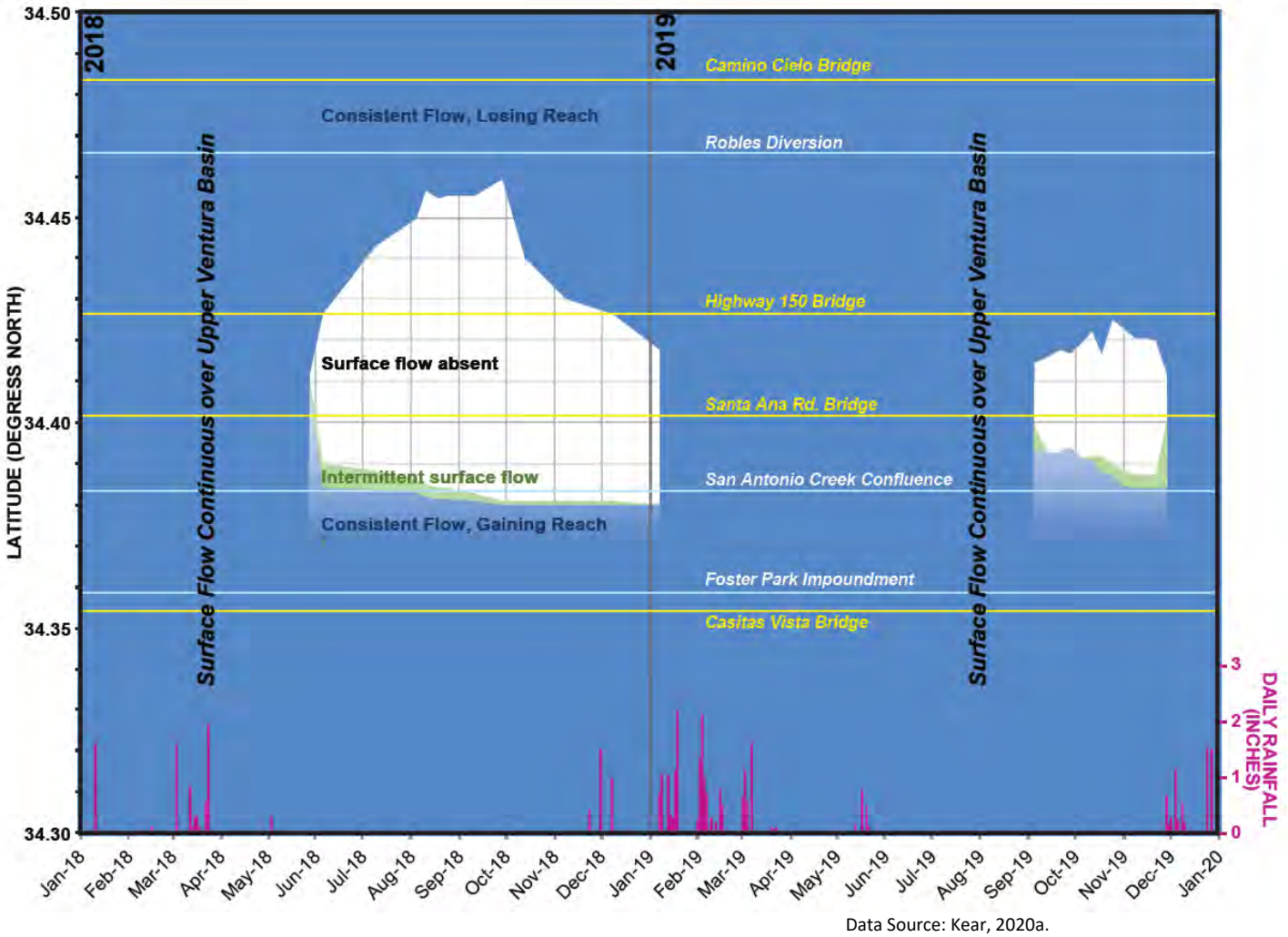


Figure 3.2-12 Mapping of Ventura River Flow Conditions Based on Surface Flow Monitoring from 2009–2018.



Data Source: Kear, 2020a.

Figure 3.2-13 Time-Latitude Representation of Ventura River Flow Conditions from 2018–2019 vs Daily Rainfall at Meiners Oaks County Fire Station Gage.

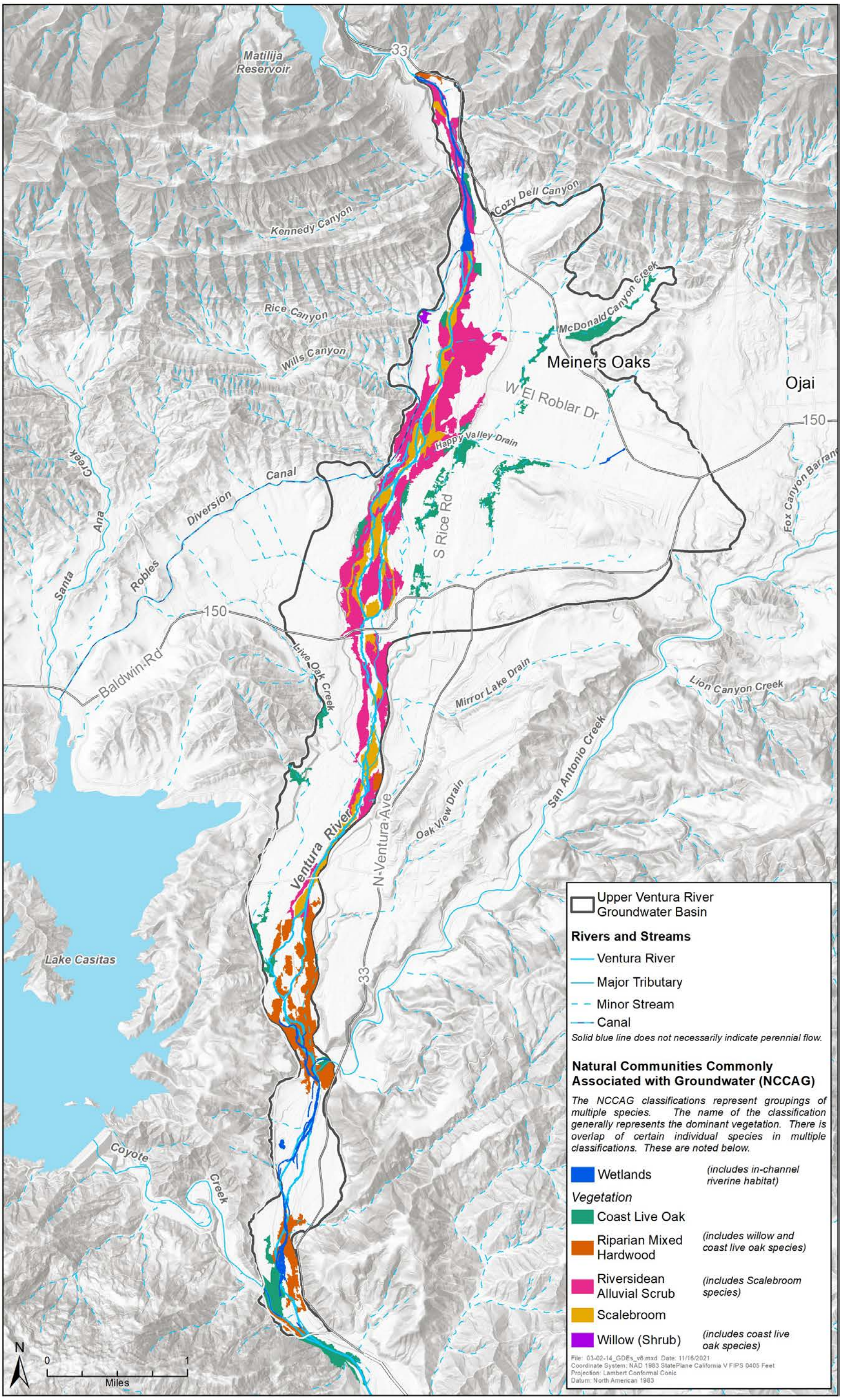


Figure 3.2-14 Potential Groundwater-Dependent Ecosystems.

Data Source: DWR, 2018; USGS, 2016a.

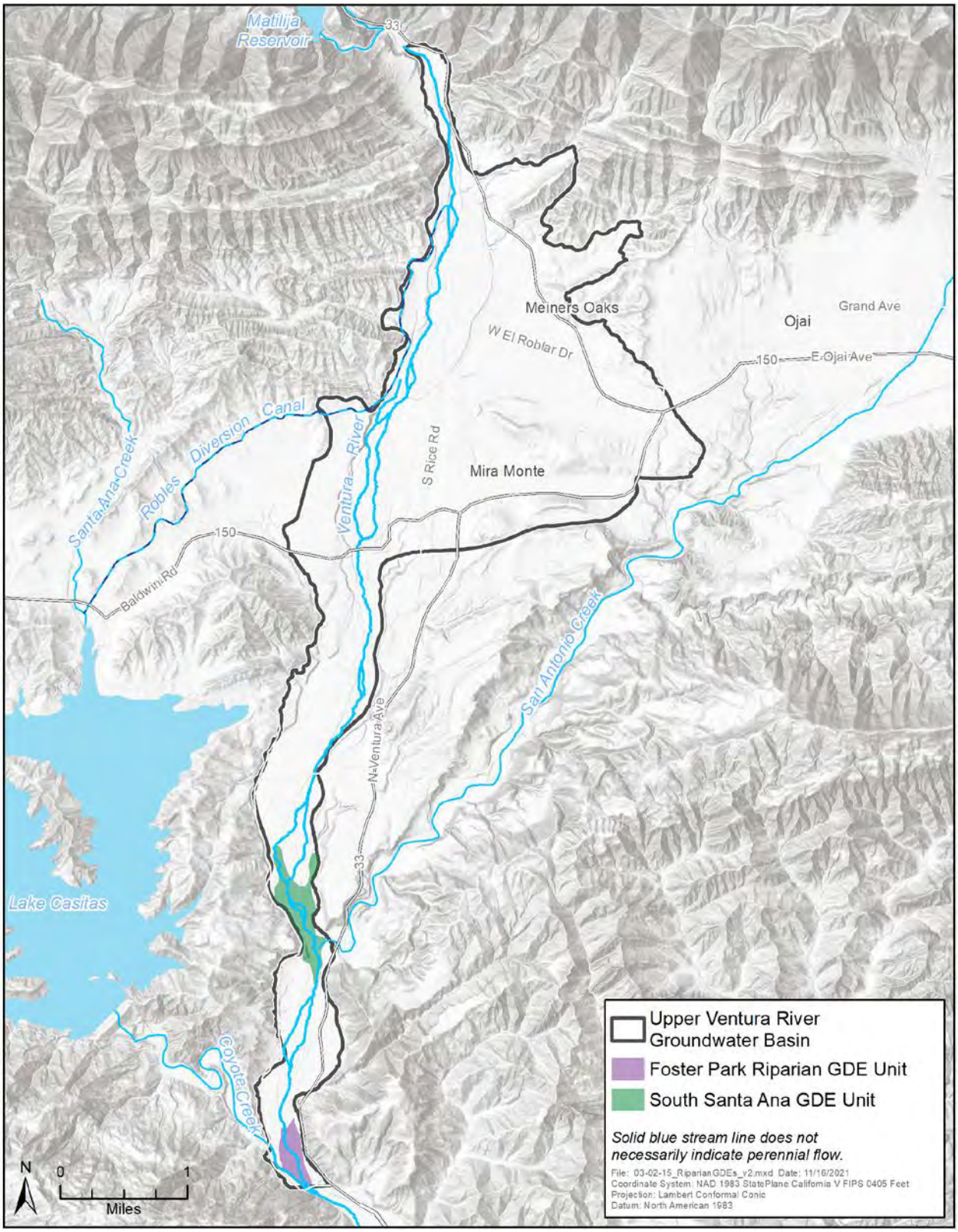


Figure 3.2-15 UVRGB Riparian GDE Map.

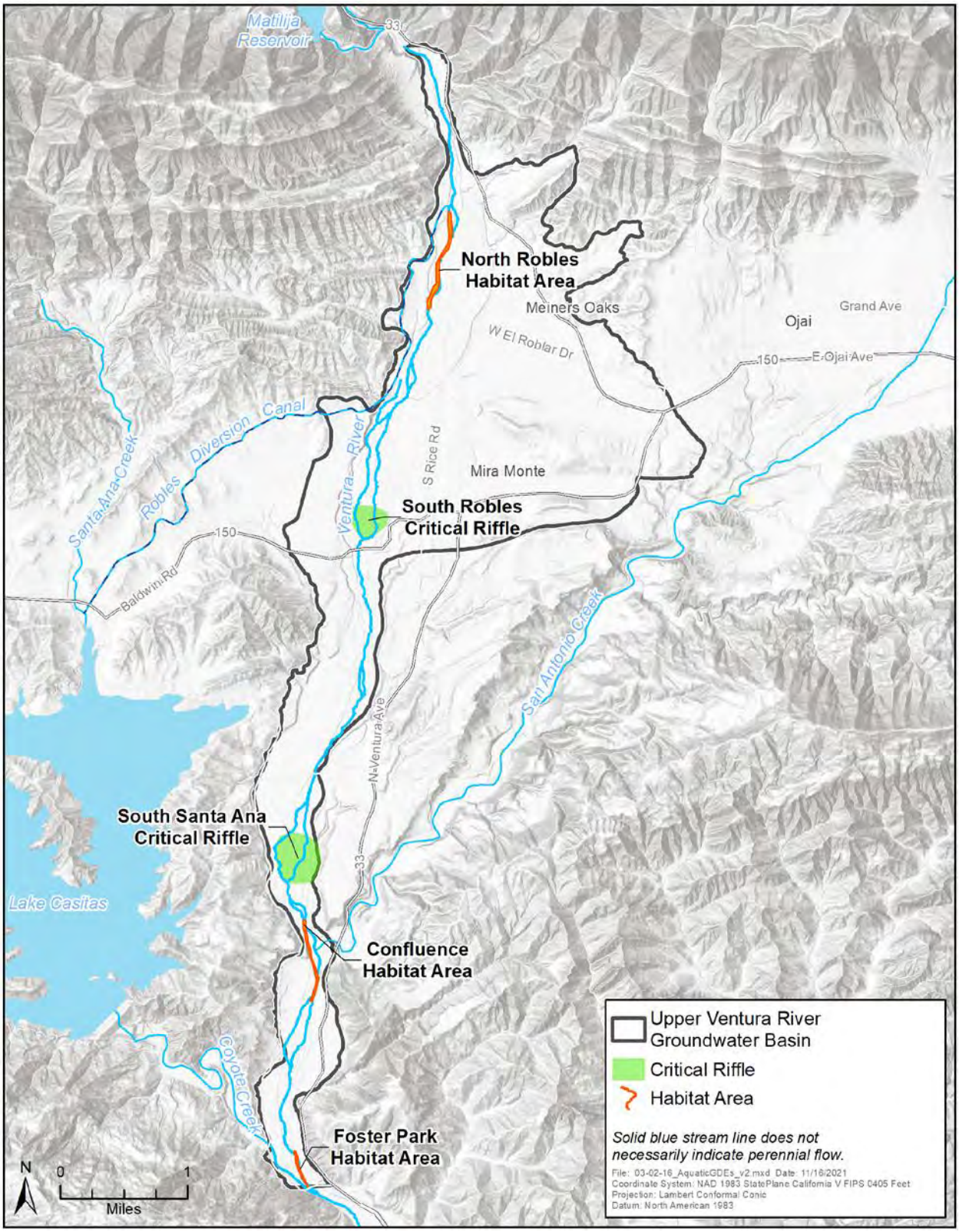


Figure 3.2-16 Aquatic GDEs within the UVRGB.

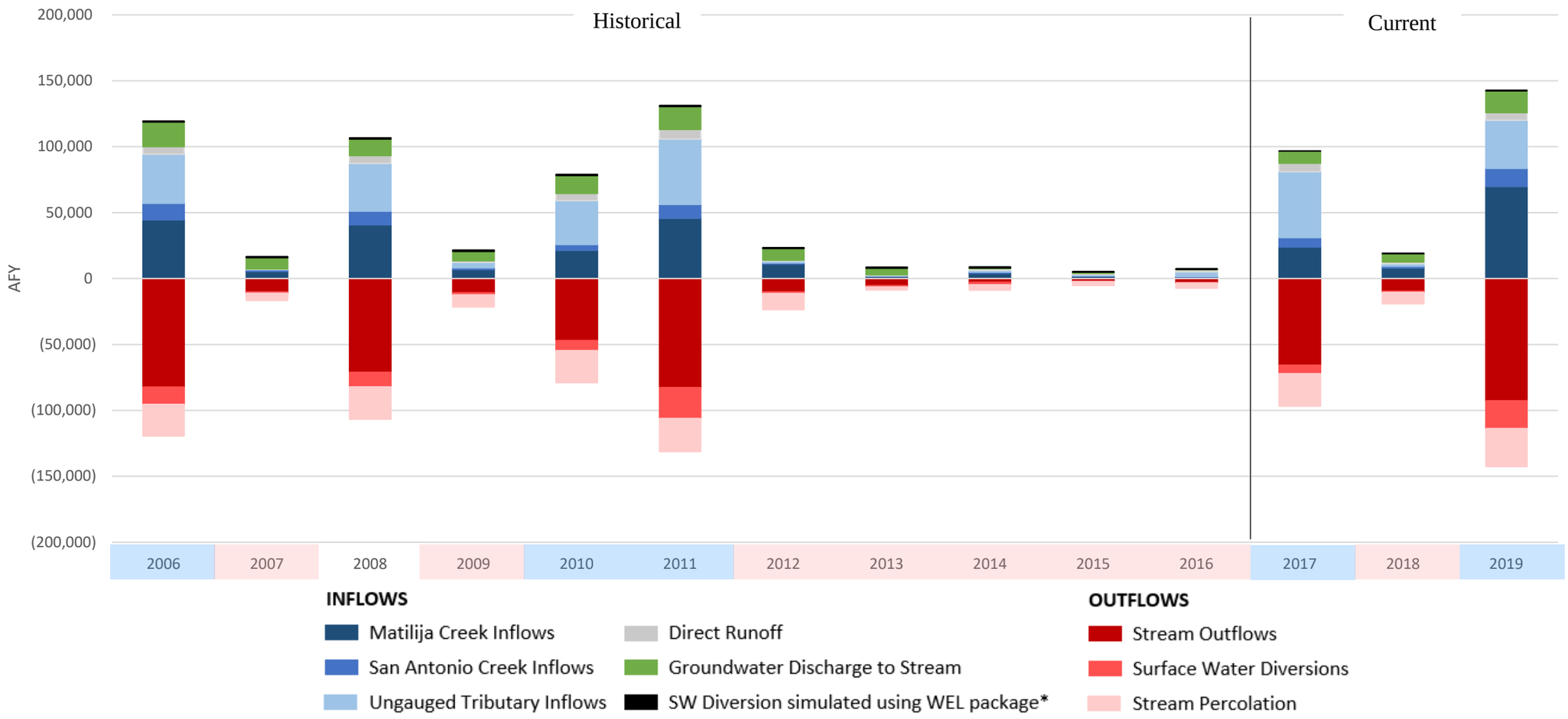


Figure 3.3-01 Historical and Current Surface Water Inflows and Outflows to/from UVRGB (acre-feet per year).

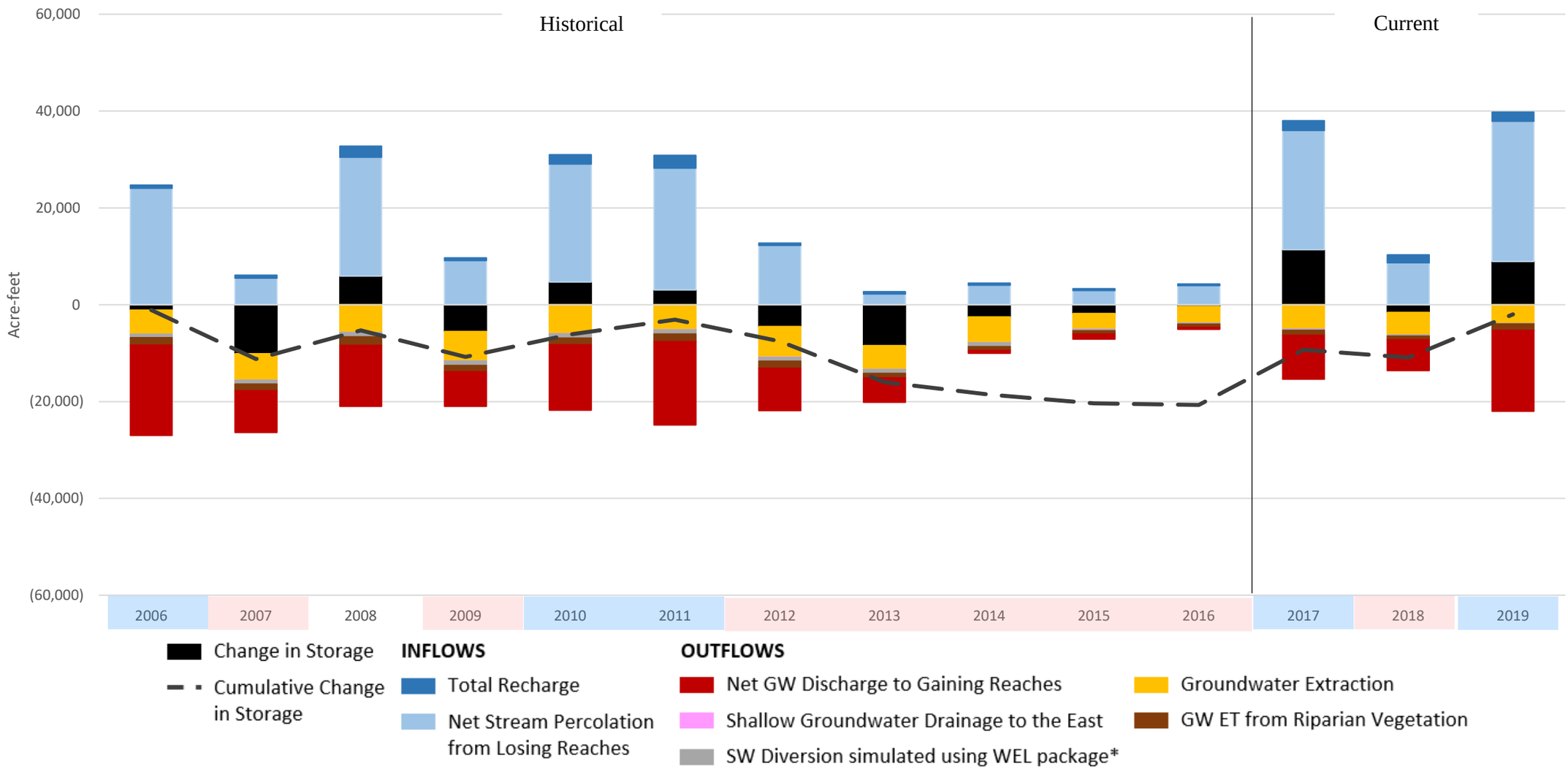


Figure 3.3-02 Historical and Current Groundwater Inflows and Outflows to/from UVRGB (acre-feet per year).

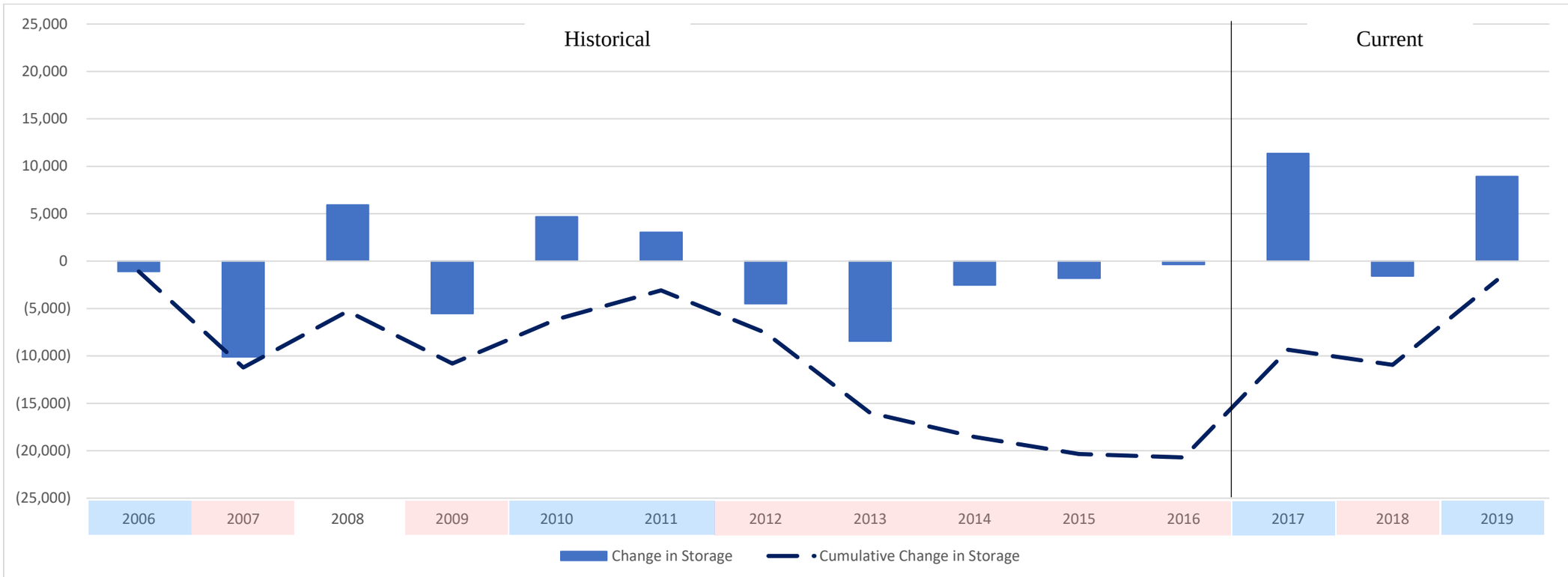


Figure 3.3-03 Historical and Current Change in Storage in UVRGB (acre-feet per year).

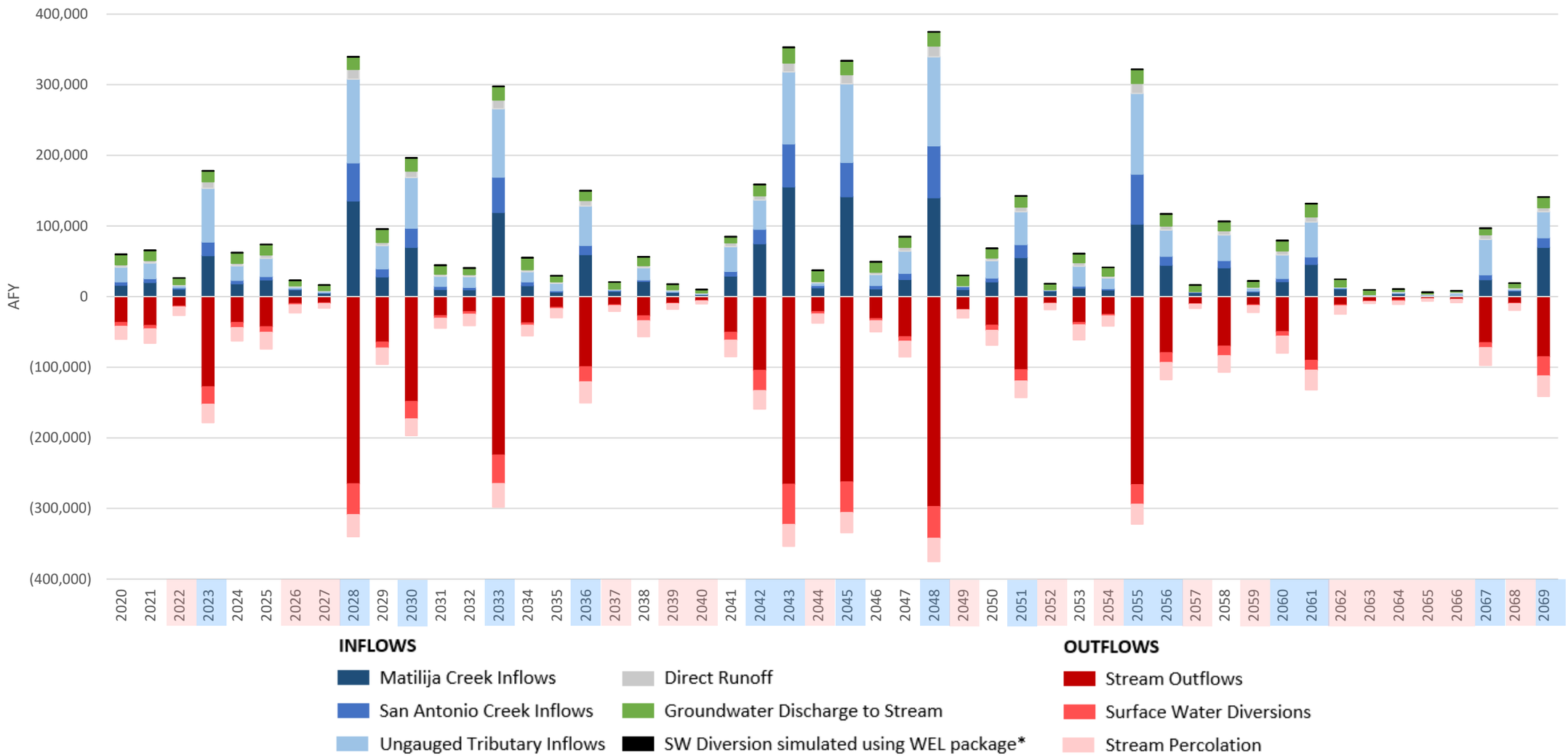


Figure 3.3-04 Baseline Projected Annual Surface Water Inflows (positive values) and Outflows (negative values) to/from UVRGB (acre-feet per year).

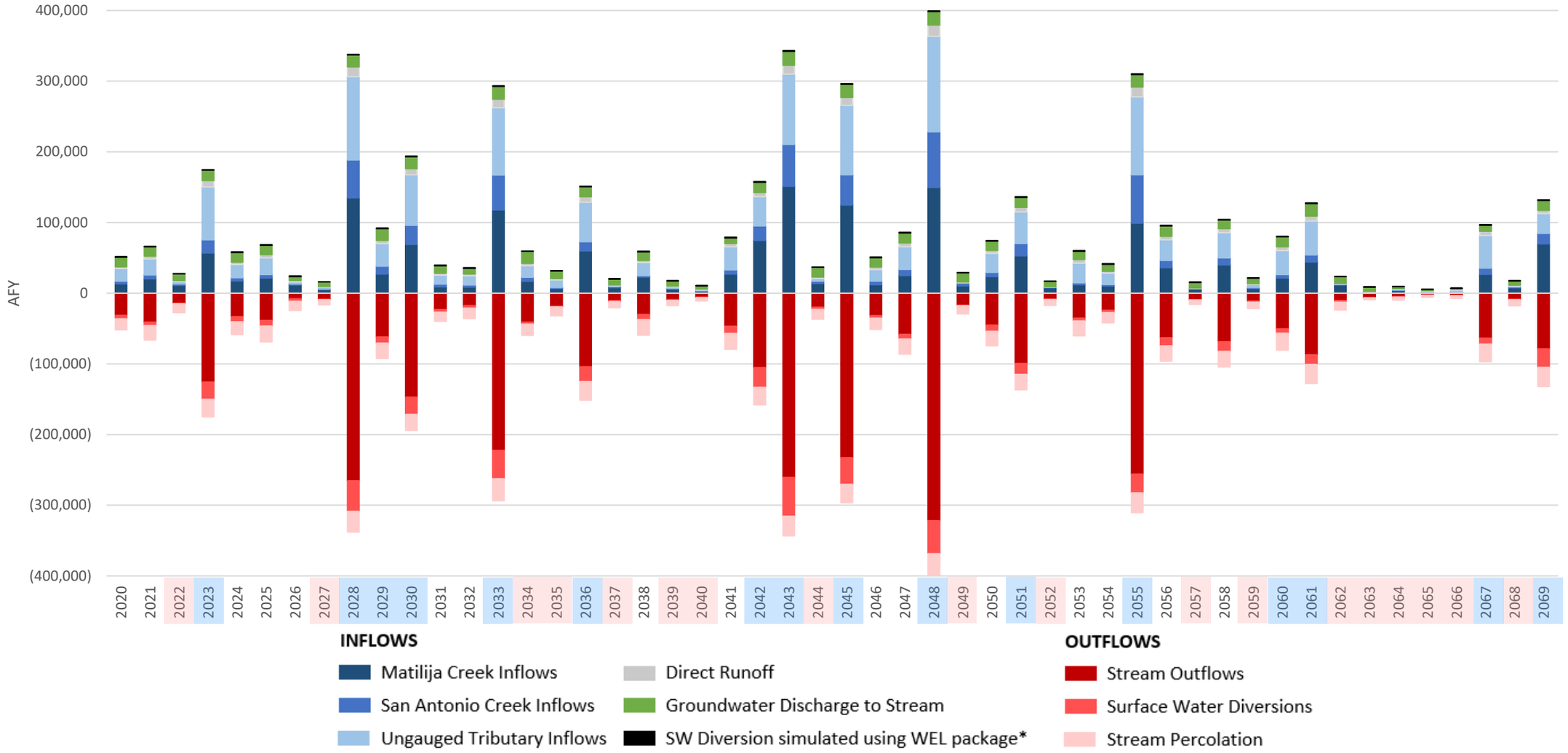


Figure 3.3-05 Projected Surface Water Budget Components under the 2030 Climate Change Scenario.

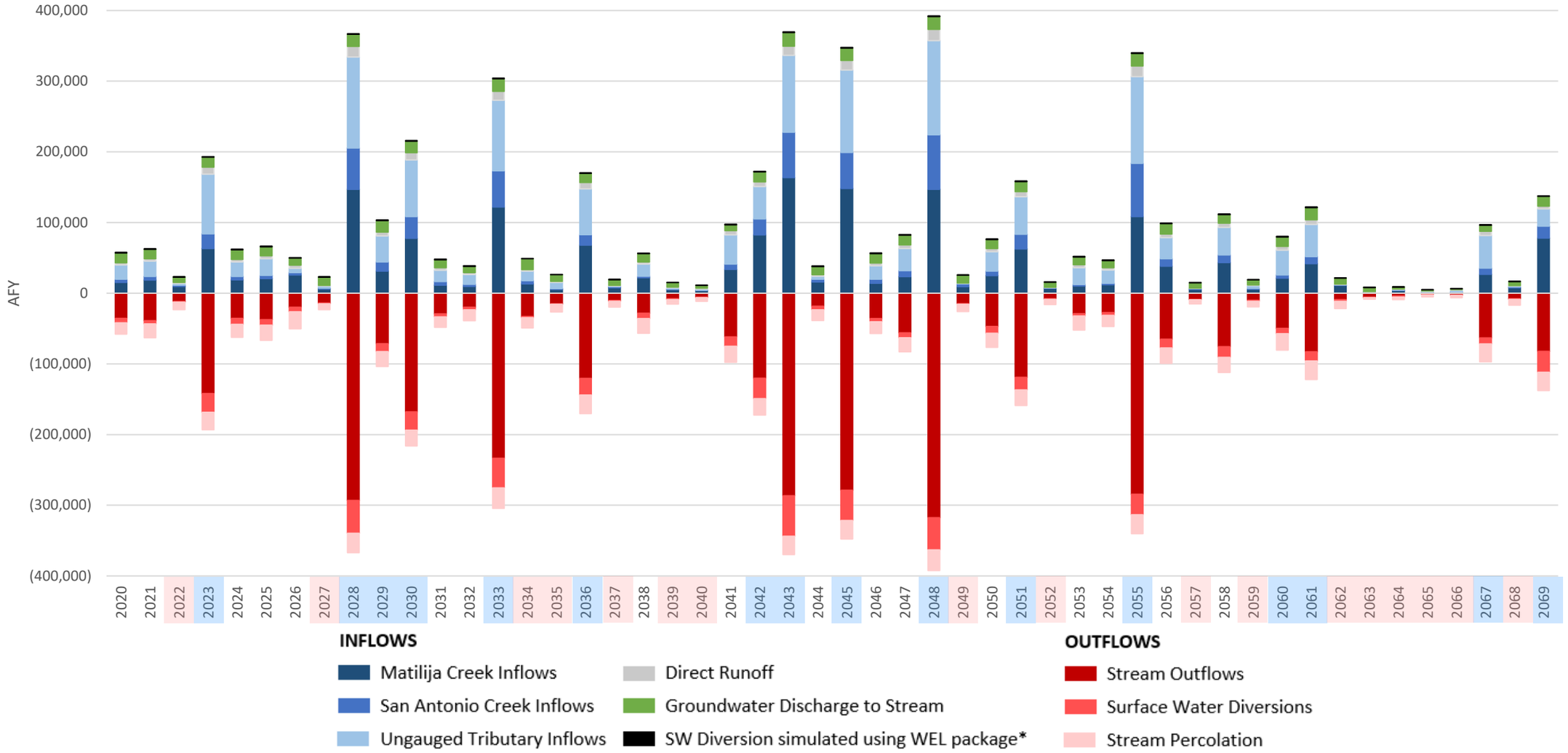


Figure 3.3-06 Projected Surface Water Budget Components under the 2070 Climate Change Scenario.

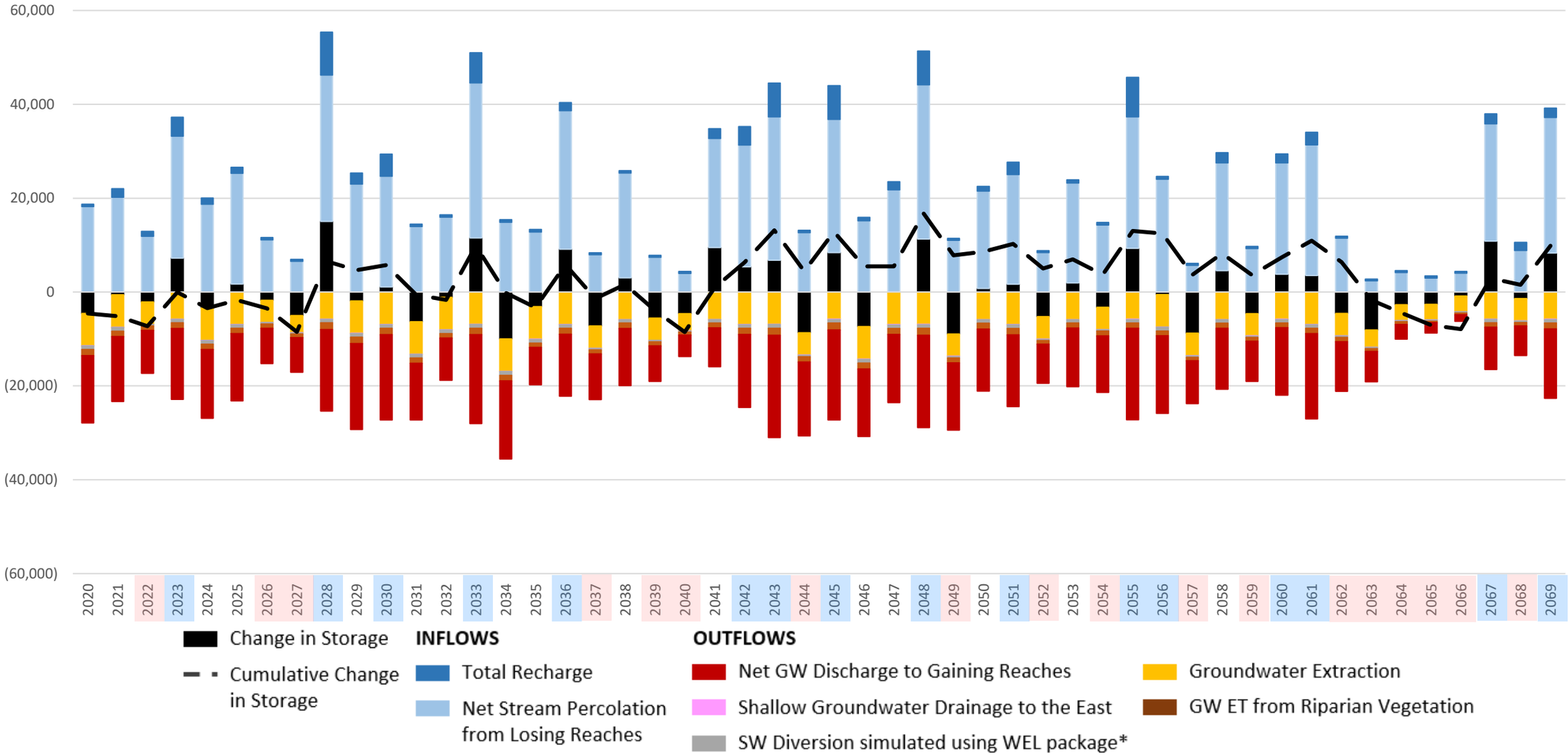


Figure 3.3-07 Baseline Projected Annual Groundwater Inflows (positive values) and Outflows (negative values) to/from UVRGB (acre-feet per year).

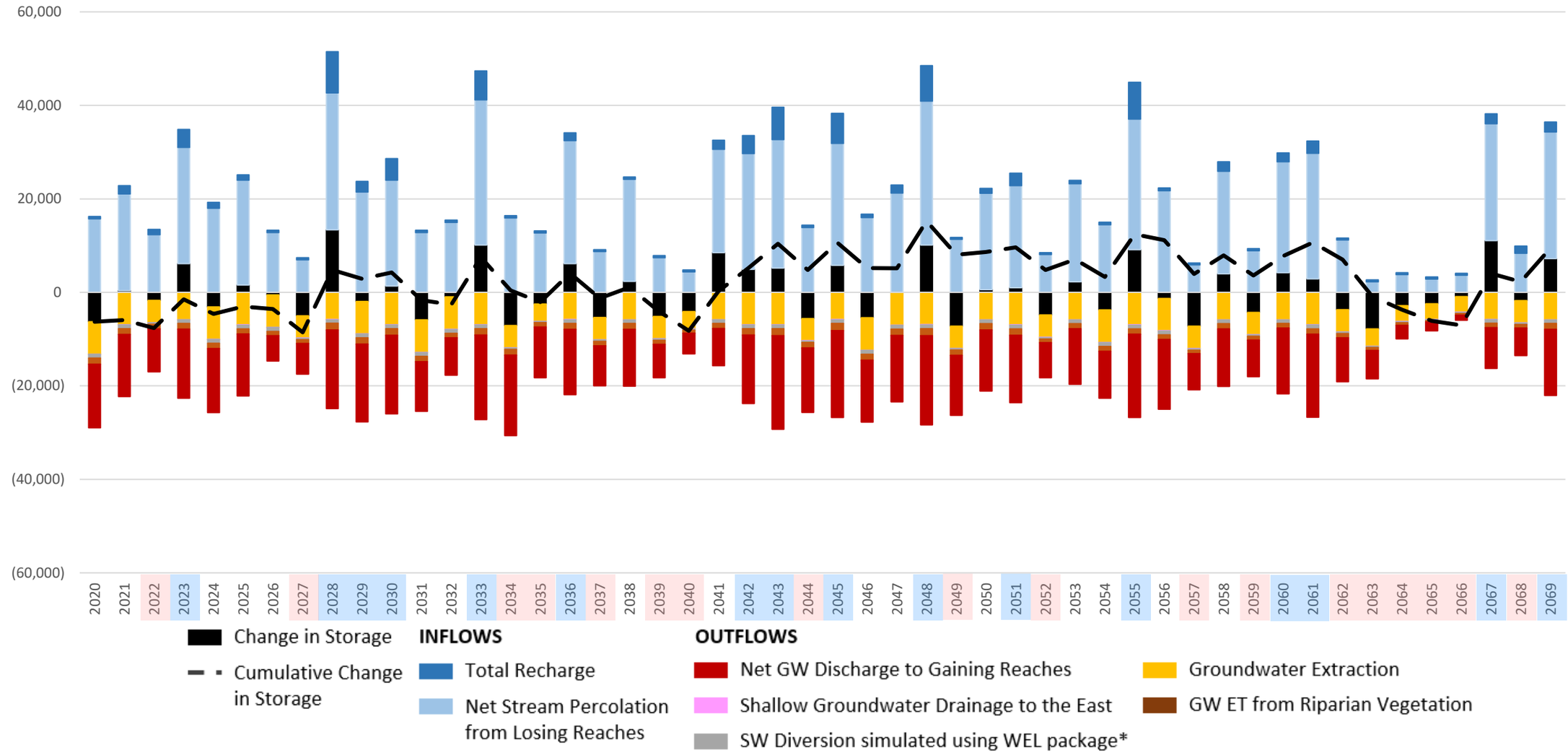


Figure 3.3-08 Projected Groundwater Budget Components under the 2030 Climate Change Scenario.

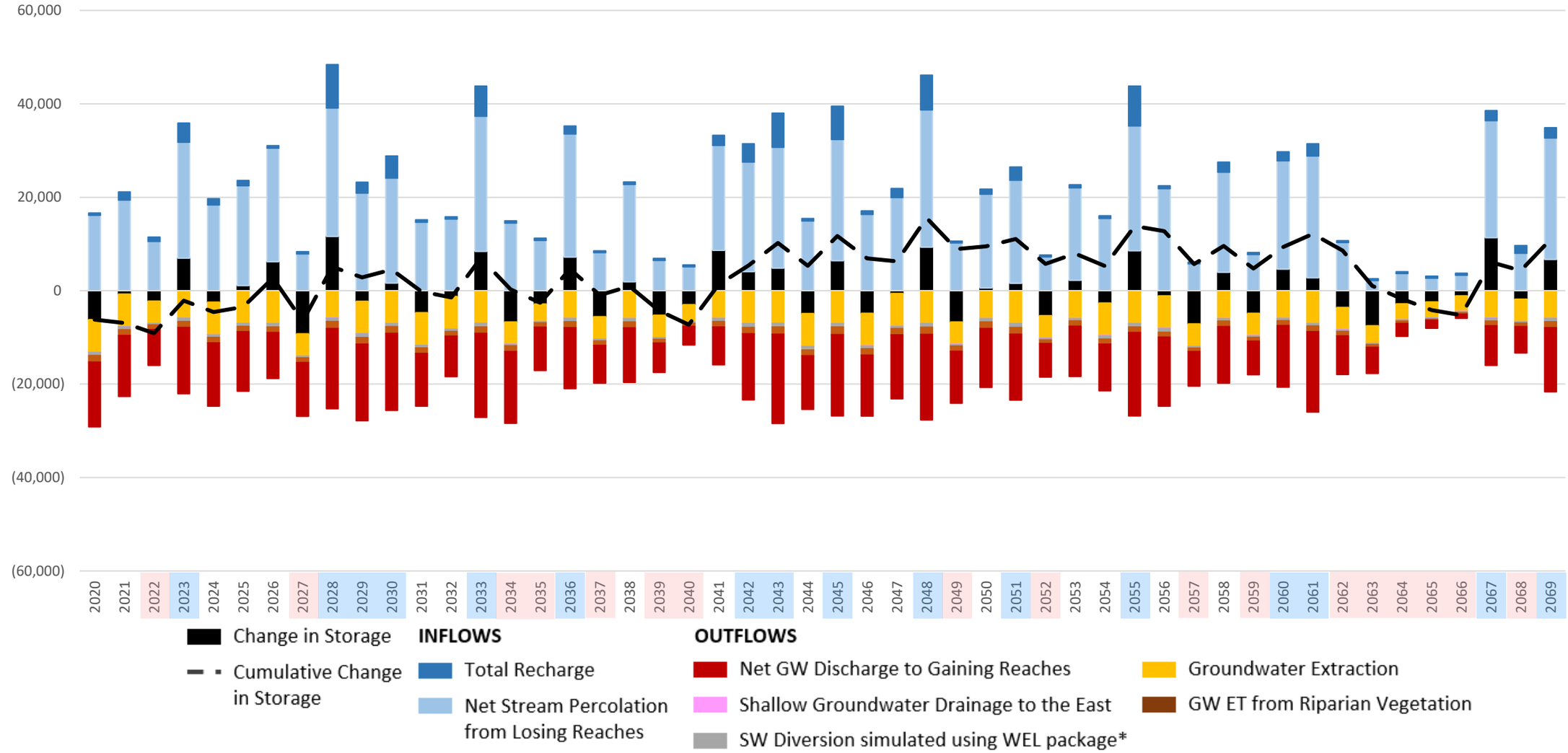


Figure 3.3-09 Projected Groundwater Budget Components under the 2070 Climate Change Scenario.

Figures
Section 4

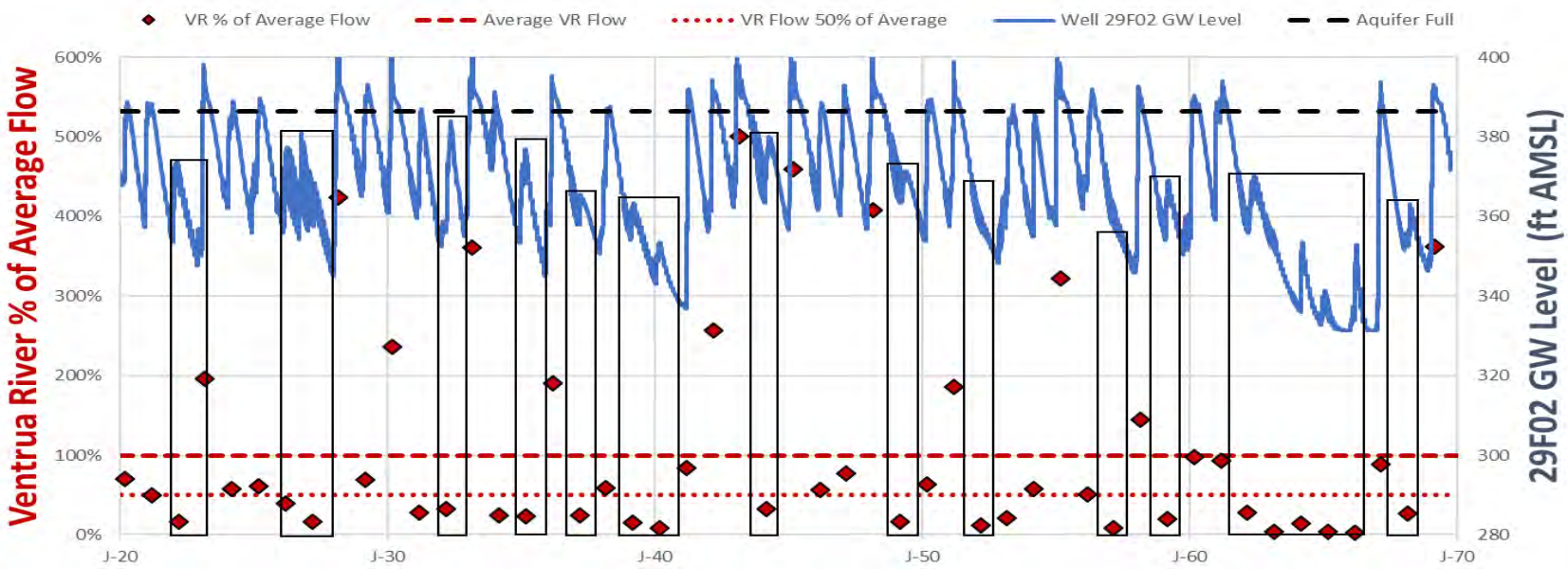
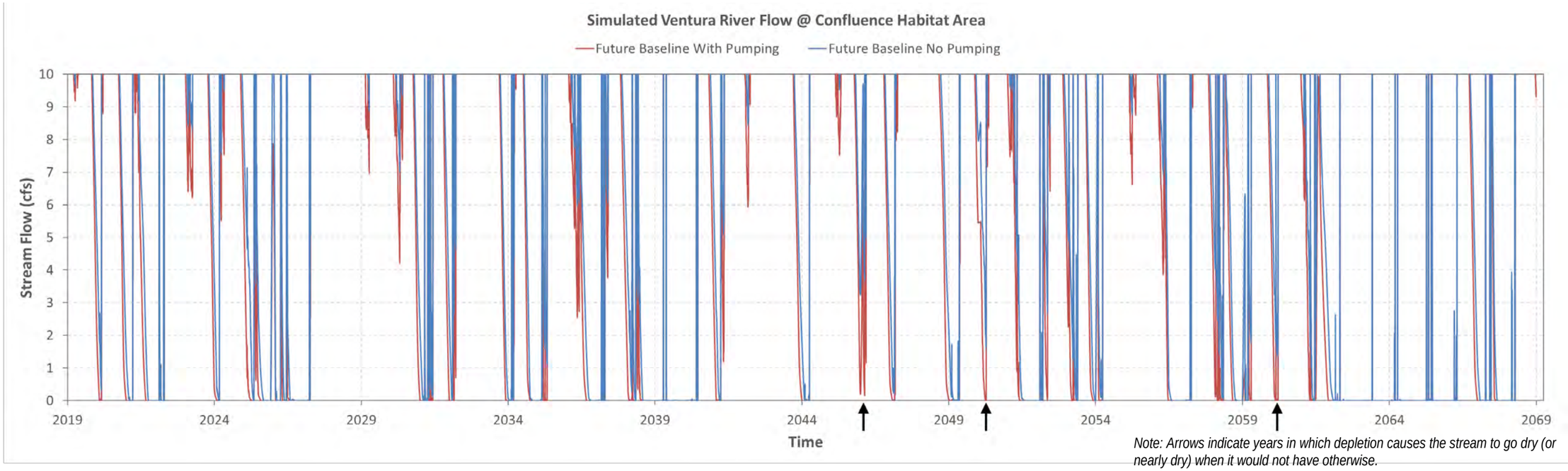
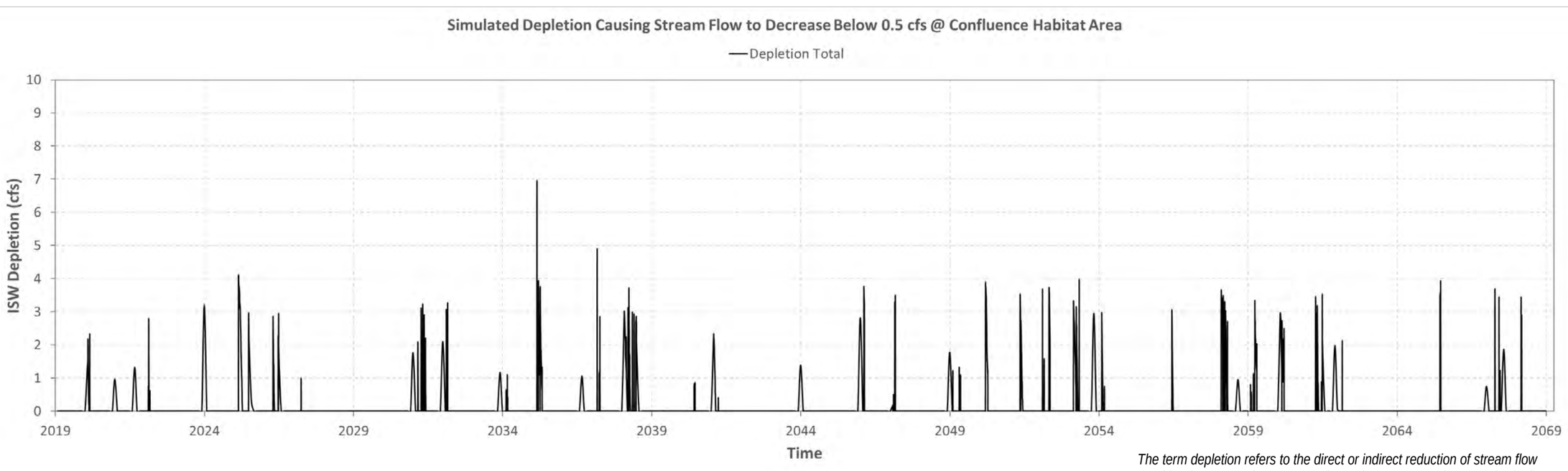


Figure 4.4-01 Groundwater Levels and Percentage of Average Ventura River Flow.

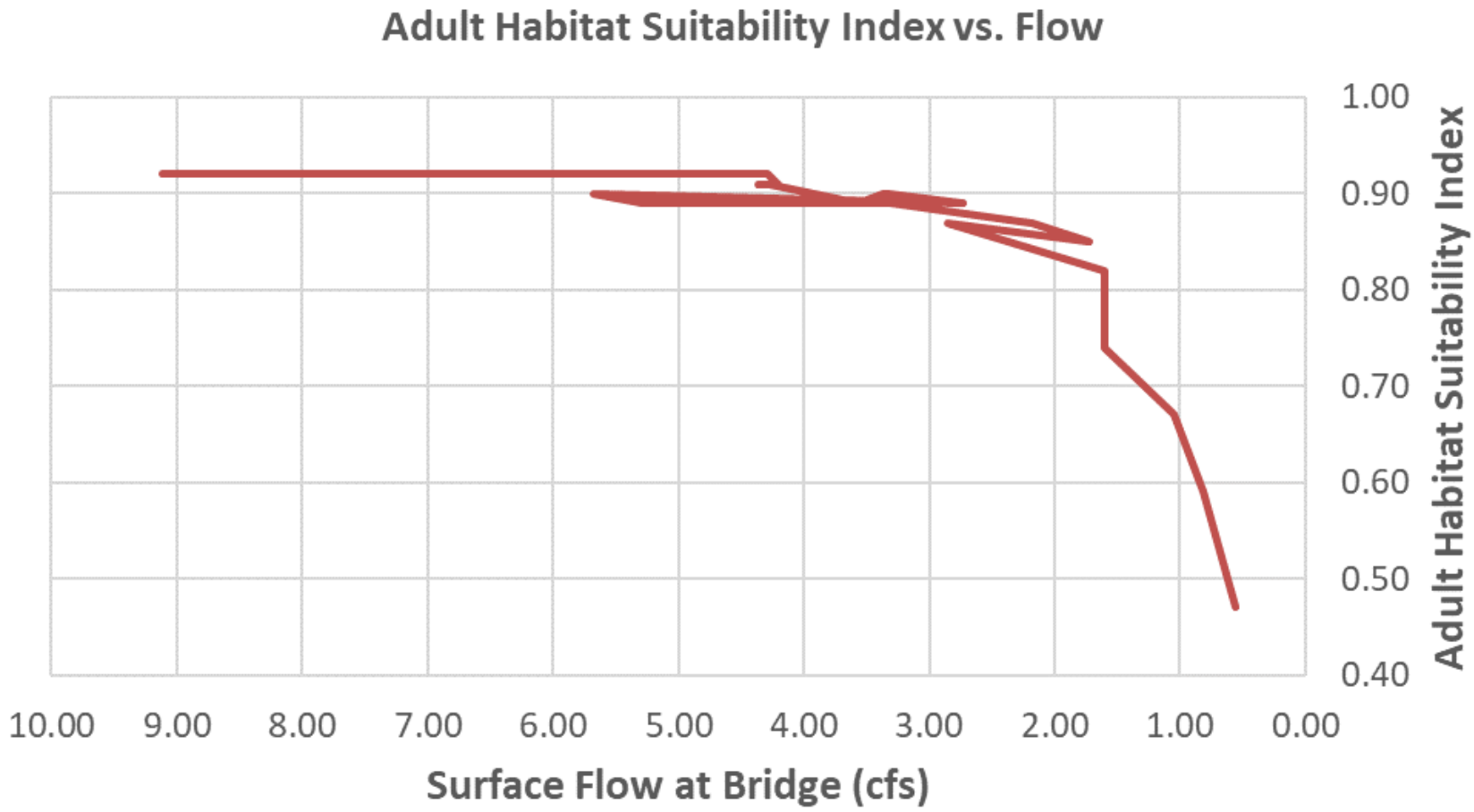


Note: Arrows indicate years in which depletion causes the stream to go dry (or nearly dry) when it would not have otherwise.



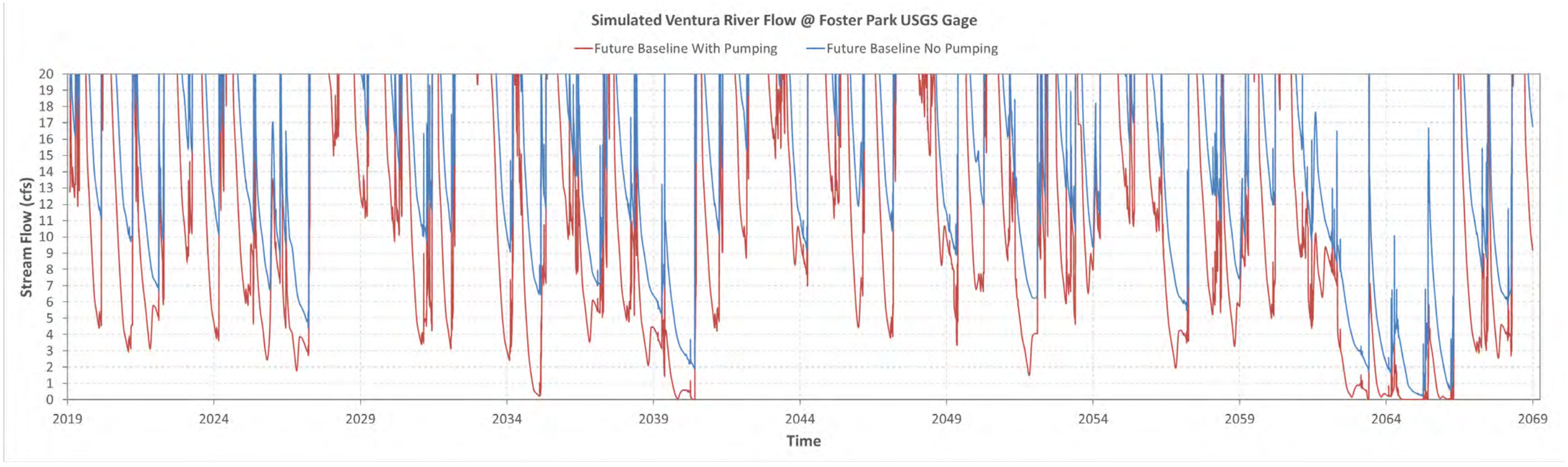
The term depletion refers to the direct or indirect reduction of stream flow resulting from groundwater extraction. Please see Section 3.2.6 for further description of direct versus indirect reductions (depletions) of surface water.

Figure 4.9-01 Confluence Aquatic Habitat Area Simulated Streamflow and Depletion.



Source: Hopkins, 2013

Figure 4.9-02 Adult Steelhead Thalweg Depth HSI Scores Related to Streamflow.



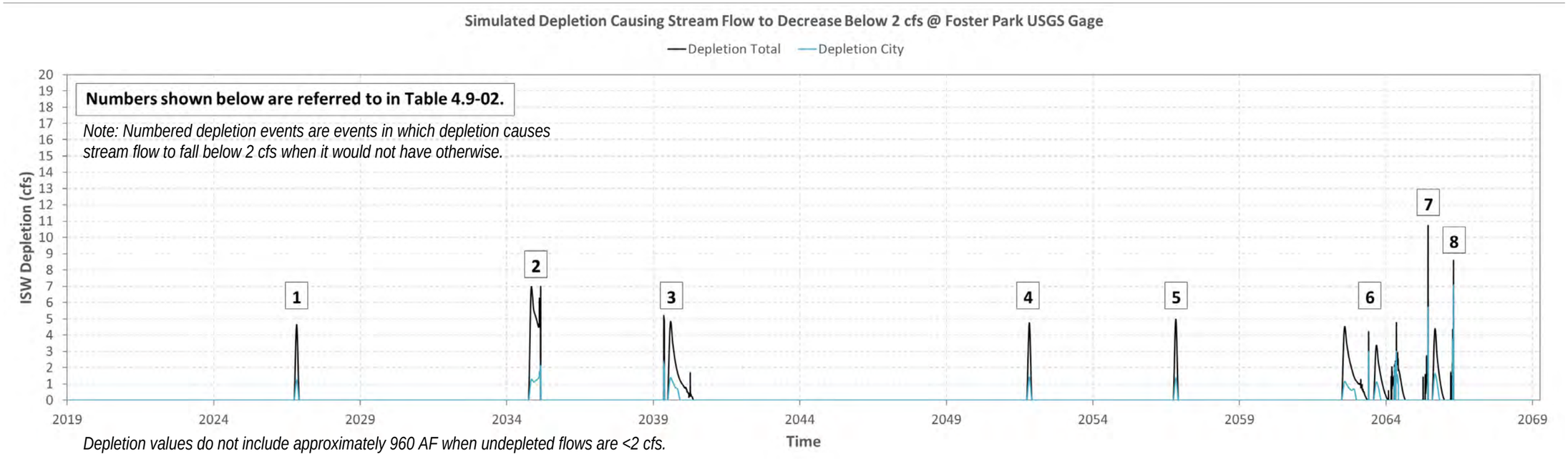
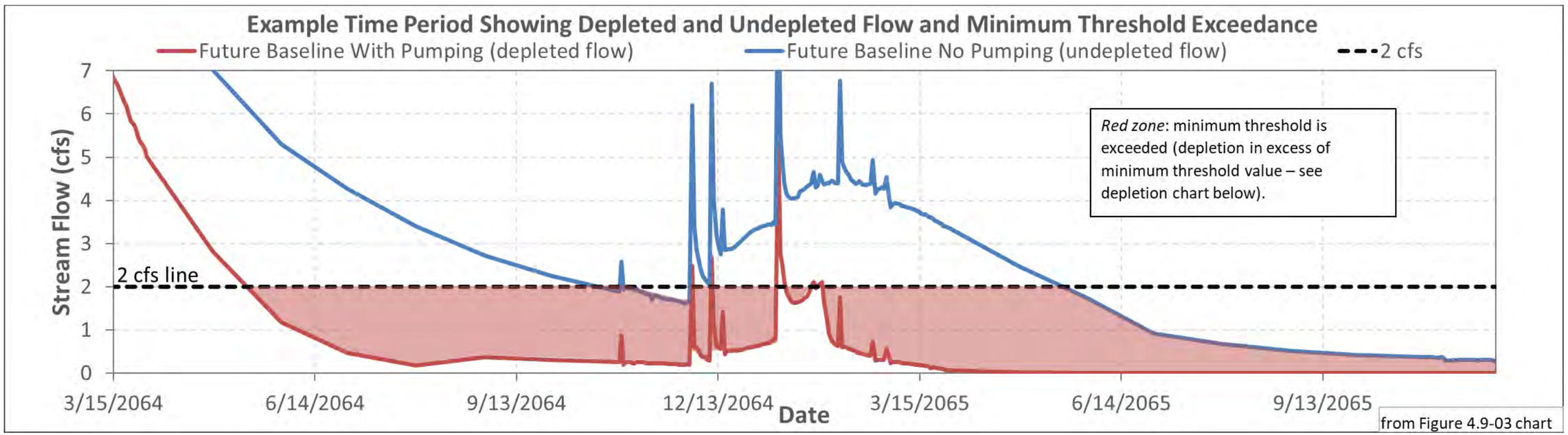


Figure 4.9-03 Foster Park Aquatic Habitat Area Simulated Streamflow and Depletion.

The term depletion refers to the direct or indirect reduction of stream flow resulting from groundwater extraction. Please see Section 3.2.6 for further description of direct versus indirect reductions (depletions) of surface water.



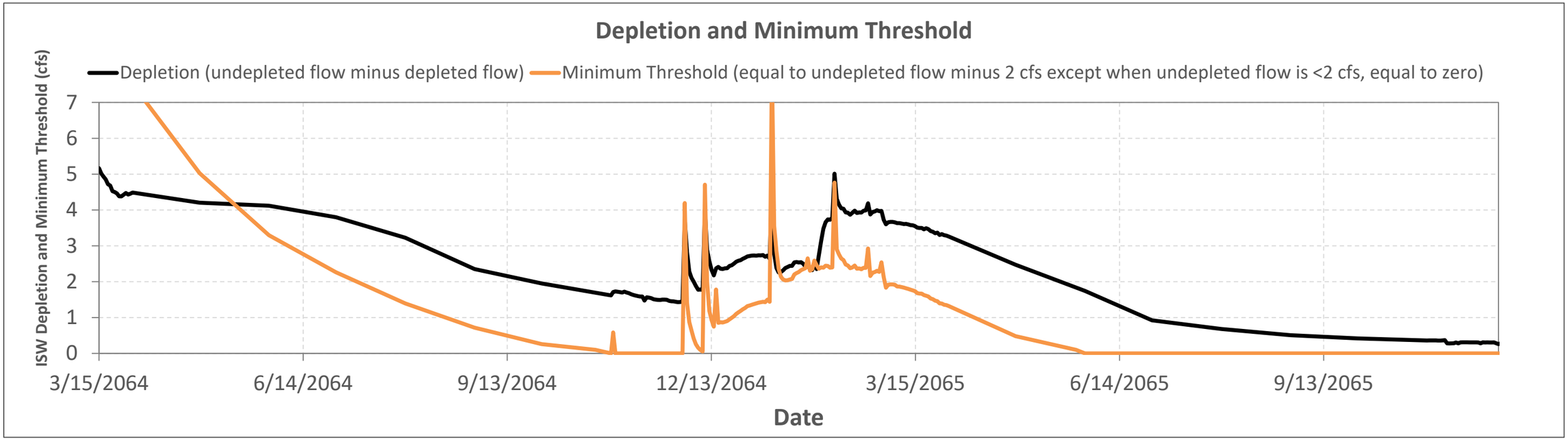


Figure 4.9-04 Example Time Period Graphs Showing Depleted and Undepleted Flow and Minimum Threshold Exceedance for the Depletion of Interconnected Surface Water Sustainability Indicator.

Figures
Section 5

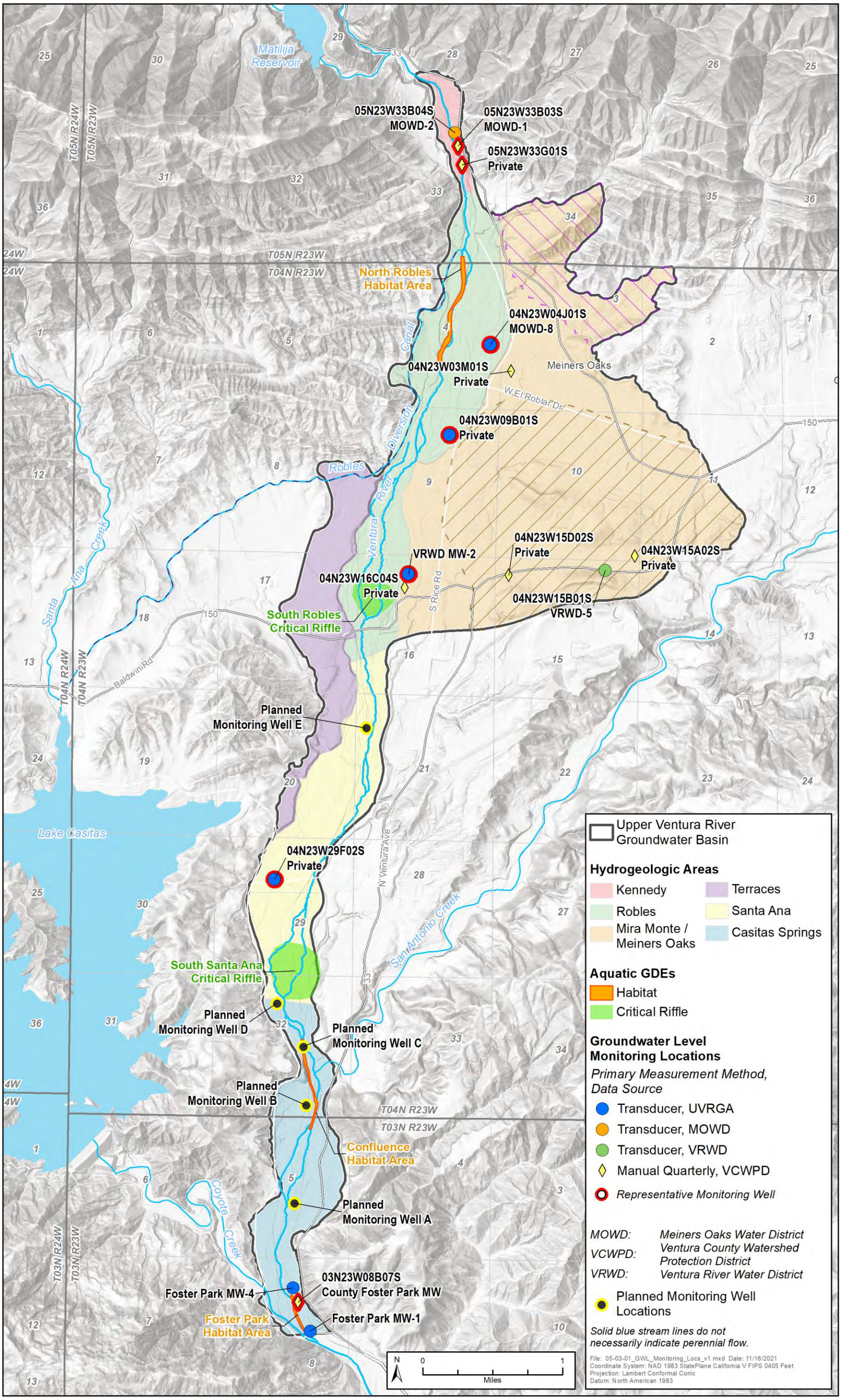


Figure 5.3-01 Existing and Planned Groundwater Level Monitoring Wells.

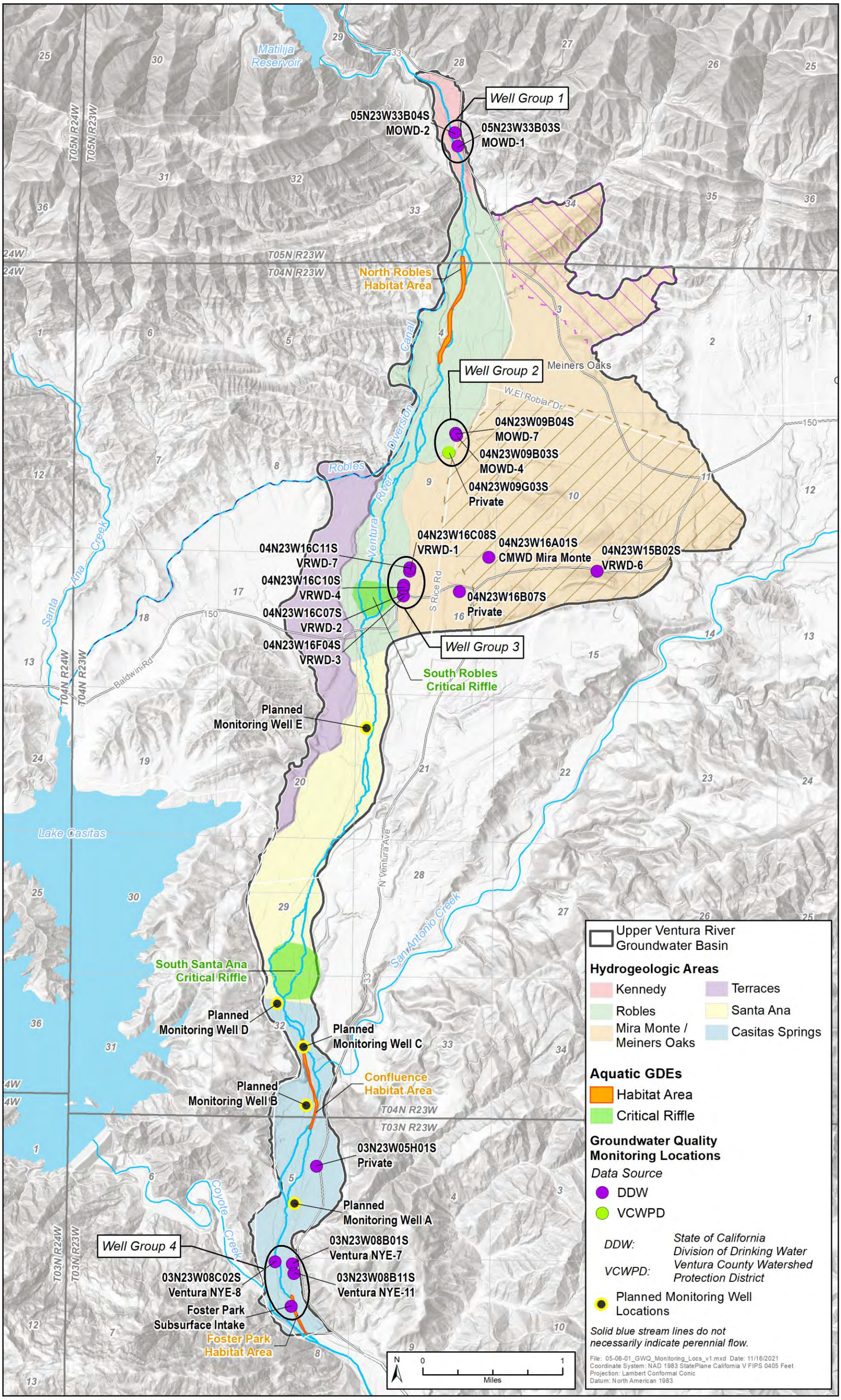


Figure 5.6-01 Existing and Planned Water Quality Monitoring Network.

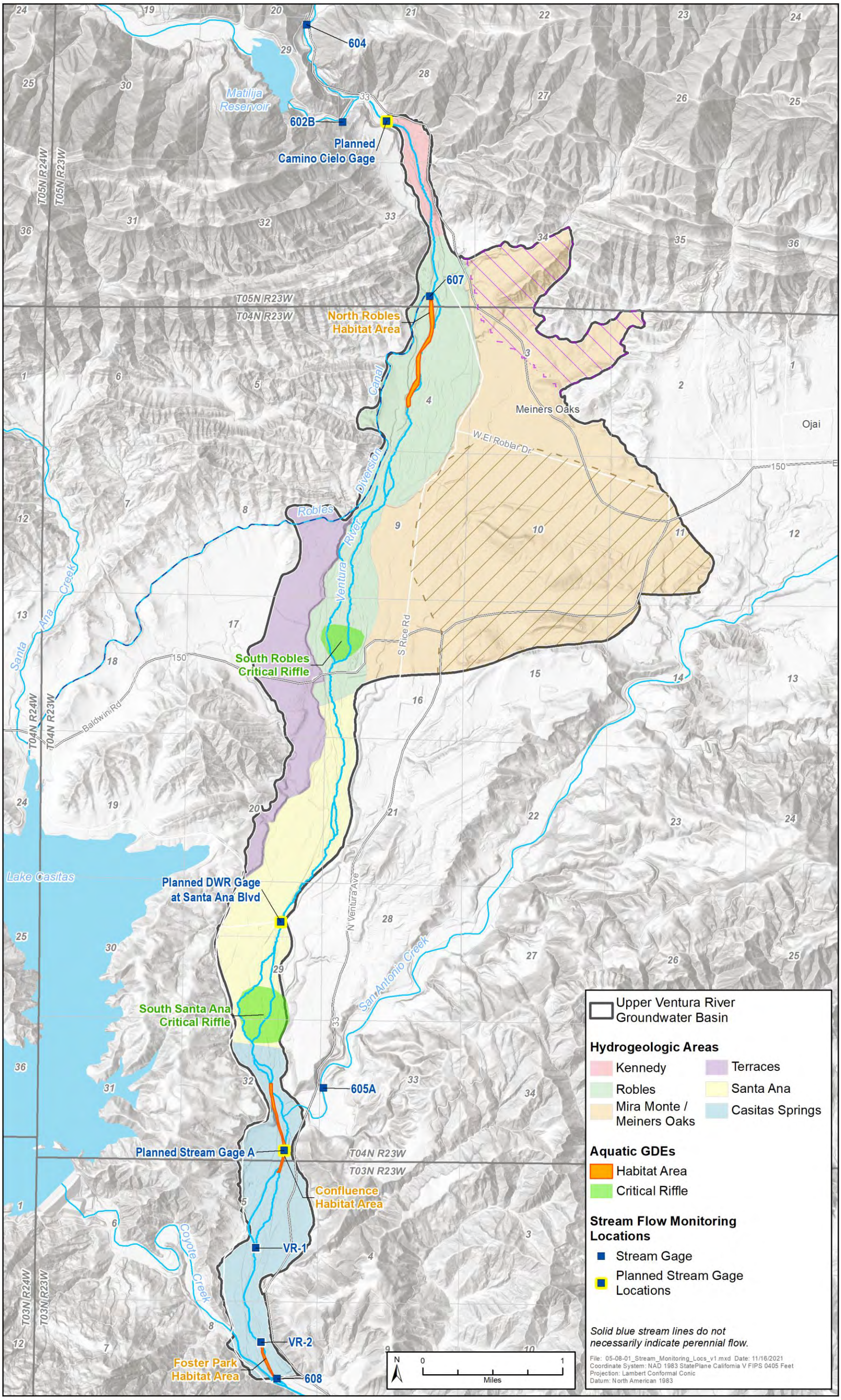


Figure 5.8-01 Existing and Proposed Surface Water Gages.

Tables

Tables

Section 2

Table 2.2-01 Existing Water Resources Monitoring Programs.

Program	Agency	Parameter(s)	Description	Incorporated into GSP Monitoring Networks	Reference
Member Agency Groundwater Levels	MOWD, VRWD, and City of Ventura	Groundwater Levels	Groundwater level monitoring as part of normal well operations.	Yes	N/A
Countywide Groundwater Monitoring Program	Ventura County Watershed Protection District	Groundwater Levels Groundwater Quality	Countywide groundwater monitoring program	Yes	https://s29422.pcdn.co/wp-content/uploads/2018/08/2015-Annual-Report-Final-Reduced.pdf
Division of Drinking Water Compliance Monitoring	Public Water Suppliers in the Basin	Groundwater Quality	Public water suppliers are required to monitor groundwater quality in potable supply wells in the Basin. Data are reported to the Division of Drinking Water.	Yes	https://sdwis.waterboards.ca.gov/PDWW/ https://www.waterboards.ca.gov/drinking_water/certlic/drinkingwater/EDTlibrary.html
California Statewide Groundwater Elevation Monitoring (CASGEM)	Ventura County Watershed Protection District	Groundwater Levels	VCWPD is the CASGEM monitoring entity for the Ventura County. Data is compiled from the Countywide Groundwater Monitoring Program and cooperative entities.	Yes	https://water.ca.gov/Programs/Groundwater-Management/Groundwater-Elevation-Monitoring--CASGEM
Groundwater Ambient Monitoring and Assessment Program (GAMA)	State Water Resources Control Board	Groundwater Quality	SWRCB Program implemented in 2000 (modified by Assembly Bill 599 in 2001) to monitor and assess groundwater basins throughout the state.	No (currently no GAMA data in last 10 years that is not captured in other data sources)	https://www.waterboards.ca.gov/water_issues/programs/gama/
GeoTracker	State Water Resources Control Board	Groundwater Quality	Records for contamination remediation sites.	No (currently no plumes of concern in UVRGB)	https://geotracker.waterboards.ca.gov/
Countywide Precipitation Monitoring	Ventura County Watershed Protection District	Precipitation	Countywide rainfall monitoring program (2 active stations located within Basin and three immediately adjacent to Basin See Figure 3.1-04)	Yes	https://www.vcwatershed.net/hydrodata/
Countywide Stream Flow Monitoring	Ventura County Watershed Protection District	Stream flow	Countywide stream flow monitoring program (3 station located near Basin boundaries See Figure 3.1-07)	Yes	https://www.vcwatershed.net/hydrodata/
Countywide Evaporation Monitoring	Ventura County Watershed Protection District	Evaporation	Countywide evaporation monitoring program (no stations located within UVRGB, but data is useful for estimating conditions in the Basin)	N/A	https://www.vcwatershed.net/hydrodata/
California Irrigation Management Information System (CIMIS)	California Department of Water Resources	Weather Station (multiple parameters)	Statewide weather station network (no stations located within UVRB, but data is useful for estimating conditions in the Basin)	N/A	https://cimis.water.ca.gov/
National Water Information System	United States Geologic Survey	Streamflow	Countrywide monitoring network (Streamflow Station 11118500)	Yes	https://maps.waterdata.usgs.gov/mapper/index.html
CMWD Ventura River Near Meiners Oaks Stream Flow Monitoring (former known as Gage 607)	Casitas Municipal Water District	Stream flow	Stream flow monitoring in accordance with a National Oceanic and Atmospheric Administration National Marine Fisheries Service Biological Opinion (BO)	Yes	https://www.casitaswater.org/home/showpublisheddocument/2377/637195232693670000
Electronic Water Rights Information Management System (eWRIMS)	State Water Resources Control Board	Surface Water Diversions	eWRIMS is a SWRCB database that contains Statements of Water Diversion and Use filed by water diverters.	Yes	https://www.waterboards.ca.gov/waterrights/water_issues/programs/ewrims/index.html
Groundwater Extraction Reporting	MOWD, VRWD, CMWD, and City of Ventura	Groundwater Extractions	Groundwater extractions by UVRGA member agencies are provided to UVRGA upon request.	Yes	N/A

Table 2.2-02 Existing Water Resources Management Programs.

Program	Agency	Parameter(s)	Description	Incorporation into GSP	Reference
Casitas Municipal Water District Urban Water Management Plan and Agricultural Water Management Plan **Casitas Municipal Water District Draft Comprehensive Water Resources Plan**	Casitas Municipal Water District	Water Supply	Planning documents that generally guides the actions related to water supply issues for the Casitas Municipal Water District service area.	References for reliability of surface water supplies and evaluation of potential future demands.	https://www.casitaswater.org/home/showpublisheddocument/163/636896291075730000 Casitas – Comprehensive Water Resources Plan (casitaswaterplan.com)
City of Ventura Urban Water Management Plan **City of Ventura Annual Comprehensive Water Resources Reports**	City of Ventura (Ventura Water)	Water Supply	Planning documents that guide the actions related to water supply issues for the Ventura Water service area.	Future water groundwater extractions for projected water budget based on CCWRP.	https://www.cityofventura.ca.gov/DocumentCenter/View/5623/2015-Urban-Water-Management-Plan-Main-Text https://www.cityofventura.ca.gov/DocumentCenter/View/27422/2021-Comprehensive-Water-Resources-Report
Casitas Municipal Water District Robles Diversion Operations	Casitas Municipal Water District	Surface Water Diversion	CMWD operates the Robles Diversion on the Ventura River (located within UVRGB) in accordance with a National Oceanic and Atmospheric Administration National Marine Fisheries Service Biological Opinion (BO), which includes certain stream flow criteria for diversion operations that are intended to furnish a downstream flow regime that mimics the natural storm recession rate and address flow depth for fish passage in critical riffles located within UVRGB.	Actual diversion quantities incorporated into historical water budget. BO operations rules used to estimate potential future diversions for projected water budget.	https://www.casitaswater.org/home/showpublisheddocument/1825/636934387800970000 https://www.casitaswater.org/home/showpublisheddocument/2377/637195232693670000
RWQCB Water Quality Management Programs	Los Angeles Regional Water Quality Control Board	Surface Water and Groundwater Quality	The RWQCB Basin Plan includes water quality objectives (WQOs) for surface water and groundwater. RWQCB operates various water quality regulatory programs to meet the WQOs, including NPDES permits, and the Algae TMDL.	WQOs were used to establish measurable objectives for the degraded water quality sustainability indicator. Actions undertaken by RWQCB contribute to maintenance of groundwater quality below the measurable objective concentrations.	https://www.waterboards.ca.gov/losangeles/water_issues/programs/basin_plan/basin_plan_documentation.html
Ventura County Stormwater Quality Monitoring Program	Ventura County Watershed Protection District and City Partners	Surface Water Quality	Program meets the requirements of the Ventura County Stormwater Permits. Includes water quality sampling, watershed assessments, business inspections, and pollution prevention programs.	This program contributes to maintenance of groundwater quality below the measurable objective concentrations.	http://www.vcstormwater.org/
VCAILG Water Quality Management Plan	Los Angeles Regional Water Quality Control Board and regulated entities. Program is managed by the Ventura County Farm Bureau	Surface Water Quality	VCAILG's Water Quality Management Plan (WQMP) serves as the roadmap to meet local water quality standards and goals. These plans are prepared and submitted to the Los Angeles Regional Water Quality Control Board (Regional Board) to comply with the agricultural conditional waiver of waste discharge requirements. The plan addresses measurement and control of discharges from irrigated farmland to protect surface water quality.	This program contributes to maintenance of groundwater quality below the measurable objective concentrations.	http://www.farmbureauvc.com/issues/water-issues/water-quality/vcailg
Integrated Regional Water Management (IRWM) Program and Plan	Watershed Coalition of Ventura County (WCVC) and Ventura River Watershed Council (VRWC)	Watershed Management Plan	Initiated with Proposition 50 in 2006, the program provides competitive grant funds for projects and studies in accordance with a comprehensive IRWM Plan.	UVRGA participates in the VRWC, which is an important clearinghouse for exchange of information and ideas concerning important water issues affecting UVRGB and the rest of the watershed.	http://wcvc.ventura.org/ http://venturawatershed.org/
Ojai Basin Groundwater Sustainability Plan	Ojai Basin Groundwater Management Agency (OBGMA)	Groundwater Management	Management of the Ojai Basin will impact stream flow in San Antonio Creek, a key tributary that flows into to the Ventura River in the southern portion of the UVRGB near Casitas Springs. Inflows from San Antonio Creek are an important source of water for sustaining the Confluence and Foster Park aquatic and riparian GDEs within the UVRGB.	N/A – currently under development	http://obgma.com/
California Water Action Plan Ventura River Streamflow Enhancement	SWRQB	Surface Water Management	The Ventura River is one of five streams prioritized pursuant to the California Water Action Plan (CWAP) for efforts to enhance flows for anadromous fish. SWRCB will is currently working to develop objectives for streamflow enhancement. The streamflow objectives are expected in 2023-24.	N/A – currently under development	https://www.waterboards.ca.gov/waterrights/water_issues/programs/instream_flows/cwap_enhancing/ventura_river.html
Ventura Watershed Instream Flow Enhancement and Water Resiliency Regional Framework (VRIF)	Ventura County Resource Conservation District	Surface Water Flow	This project includes a framework and project planning tools to help enhance streamflow in the Ventura River and increase water supply reliability for the region. The tools will provide landowners and others a means of quantifying water demand, infiltration, and opportunities for reduced consumptive use at the parcel scale.	N/A – currently under development	https://www.vcrcd.org/vrif-project-overview
Ventura River Watershed Adjudication	Superior Court of the State of California, County of Los Angeles	To Be Determined	Includes 2014 complaint by Santa Barbara Channelkeeper against the City of Ventura and State of California concerning effects of water extraction in Foster Park on steelhead and a 2019 cross-complaint by the City of Ventura that incorporates all water users in the Ventura River Watershed. Foster Park Protocols are included in the settlement agreement with Santa Barbara Channelkeeper. The Foster Park Protocols are operational protocols for the City of Ventura's Foster Park extraction facilities. The Foster Park Protocols address direct depletion of interconnected surface water in Foster Park. A future judgment to settle the remainder of the case will likely include aspects relevant to implementation of the GSP. There is no definitive timeline for a judgment. UVRGA will monitor, and to the extent possible, coordinate with the adjudication process during GSP implementation. UVRGA is not a party to the lawsuit.	Foster Park Protocols are incorporated into this GSP as a management action.	https://www.venturariverwatershedadjudication.com/

Tables

Section 3

Table 3.1-01 Streamflow Gages Period of Record and Daily Flow Statistics.

Gage ID(s)	Tributary/River	Period of Record	5th Percentile Daily Flow (cfs)	Median Daily Flow (cfs)	Average Daily Flow (cfs)	95th Percentile Daily Flow (cfs)	Peak Daily Flow (cfs)
602/602B	Matilija Creek	Oct 1927 – Aug 2019	0.6	5.8	33.3	128.8	8,340
604	North Fork Matilija Creek	Oct 1928 – Aug 2017	0.3	2.1	10.6	34.0	4,980
607	Ventura River (Robles Diversion)	Oct 1959 – Sept 2017	0.0	2.3	30.0	52.0	13,300
605/605A	San Antonio Creek	Oct 1949 – May 2017	0.0	1.1	15.8	41.0	10,405
601	Coyote Creek	Oct 1927 – Sept 1982	0.0	0.3	10.1	26.0	3,970
608	Ventura River (Foster Park)	Oct 1929 – Mar 2020	0.0	3.5	62.3	160.0	22,000

Table 3.1-02 Water Quality Objectives for the UVRGB.

Constituent	Groundwater Quality Objective	Surface Water Quality Objective
Nitrate as N (mg/L)	10	5 (Nitrate and Nitrite as N)
TDS (mg/L)	800	800
Sulfate (mg/L)	300	300
Chloride (mg/L)	100	60
Boron (mg/L)	0.5	1

Table 3.2-01 Summary of Streamflows and Streamflow Depletions for Different Locations and Times of the Year, 2005–2019 Historical Simulation.

South Kennedy (Boundary of Kennedy & Robles Area)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Median Flow (Historical)	32.1	39.6	42.4	18.6	10.8	4.1	1.2	0.2	0.0	0.1	0.9	5.8
Median Flow (Historical No Pumping)	33.0	39.9	43.0	19.0	11.3	4.8	2.4	0.8	0.3	0.5	1.7	6.3
Median Depletion	0.3	0.4	0.4	0.4	0.4	0.7	0.6	0.4	0.2	0.2	0.4	0.4
Robles Diversion (Gage 607)	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**
Median Flow (Historical)	23.2	34.3	30.0	14.6	7.8	1.7	0.1	0.0	0.0	0.0	0.2	3.2
Median Flow (Historical No Pumping)	23.4	34.8	30.4	14.7	8.3	2.3	0.4	0.0	0.0	0.0	0.5	3.6
Median Depletion	0.3	0.4	0.4	0.4	0.3	0.3	0.1	0.0	0.0	0.0	0.2	0.3
North Robles (near Happy Valley Drain)	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**
Median Flow (Historical)	3.9	15.4	17.8	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
Median Flow (Historical No Pumping)	3.9	15.8	18.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3
Median Depletion	0.1	0.2	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
South Robles (150 Bridge)	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**
Median Flow (Historical)	4.7	14.1	14.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Median Flow (Historical No Pumping)	5.3	14.3	14.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Median Depletion	0.1	0.2	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Santa Ana Bridge	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**
Median Flow (Historical)	7.3	17.6	16.8	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Median Flow (Historical No Pumping)	7.4	17.7	16.9	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Median Depletion	0.1	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
San Antonio Confluence	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**
Median Flow (Historical)	7.1	28.7	27.3	10.5	6.1	3.1	0.8	0.0	0.0	0.0	0.0	0.8
Median Flow (Historical No Pumping)	10.7	31.2	29.3	13.6	9.2	6.7	4.7	2.2	0.3	0.0	0.1	1.2
Median Depletion	1.5	2.2	1.8	1.1	0.7	0.7	0.3	0.6	0.3	0.0	0.1	0.4
Foster Park (Gage 608)	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**
Median Flow (Historical)	10.7	28.2	25.8	10.9	6.9	4.7	4.5	4.1	2.7	3.5	4.2	4.3
Median Flow (Historical No Pumping)	15.8	36.1	33.1	17.5	14.3	12.6	11.3	10.2	9.8	9.8	9.7	8.9
Median Depletion	5.1	5.1	6.7	4.6	4.5	4.6	4.4	4.3	4.4	4.5	4.2	4.6

All values are cubic feet per second (cfs).

The term depletion refers to the direct or indirect reduction of stream flow resulting from groundwater extraction. Please see Section 3.2.6 for further description of direct versus indirect reductions (depletions) of surface water.

Table 3.3-01 Summary of Data Sources for Water Budget Components.

Water Budget Component	Data Source or Estimation Method
Directly measured components:	
Precipitation (i.e., rainfall)	• Historical and current: Precipitation data for Meiners Oaks-County Fire Station and other rain gauges in Ventura County collected and maintained by Ventura County Watershed Protection District (VCWPD) at https://www.vcwatershed.net/hydrodata/. • Projected: VCWPD precipitation data as noted above (assume baseline period of water year 1970-2019 rainfall amounts), modified in accordance with precipitation climate-change factors for 2030 and 2070, as recommended by California Department of Water Resources (2018).
Surface water diversions	• Historical and current: Annual volumes of surface water diverted at the Robles Diversion by CMWD and at a private sump. Robles Diversion data was obtained from CMWD. The private sump reported water use to the eWRIMS database. • Projected: The Robles Diversion operating logic as specified in the non-jeopardy Biological Opinion Operating Criteria (USBR, 2003) was programmed into code and used to simulated diversions. Inflows used to calculate diversion amounts were adjusted by the respective climate-change streamflow change factors. The owner of the private sump provided planned future use to the URVGA board.
Groundwater extractions (pumping)	• Historical and current: Historical groundwater extractions for the four M&I entities as well as for four agricultural wells were provided to the UVRGA board. Extractions for the remainder of the agricultural wells, the two domestic MWCs, and private de minimis users were estimated for 2017 according to the Groundwater Extraction Estimates Technical Memorandum presented to the UVRGA board on June 30, 2020. Extractions for agricultural wells without historical records were taken as the 2017 volumes scaled by historical precipitation. De minimis extractions were assumed to be constant throughout the historical period. • Projected: The four M&I entities and an agricultural user provided estimates of future use under normal and dry conditions, which were determined by the projected precipitation data above. The remaining agricultural extractions were the 2017 estimates scaled by future projected precipitation and modified in accordance with central-tendency climate-change evapotranspiration factors for 2030 and 2070, as recommended by California Department of Water Resources (2018). De minimis extractions were assumed to be constant throughout the projected period.
Gaged surface flows entering and exiting Upper Ventura River Basin	• Historical and current: Surface inflows to the basin are gaged at Matilija and North Fork Matilija Creeks (stations 602 and 604), and San Antonio Creek (605). Surface outflows are gaged at station 608 at the Foster Park Bridge and are used to calibrate streamflows in the numerical model. • Projected: Historical streamflow data (as noted above) was used for the baseline projected simulation from the reference period 1970-2019). The historical data was modified in accordance with the climate-change streamflow Change Factors for the 2030 and 2070 scenarios, respectively, as recommended by California Department of Water Resources (2018).
Components estimated using related data:	
Ungauged stream flows entering and exiting Upper Ventura River Basin	• Historical and current: Ungauged flows at ephemeral tributaries feeding the Ventura River were estimated using the curve number method with baseflow computed using exponential decay to simulate baseflow recession. Runoff generated using the curve number method was computed using precipitation from VCWPD precipitation gage 20 located in the basin. . • Projected: Ungauged flows were computed for the reference historical period (1970-2019) using the method described above with data from VCWPD precipitation gage 20. Ungauged flows for the climate-change scenarios were adjusted using the climate-change streamflow change factors for the 2030 and 2070 scenarios, respectively.
Direct runoff	• Historical and current: Direct runoff is calculated for the area directly adjacent to the main river using the curve number method based on precipitation from VCWPD precipitation gage 20 located in the basin. • Projected: Direct runoff is calculated using the curve number method for the historical reference period for the baseline scenario with data from VCWPD precipitation gage 20. The runoff data is adjusted by climate-change streamflow change factors for the respective 2030 and 2070 scenarios.

Water Budget Component	Data Source or Estimation Method
Components estimated by groundwater flow modeling:	
Interaction (exchanges) of groundwater and surface water within Upper Ventura River Basin	• Historical, current, and projected: The Ventura River has both gaining and losing reaches within the basin. Both stream percolation directly into the aquifer as well as discharge from the aquifer into the river is calculated in the model and is dependent on the difference between river stage and groundwater elevations as well as the width and slope of the riverbed.
Recharge (including infiltration of precipitation, water distribution system losses, septic system leachate, and agricultural and M&I return flows)	• Historical and current: Areal recharge via precipitation was taken from the BCM model. M&I return flows were estimated by taking residential usage from UWMPs, distributing the water evenly across each M&I entities' service area within the basin (CMWD, VRWD, and MOWD) and assuming that 50% of the water is applied outdoors and 20% of that water is lost to return flows. Distribution system losses were either taken from UWMPs where available and were otherwise estimated as 4% of total deliveries. Septic leachate was applied to parcels with known septic systems and was estimated as total indoor usage times a constant rate per area. Agricultural return flows were estimated at 20% of 2 acre-feet per acre per year for all cropland in the basin. • Projected: Areal recharge via precipitation in the historical period 1970 – 2019 is taken from the BCM data and used to simulate future conditions. For the climate change scenarios, precipitation and ET change factors are both used. Projected return flows are based on VRWD's per area water usage rates applied to all service areas within the basin. Dry years are assigned a water usage rate based on the average water usage from years 2015-2020. Wet years are based on 85% of the average water usage rate from years 2005-2009. Agricultural return flows for the baseline projected simulation were represented in the same way as in the historical model. Agricultural return flows were scaled by the average climate change ET factor for each respective climate-change scenario to represent increased evaporative crop demand.
Direct evapotranspiration (ET) of groundwater in aquifers	• Historical and current: ET from non-riparian surfaces and vegetation is already accounted for in the BCM recharge data, therefore only ET from phreatophytes is accounted for in this section. Areas in the basin known to have GDEs were available in data from The Nature Conservancy, with additional areas of Arundo sourced from surveys in 2007, 2011, 2015, and 2019. Seasonal and spatial crop coefficients for different vegetation groups were used to estimate max ET rates with a reference ET that relied on local pan evaporation stations. Rooting depths for each vegetation group were also used to limit ET as extinction depths in which no ET occurs when groundwater levels fall below that depth. • Projected: The historical and current ET rates were scaled for the climate change scenarios using the ET change factor. Current phreatophyte distribution (with corresponding vegetation type and rooting depths) was assumed for future conditions.

Table 3.3-02 Comparison of Water Year Types used in the UVRGB GSP and DWR Water Year Types for the Ventura River Watershed.

Water Year	Precipitation(in)	UVRGB GSP Water Year Type	DWR Water Year Type
2006	25.9	Wet	Wet
2007	7.0	Dry	Critical
2008	23.9	Normal	Dry
2009	0.0	Dry	Dry
2010	25.4	Wet	Above Normal
2011	27.6	Wet	Wet
2012	10.6	Dry	Below Normal
2013	8.6	Dry	Critical
2014	9.1	Dry	Critical
2015	10.5	Dry	Critical
2016	10.7	Dry	Critical
2017	26.5	Wet	Below Normal
2018	10.9	Dry	Dry
2019	25.7	Wet	(Not Available)

Table 3.3-03 Estimated Historical Demands and Supplies in the UVRGB by Category and Source.

Water Year	Year Type	M&I Demand	Ag Demand	Domestic Demand	Total Demand	M&I GW Supplies	Ag GW Supplies*	Domestic GW Supplies	Total GW Supplies	M&I SW Supplies	Ag SW Supplies	Total SW Supplies	Total Supply
2006	Wet	2,595	505	147	3,247	1,104	67	147	1,318	1,491	439	1,930	3,248
2007	Dry	2,974	505	194	3,673	1,220	90	194	1,504	1,754	415	2,169	3,673
2008	Normal	2,710	505	196	3,411	1,126	88	196	1,410	1,584	417	2,001	3,411
2009	Dry	2,565	505	197	3,267	894	92	197	1183	1,671	413	2,084	3,267
2010	Wet	2,261	505	196	2,962	956	83	196	1,235	1,305	422	1,727	2,962
2011	Wet	2,165	505	193	2,863	854	86	193	1133	1,311	420	1,730	2,863
2012	Dry	2,292	505	197	2,994	1,056	95	197	1,348	1,236	410	1,646	2,994
2013	Dry	2,198	505	199	2,902	944	90	199	1,233	1,255	415	1,670	2,903
2014	Dry	2,089	505	195	2,789	651	70	195	916	1,438	436	1,874	2,790
2015	Dry	1,782	505	182	2,469	604	77	182	863	1,178	428	1,607	2,470
2016	Dry	1,501	505	173	2,179	443	57	173	673	1,058	449	1,507	2,180
2017	Wet	1,464	505	168	2,137	680	77	168	925	784	428	1,212	2,137
2018	Dry	1,618	505	183	2,306	689	102	183	974	928	404	1,332	2,306
2019	Wet	1,482	505	191	2,178	614	82	191	887	868	424	1,292	2,179
Average (2006 – 2016)		2121	505	179	2,813	845	83	179	1,114	1,276	423	1,699	2,813

Sums of values may not match averages or totals due to rounding.

**Ag groundwater supplies are less than Ag groundwater extractions shown in Table 3.3-06 due to groundwater exports for agricultural uses located outside of the Basin.*

Table 3.3-04 Actual and Planned CMWD Surface Water Deliveries.

Water Year	Water Year Type	Actual Deliveries	Planned Deliveries
2006	Wet	15,368	18,820
2007	Dry	19,394	18,820
2008	Normal	17,203	18,820
2009	Dry	15,523	18,820
2010	Wet	15,204	18,820
2011	Wet	14,432	17,354
2012	Dry	14,106	17,354
2013	Dry	16,987	17,354
2014	Dry	18,799	17,354
2015	Dry	15,612	17,354
2016	Dry	14,131	17,200
2017	Wet	10,855	17,200
2018	Dry	11,196	17,200
2019	Wet	7,320	17,200

Table 3.3-05 UVRGB Surface Water Inflows and Outflows by Water Year, Historical and Current Period.

Period	Water Year	Year Type	Matilija Creek Inflows	San Antonio Creek Inflows	Ungauged Tributary Inflows	Direct Runoff	Groundwater Discharge to Stream	SW Diversion Simulated using WEL Package	Stream Outflows	Surface Water Diversions	Stream Percolation	Inflows	Outflows
Historical	2006	Wet	44,605	12,527	37,128	5,833	18,642	708	(82,387)	(13,009)	(24,048)	119,444	(119,444)
	2007	Dry	5,381	1,270	297	309	8,632	804	(10,120)	(1,064)	(5,509)	16,694	(16,694)
	2008	Normal	40,874	10,332	36,188	5,871	12,588	846	(71,136)	(11,036)	(24,526)	106,698	(106,698)
	2009	Dry	6,829	1,416	4,032	1,182	7,178	903	(10,759)	(1,685)	(9,096)	21,540	(21,540)
	2010	Wet	21,348	4,544	33,228	5,525	13,492	886	(46,999)	(7,660)	(24,365)	79,024	(79,024)
	2011	Wet	45,682	10,580	49,632	7,243	17,267	856	(82,672)	(23,443)	(25,145)	131,260	(131,260)
	2012	Dry	11,029	901	1,298	742	8,768	785	(10,172)	(1,105)	(12,246)	23,524	(23,524)
	2013	Dry	1,817	110	470	478	5,015	765	(5,443)	(987)	(2,225)	8,655	(8,655)
	2014	Dry	4,188	685	1,474	1,131	573	787	(2,845)	(1,952)	(4,041)	8,839	(8,839)
	2015	Dry	1,978	153	964	843	1,056	271	(1,933)	(427)	(2,904)	5,265	(5,265)
	2016	Dry	1,138	501	3,512	1,574	397	207	(3,047)	(327)	(3,955)	7,329	(7,329)
Current	2017	Wet	23,963	7,152	49,881	6,540	9,055	256	(65,770)	(6,468)	(24,609)	96,847	(96,847)
	2018	Dry	8,027	1,306	1,842	1,427	6,363	199	(9,621)	(877)	(8,665)	19,164	(19,164)
	2019	Wet	69,779	13,801	36,595	5,748	16,696	93	(92,791)	(20,983)	(28,938)	142,711	(142,711)
Historical Average* (2006 – 2016)			16,806	3,911	15,293	2,794	8,510	711	(29,774)	(5,700)	(12,551)	48,025	(48,025)
Current Average* (2017 – 2019)			33,923	7,420	29,439	4,572	10,705	183	(56,061)	(9,443)	(20,737)	86,241	(86,241)

*Sums of values may not match averages or totals due to rounding.

Table 3.3-06 UVRGB Groundwater Inflows and Outflows by Water Year, Historical and Current Period.

Period	Water Year	Year Type	Precipitation-Based Recharge	Agricultural Return Flows	M&I Return Flows	Septic Return Flows	Distribution losses Return Flows	Net Stream Percolation from Losing Reaches	Net GW Discharge to Gaining Reaches	Shallow Groundwater Drainage to the East	SW Diversion simulated using WEL package	M&I Pumping‡	Agricultural Pumping†	Domestic Pumping	GW ET from Riparian Vegetation	Inflows	Outflows	Change in Storage	Cumulative Change in Storage
Historical	**2006**	Wet	152	62	242	125	97	24,048	(18,642)	(5)	(708)	(4,600)	(215)	(194)	(1,525)	24,726	(25,889)	(1,090)	(1,090)
	2007	Dry	0	62	271	140	108	5,509	(8,632)	(3)	(804)	(5,009)	(283)	(196)	(1,359)	6,090	(16,286)	(10,115)	(11,205)
	2008	Normal	1,744	62	262	135	105	24,526	(12,588)	(5)	(846)	(5,292)	(266)	(197)	(1,802)	26,834	(20,996)	5,930	(5,274)
	2009	Dry	44	62	245	126	98	9,096	(7,178)	(6)	(903)	(5,618)	(290)	(197)	(1,275)	9,670	(15,466)	(5,523)	(10,798)
	2010	Wet	1,478	62	220	113	88	24,365	(13,492)	(9)	(886)	(5,542)	(240)	(193)	(1,399)	26,325	(21,763)	4,673	(6,125)
	2011	Wet	2,215	62	206	106	82	25,145	(17,267)	(14)	(856)	(4,727)	(252)	(197)	(1,538)	27,816	(24,851)	3,045	(3,080)
	2012	Dry	0	62	213	110	85	12,246	(8,768)	(13)	(785)	(5,908)	(284)	(199)	(1,439)	12,717	(17,398)	(4,490)	(7,569)
	2013	Dry	5	62	209	109	84	2,225	(5,015)	(12)	(765)	(4,449)	(310)	(196)	(944)	2,693	(11,690)	(8,439)	(16,008)
	2014	Dry	0	62	199	102	80	4,041	(573)	(11)	(787)	(4,867)	(266)	(183)	(809)	4,484	(7,497)	(2,532)	(18,540)
	2015	Dry	42	62	175	90	70	2,904	(1,056)	(11)	(271)	(2,815)	(294)	(170)	(678)	3,343	(5,296)	(1,808)	(20,348)
	2016	Dry	6	62	148	76	59	3,955	(397)	(11)	(207)	(2,944)	(338)	(166)	(662)	4,307	(4,725)	(354)	(20,702)
Current	**2017**	Wet	1,724	62	116	71	76	24,609	(9,055)	(15)	(256)	(4,494)	(367)	(184)	(1,001)	26,658	(15,372)	11,363	(9,339)
	2018	Dry	1,309	62	121	74	78	8,665	(6,363)	(15)	(199)	(4,142)	(335)	(192)	(767)	10,309	(12,012)	(1,592)	(10,931)
	2019	Wet	1,570	62	119	73	77	28,938	(16,696)	(18)	(93)	(3,288)	(395)	(192)	(1,314)	30,838	(21,996)	8,939	(1,992)
Average* (2006 – 2016)			517	62	217	112	87	12,551	(8,510)	(9)	(711)	(4,707)	(276)	(190)	(1,221)	13,546	(15,623)	(1,882)	
Average* (2017 – 2019)			1,535	62	119	73	77	20,737	(10,705)	(16)	(183)	(3,975)	(366)	(189)	(1,027)	22,602	(16,460)	6,237	

*Sums of values may not match averages or totals due to rounding.

†Estimated for the Basin. Note that some of the agricultural pumped groundwater is used outside of the Basin.

‡These values are much higher than the "M&I GW Supplies" term in Table 3.3-03 due to City of Ventura pumping exported to the City of Ventura.

Table 3.3-07 Current and Projected Population for CMWD Retail Service Area (CMWD, 2020).

Year	Population
2020	11,042
2025	11,101
2030	11,161
2035	11,221
2040	11,281

Table 3.3-08 Projected Baseline Demands and Supplies by Category and Source.

Water Year	Year Type	M&I Demand	Ag Demand	Domestic Demand	Total Demand	M&I GW Supplies	Ag GW Supplies	Domestic GW Supplies	Total GW Supplies	M&I SW Supplies	Ag SW Supplies	Total SW Supplies	Total Supplies
2020	Normal	2133	505	193	2831	720	101	193	1014	1412	404	1817	2831
2021	Normal	2133	505	192	2830	721	109	192	1022	1412	396	1808	2830
2022	Dry	1502	505	188	2196	482	120	188	790	1020	386	1406	2196
2023	Wet	2133	505	193	2831	647	99	193	939	1485	407	1892	2831
2024	Normal	2133	505	193	2831	721	105	193	1019	1412	401	1813	2831
2025	Normal	2133	505	191	2829	721	107	191	1019	1412	399	1811	2829
2026	Dry	1502	505	187	2194	482	113	187	782	1020	392	1412	2194
2027	Dry	1502	505	184	2191	409	121	184	714	1093	384	1477	2191
2028	Wet	2133	505	196	2834	647	86	196	929	1485	420	1905	2834
2029	Normal	2133	505	195	2833	721	95	195	1011	1412	410	1822	2833
2030	Wet	2133	505	198	2836	721	93	198	1011	1412	412	1824	2836
2031	Normal	2133	505	192	2830	721	106	192	1019	1412	399	1811	2830
2032	Normal	2133	505	187	2825	721	106	187	1014	1412	399	1811	2825
2033	Wet	2133	505	196	2834	721	85	196	1001	1412	420	1833	2834
2034	Normal	2133	505	192	2830	721	103	192	1016	1412	402	1814	2830
2035	Normal	2133	505	186	2824	721	115	186	1021	1412	391	1803	2824
2036	Wet	2133	505	190	2828	721	98	190	1008	1412	408	1820	2828
2037	Dry	1502	505	190	2197	482	118	190	790	1020	387	1407	2197
2038	Normal	2133	505	191	2829	647	115	191	954	1485	390	1875	2829
2039	Dry	1502	505	185	2193	482	119	185	786	1020	386	1406	2193
2040	Dry	1502	505	178	2186	409	120	178	707	1093	385	1478	2186
2041	Normal	2133	505	185	2823	647	106	185	938	1485	400	1885	2823
2042	Wet	2133	505	194	2832	721	100	194	1015	1412	405	1817	2832
2043	Wet	2133	505	199	2837	721	85	199	1004	1412	420	1833	2837
2044	Dry	1502	505	193	2201	482	108	193	784	1020	397	1417	2201
2045	Wet	2133	505	197	2835	647	89	197	934	1485	416	1901	2835
2046	Normal	2133	505	194	2832	721	103	194	1018	1412	402	1814	2832
2047	Normal	2133	505	193	2831	721	104	193	1018	1412	401	1813	2831
2048	Wet	2133	505	197	2835	721	79	197	997	1412	426	1838	2835
2049	Dry	1502	505	194	2201	482	111	194	786	1020	395	1414	2201
2050	Normal	2133	505	191	2829	647	113	191	951	1485	393	1878	2829
2051	Wet	2133	505	193	2831	721	101	193	1015	1412	405	1817	2831
2052	Dry	1502	505	188	2195	482	122	188	792	1020	383	1403	2195
2053	Normal	2133	505	191	2829	647	108	191	946	1485	397	1882	2829
2054	Dry	1502	505	189	2196	482	112	189	783	1020	393	1413	2196
2055	Wet	2133	505	197	2835	647	87	197	932	1485	418	1904	2835
2056	Wet	2133	505	194	2832	721	94	194	1008	1412	411	1823	2832
2057	Dry	1502	505	188	2195	482	125	188	795	1020	380	1400	2195
2058	Normal	2133	505	191	2829	647	111	191	949	1485	395	1880	2829

Water Year	Year Type	M&I Demand	Ag Demand	Domestic Demand	Total Demand	M&I GW Supplies	Ag GW Supplies	Domestic GW Supplies	Total GW Supplies	M&I SW Supplies	Ag SW Supplies	Total SW Supplies	Total Supplies
2059	Dry	1502	505	187	2194	482	115	187	784	1020	390	1410	2194
2060	Wet	2133	505	191	2829	647	104	191	943	1485	401	1886	2829
2061	Wet	2133	505	193	2831	721	96	193	1010	1412	410	1822	2831
2062	Dry	1502	505	192	2199	482	115	192	789	1020	390	1410	2199
2063	Dry	1502	505	182	2189	409	121	182	711	1093	384	1477	2189
2064	Dry	1502	505	175	2182	409	87	175	671	1093	419	1512	2182
2065	Dry	1502	505	162	2169	409	76	162	647	1093	429	1522	2169
2066	Dry	1502	505	157	2165	409	72	157	638	1093	434	1527	2165
2067	Wet	2133	505	178	2816	647	77	178	902	1485	429	1914	2816
2068	Dry	1502	505	185	2192	482	114	185	781	1020	391	1411	2192
2069	Wet	2133	505	190	2828	647	104	190	942	1485	401	1886	2828
Average (2020-2069)		1906	505	189	2600	608	103	189	901	1297	402	1699	2600

Sums of values may not match averages or totals due to rounding.

Table 3.3-09 Projected 2030 Demands and Supplies by Category and Source.

Water Year	Year Type	M&I Demand	Ag Demand	Domestic Demand	Total Demand	M&I GW Supplies	Ag GW Supplies	Domestic GW Supplies	Total GW Supplies	M&I SW Supplies	Ag SW Supplies	Total SW Supplies	Total Supply
2020	Normal	2178	527	192	2897	720	108	192	1020	1458	419	1877	2897
2021	Normal	2178	527	191	2896	721	112	191	1024	1457	415	1872	2896
2022	Dry	1534	527	189	2250	482	124	189	795	1052	403	1455	2250
2023	Wet	2178	527	193	2898	647	106	193	946	1531	421	1952	2898
2024	Normal	2178	527	192	2897	721	110	192	1022	1457	417	1874	2897
2025	Normal	2178	527	191	2896	721	114	191	1025	1457	413	1870	2896
2026	Normal	2178	527	186	2891	721	116	186	1023	1457	411	1868	2891
2027	Dry	1534	527	183	2244	482	125	183	790	1052	402	1454	2244
2028	Wet	2178	527	196	2901	647	91	196	934	1531	436	1967	2901
2029	Wet	2178	527	195	2900	721	100	195	1016	1457	427	1884	2900
2030	Wet	2178	527	196	2901	721	99	196	1015	1457	428	1886	2901
2031	Normal	2178	527	189	2894	721	112	189	1022	1457	415	1872	2894
2032	Normal	2178	527	186	2891	721	111	186	1018	1457	416	1874	2891
2033	Wet	2178	527	196	2901	721	88	196	1005	1457	439	1896	2901
2034	Dry	1534	527	192	2253	482	113	192	787	1052	414	1466	2253
2035	Dry	1534	527	187	2248	409	124	187	720	1125	403	1529	2248
2036	Wet	2178	527	190	2895	647	104	190	942	1531	423	1954	2895
2037	Dry	1534	527	188	2249	482	123	188	793	1052	404	1456	2249
2038	Normal	2178	527	191	2896	647	121	191	959	1531	406	1937	2896
2039	Dry	1534	527	185	2246	482	123	185	790	1052	404	1456	2246
2040	Dry	1534	527	178	2239	409	125	178	712	1125	402	1527	2239
2041	Normal	2178	527	184	2889	647	105	184	937	1531	422	1953	2889
2042	Wet	2178	527	193	2898	721	107	193	1020	1457	420	1878	2898
2043	Wet	2178	527	199	2904	721	91	199	1011	1457	436	1893	2904
2044	Dry	1534	527	193	2254	482	114	193	789	1052	413	1465	2254
2045	Wet	2178	527	196	2901	647	97	196	941	1531	430	1961	2901
2046	Normal	2178	527	194	2899	721	107	194	1022	1457	420	1877	2899
2047	Normal	2178	527	192	2897	721	108	192	1021	1457	419	1876	2897
2048	Wet	2178	527	197	2902	721	82	197	1000	1457	445	1902	2902
2049	Dry	1534	527	194	2255	482	115	194	791	1052	412	1464	2255
2050	Normal	2178	527	190	2895	647	117	190	955	1531	410	1941	2895
2051	Wet	2178	527	193	2898	721	108	193	1021	1457	419	1877	2898
2052	Dry	1534	527	186	2247	482	128	186	797	1052	399	1450	2247
2053	Normal	2178	527	189	2894	647	115	189	952	1531	412	1942	2894
2054	Normal	2178	527	189	2894	721	117	189	1027	1457	410	1867	2894
2055	Wet	2178	527	197	2902	721	95	197	1013	1457	432	1889	2902
2056	Normal	2178	527	193	2898	721	104	193	1017	1457	423	1881	2898

Water Year	Year Type	M&I Demand	Ag Demand	Domestic Demand	Total Demand	M&I GW Supplies	Ag GW Supplies	Domestic GW Supplies	Total GW Supplies	M&I SW Supplies	Ag SW Supplies	Total SW Supplies	Total Supply
2057	Dry	1534	527	185	2246	482	132	185	799	1052	395	1447	2246
2058	Normal	2178	527	191	2896	647	115	191	953	1531	412	1942	2896
2059	Dry	1534	527	186	2247	482	117	186	785	1052	410	1462	2247
2060	Wet	2178	527	191	2896	647	109	191	947	1531	418	1949	2896
2061	Wet	2178	527	193	2898	721	102	193	1016	1457	425	1882	2898
2062	Dry	1534	527	190	2251	482	123	190	795	1052	404	1456	2251
2063	Dry	1534	527	181	2242	409	128	181	718	1125	399	1524	2242
2064	Dry	1534	527	174	2235	409	90	174	673	1125	437	1562	2235
2065	Dry	1534	527	158	2219	409	80	158	648	1125	447	1572	2219
2066	Dry	1534	527	156	2217	409	72	156	637	1125	455	1580	2217
2067	Wet	2178	527	178	2883	647	80	178	905	1531	447	1978	2883
2068	Dry	1534	527	184	2245	482	121	184	787	1052	406	1458	2245
2069	Wet	2178	527	190	2895	647	113	190	951	1531	414	1944	2895
Average (2020-2069)		1946	527	188	2662	608	109	188	906	1338	418	1756	2662

Sums of values may not match averages or totals due to rounding.

Table 3.3-10 Projected 2070 Demands and Supplies by Category and Source.

Water Year	Year Type	M&I Demand	Ag Demand	Domestic Demand	Total Demand	M&I GW Supplies	Ag GW Supplies	Domestic GW Supplies	Total GW Supplies	M&I SW Supplies	Ag SW Supplies	Total SW Supplies	Total Supply
2020	Normal	2228	551	192	2971	720	116	192	1028	1508	435	1943	2971
2021	Normal	2228	551	191	2970	721	127	191	1039	1507	424	1931	2970
2022	Dry	1569	551	187	2307	482	133	187	802	1087	418	1505	2307
2023	Wet	2228	551	192	2971	647	113	192	953	1581	438	2018	2971
2024	Normal	2228	551	191	2970	721	119	191	1031	1507	432	1939	2970
2025	Normal	2228	551	191	2970	721	122	191	1033	1507	429	1937	2970
2026	Normal	2228	551	190	2969	721	120	190	1031	1507	431	1938	2969
2027	Dry	1569	551	189	2309	482	134	189	805	1087	417	1504	2309
2028	Wet	2228	551	196	2975	647	95	196	938	1581	456	2037	2975
2029	Wet	2228	551	195	2974	721	108	195	1024	1507	443	1951	2974
2030	Wet	2228	551	196	2975	721	104	196	1021	1507	447	1954	2975
2031	Normal	2228	551	190	2969	721	120	190	1030	1507	431	1939	2969
2032	Normal	2228	551	187	2966	721	117	187	1025	1507	434	1941	2966
2033	Wet	2228	551	196	2975	721	96	196	1012	1507	455	1962	2975
2034	Dry	1569	551	192	2312	482	120	192	794	1087	431	1518	2312
2035	Dry	1569	551	186	2306	409	130	186	724	1160	421	1582	2306
2036	Wet	2228	551	190	2969	647	112	190	950	1581	439	2019	2969
2037	Dry	1569	551	187	2307	482	136	187	805	1087	415	1502	2307
2038	Normal	2228	551	190	2969	647	130	190	967	1581	421	2002	2969
2039	Dry	1569	551	183	2303	482	130	183	795	1087	421	1508	2303
2040	Dry	1569	551	178	2298	409	135	178	722	1160	416	1576	2298
2041	Normal	2228	551	184	2963	647	110	184	942	1581	441	2022	2963
2042	Wet	2228	551	193	2972	721	112	193	1026	1507	439	1946	2972
2043	Wet	2228	551	198	2977	721	97	198	1016	1507	454	1961	2977
2044	Normal	2228	551	193	2972	721	124	193	1037	1507	427	1935	2972
2045	Wet	2228	551	197	2976	721	102	197	1019	1507	449	1956	2976
2046	Normal	2228	551	193	2972	721	115	193	1029	1507	436	1943	2972
2047	Normal	2228	551	191	2970	721	116	191	1028	1507	435	1943	2970
2048	Wet	2228	551	197	2976	721	89	197	1006	1507	462	1969	2976
2049	Dry	1569	551	193	2313	482	127	193	802	1087	424	1511	2313
2050	Normal	2228	551	190	2969	647	126	190	964	1581	425	2005	2969
2051	Wet	2228	551	193	2972	721	115	193	1028	1507	436	1943	2972
2052	Dry	1569	551	185	2305	482	141	185	809	1087	410	1497	2305
2053	Normal	2228	551	188	2967	647	126	188	962	1581	425	2005	2967
2054	Normal	2228	551	189	2968	721	125	189	1034	1507	426	1934	2968
2055	Wet	2228	551	197	2976	721	101	197	1019	1507	450	1957	2976
2056	Normal	2228	551	193	2972	721	112	193	1026	1507	439	1946	2972

Water Year	Year Type	M&I Demand	Ag Demand	Domestic Demand	Total Demand	M&I GW Supplies	Ag GW Supplies	Domestic GW Supplies	Total GW Supplies	M&I SW Supplies	Ag SW Supplies	Total SW Supplies	Total Supply
2057	Dry	1569	551	185	2305	482	145	185	812	1087	406	1493	2305
2058	Normal	2228	551	191	2970	647	123	191	961	1581	428	2009	2970
2059	Dry	1569	551	184	2304	482	125	184	792	1087	426	1513	2304
2060	Wet	2228	551	190	2969	647	117	190	955	1581	434	2014	2969
2061	Wet	2228	551	193	2972	721	108	193	1021	1507	443	1950	2972
2062	Dry	1569	551	188	2308	482	132	188	802	1087	419	1505	2308
2063	Dry	1569	551	181	2301	409	131	181	721	1160	420	1580	2301
2064	Dry	1569	551	174	2294	409	101	174	684	1160	450	1610	2294
2065	Dry	1569	551	156	2276	409	89	156	654	1160	462	1622	2276
2066	Dry	1569	551	154	2274	409	81	154	644	1160	470	1631	2274
2067	Wet	2228	551	177	2956	647	85	177	910	1581	466	2047	2956
2068	Dry	1569	551	184	2304	482	130	184	796	1087	421	1508	2304
2069	Wet	2228	551	190	2969	647	106	190	944	1581	445	2025	2969
Average (2020-2069)		2004	551	188	2743	615	117	188	919	1389	434	1824	2743

Sums of values may not match averages or totals due to rounding.

Table 3.3-11 UVRGB Surface Water Inflows and Outflows by Water Year, Future Baseline Conditions.

Water Year	Year Type	Matilija Creek Inflows	San Antonio Creek Inflows	Ungauged Tributary Inflows	Direct Runoff	Groundwater Discharge to Stream	SW Diversion Simulated using WEL Package	Stream Outflows	Surface Water Diversions	Stream Percolation	Inflows	Outflows
2020	Normal	16,204	4,901	20,731	3,309	14,334	784	(36,778)	(5,281)	(18,203)	60,263	(60,263)
2021	Normal	20,172	5,513	21,826	3,831	13,795	784	(40,950)	(4,758)	(20,213)	65,922	(65,922)
2022	Dry	10,721	1,972	2,936	1,471	9,160	302	(13,704)	(991)	(11,868)	26,562	(26,562)
2023	Wet	58,273	19,145	76,065	9,250	15,081	716	(127,755)	(24,774)	(26,002)	178,531	(178,530)
2024	Normal	18,448	4,852	20,292	3,597	14,646	784	(36,880)	(7,033)	(18,707)	62,620	(62,620)
2025	Normal	23,653	5,105	25,328	5,020	14,371	784	(42,794)	(7,863)	(23,604)	74,261	(74,261)
2026	Dry	9,920	1,250	2,295	1,751	7,523	302	(9,917)	(1,995)	(11,130)	23,041	(23,041)
2027	Dry	4,812	861	2,254	853	7,376	234	(9,103)	(733)	(6,556)	16,391	(16,391)
2028	Wet	135,574	53,947	118,373	13,993	17,358	716	(265,227)	(43,550)	(31,183)	339,960	(339,960)
2029	Normal	27,908	11,499	32,825	4,680	18,290	784	(64,600)	(8,361)	(23,025)	95,986	(95,986)
2030	Wet	69,751	27,305	71,787	9,079	18,163	784	(148,703)	(24,580)	(23,588)	196,871	(196,871)
2031	Normal	10,101	4,507	14,162	3,116	12,069	784	(27,190)	(3,591)	(13,958)	44,739	(44,739)
2032	Normal	9,938	3,232	15,187	2,836	9,017	784	(21,348)	(3,705)	(15,940)	40,993	(40,993)
2033	Wet	119,319	50,110	96,700	12,272	18,954	784	(224,425)	(40,641)	(33,073)	298,139	(298,139)
2034	Normal	15,729	5,401	14,100	2,895	16,633	784	(37,437)	(3,235)	(14,870)	55,542	(55,542)
2035	Normal	6,624	1,745	10,651	2,198	7,943	784	(15,254)	(1,900)	(12,791)	29,945	(29,945)
2036	Wet	59,645	12,835	55,898	7,942	13,203	784	(99,495)	(21,299)	(29,514)	150,308	(150,308)
2037	Dry	7,640	1,400	1,053	807	9,713	302	(11,630)	(1,313)	(7,972)	20,915	(20,915)
2038	Normal	21,551	2,233	17,186	2,965	12,134	716	(27,509)	(6,919)	(22,357)	56,785	(56,785)
2039	Dry	5,877	736	2,091	1,205	7,557	302	(9,340)	(1,028)	(7,400)	17,768	(17,768)
2040	Dry	2,947	298	1,273	986	4,564	234	(5,753)	(553)	(3,997)	10,303	(10,303)
2041	Normal	29,307	6,685	34,865	5,282	8,273	716	(50,701)	(11,211)	(23,217)	85,129	(85,129)
2042	Wet	75,028	20,511	41,257	6,084	15,553	784	(104,696)	(28,556)	(25,963)	159,215	(159,215)
2043	Wet	155,396	61,083	101,824	12,555	21,776	784	(265,965)	(56,905)	(30,548)	353,418	(353,418)
2044	Dry	12,745	3,312	3,480	1,709	15,742	302	(21,512)	(3,123)	(12,657)	37,292	(37,292)
2045	Wet	141,479	48,603	111,416	12,861	19,160	716	(262,549)	(43,298)	(28,389)	334,236	(334,236)
2046	Normal	11,173	4,722	15,347	3,294	14,384	784	(31,266)	(3,239)	(15,199)	49,705	(49,705)
2047	Normal	24,488	8,752	31,175	5,481	14,511	784	(56,893)	(6,556)	(21,742)	85,191	(85,191)
2048	Wet	140,192	73,503	125,957	15,216	19,646	784	(297,523)	(44,875)	(32,900)	375,299	(375,299)
2049	Dry	10,126	3,943	978	489	14,316	302	(18,351)	(754)	(11,049)	30,154	(30,154)

Water Year	Year Type	Matilija Creek Inflows	San Antonio Creek Inflows	Ungauged Tributary Inflows	Direct Runoff	Groundwater Discharge to Stream	SW Diversion Simulated using WEL Package	Stream Outflows	Surface Water Diversions	Stream Percolation	Inflows	Outflows
2050	Normal	21,113	5,406	24,519	3,817	13,178	716	(40,810)	(7,203)	(20,738)	68,750	(68,750)
2051	Wet	55,372	18,402	46,454	6,559	15,319	784	(103,666)	(15,845)	(23,379)	142,890	(142,890)
2052	Dry	7,996	1,099	356	387	8,314	302	(9,335)	(695)	(8,425)	18,455	(18,455)
2053	Normal	12,304	2,790	27,936	5,065	12,453	716	(36,850)	(3,130)	(21,285)	61,265	(61,265)
2054	Dry	9,699	1,847	15,097	2,615	12,043	302	(25,443)	(1,861)	(14,300)	41,604	(41,604)
2055	Wet	102,614	71,059	114,060	14,233	19,511	716	(266,449)	(27,713)	(28,030)	322,193	(322,193)
2056	Wet	44,605	12,527	37,128	5,833	16,550	784	(79,511)	(13,858)	(24,059)	117,428	(117,428)
2057	Dry	5,381	1,270	297	309	9,118	302	(10,305)	(695)	(5,679)	16,678	(16,678)
2058	Normal	40,874	10,332	36,188	5,871	12,935	716	(70,210)	(13,735)	(22,971)	106,916	(106,916)
2059	Dry	6,829	1,416	4,032	1,182	8,555	302	(11,840)	(1,198)	(9,279)	22,317	(22,317)
2060	Wet	21,348	4,544	33,228	5,525	14,380	716	(49,880)	(6,120)	(23,742)	79,742	(79,742)
2061	Wet	45,676	10,580	49,632	7,243	18,164	784	(90,301)	(13,945)	(27,834)	132,080	(132,080)
2062	Dry	11,037	901	1,298	742	10,563	302	(11,659)	(1,692)	(11,493)	24,843	(24,843)
2063	Dry	1,820	110	470	478	6,457	234	(6,645)	(544)	(2,380)	9,569	(9,569)
2064	Dry	4,188	685	1,474	1,131	3,153	234	(5,250)	(1,439)	(4,178)	10,866	(10,866)
2065	Dry	1,978	153	964	843	2,206	234	(2,847)	(542)	(2,989)	6,378	(6,378)
2066	Dry	1,139	501	3,512	1,574	1,407	234	(3,830)	(531)	(4,006)	8,367	(8,367)
2067	Wet	23,961	7,152	49,881	6,540	8,996	716	(65,319)	(6,953)	(24,973)	97,246	(97,246)
2068	Dry	8,001	1,306	1,842	1,427	6,282	302	(9,254)	(1,049)	(8,857)	19,160	(19,160)
2069	Wet	69,788	13,801	36,595	5,748	14,802	716	(85,355)	(27,214)	(28,880)	141,450	(141,450)
Average (2020-2069)		35,009	12,317	31,486	4,683	12,393	586	(67,400)	(11,172)	(17,902)	96,474	(96,474)

Sums of values may not match averages or totals due to rounding.

Table 3.3-12 UVRGB Projected Surface Water Inflows and Outflows by Water Year, 2030 Climate Change Factors.

Water Year	Year Type	Matilija Creek Inflows	San Antonio Creek Inflows	Ungauged Tributary Inflows	Direct Runoff	Groundwater Discharge to Stream	SW Diversion Simulated using WEL Package	Stream Outflows	Surface Water Diversions	Stream Percolation	Inflows	Outflows
2020	Normal	13,258	3,981	17,672	2,534	13,609	817	(31,293)	(4,843)	(15,737)	51,872	(51,872)
2021	Normal	20,390	5,572	22,516	3,869	13,270	817	(40,894)	(4,843)	(20,698)	66,435	(66,435)
2022	Dry	11,285	2,076	3,184	1,543	9,171	315	(14,145)	(1,082)	(12,347)	27,574	(27,574)
2023	Wet	56,879	18,687	74,765	8,978	14,750	747	(125,722)	(24,254)	(24,830)	174,806	(174,806)
2024	Normal	17,471	4,595	18,498	3,410	13,681	817	(33,187)	(7,313)	(17,971)	58,472	(58,472)
2025	Normal	21,707	4,685	23,674	4,588	13,260	817	(38,651)	(7,663)	(22,416)	68,731	(68,731)
2026	Normal	11,833	1,491	2,739	2,082	5,431	817	(7,948)	(3,665)	(12,781)	24,394	(24,394)
2027	Dry	5,220	934	2,451	916	6,572	315	(8,437)	(1,023)	(6,947)	16,407	(16,407)
2028	Wet	134,937	53,694	117,735	13,927	16,815	747	(265,590)	(42,957)	(29,308)	337,855	(337,855)
2029	Wet	27,115	11,172	31,910	4,521	16,634	817	(61,938)	(8,747)	(21,485)	92,170	(92,170)
2030	Wet	69,130	27,062	71,264	8,969	16,823	817	(147,111)	(24,315)	(22,639)	194,065	(194,065)
2031	Normal	8,968	4,002	12,519	2,773	10,610	817	(23,308)	(3,605)	(12,776)	39,690	(39,690)
2032	Normal	8,813	2,866	12,954	2,550	8,023	817	(17,646)	(3,423)	(14,955)	36,024	(36,024)
2033	Wet	117,722	49,439	95,324	12,076	18,097	817	(222,420)	(40,002)	(31,054)	293,476	(293,476)
2034	Dry	16,909	5,806	16,286	3,047	17,246	315	(41,129)	(2,584)	(15,897)	59,610	(59,610)
2035	Dry	6,480	1,707	10,579	2,127	10,823	244	(18,611)	(665)	(12,684)	31,960	(31,960)
2036	Wet	59,927	12,896	55,791	7,926	13,993	747	(103,881)	(21,102)	(26,296)	151,279	(151,279)
2037	Dry	8,177	1,498	1,132	856	8,551	315	(10,669)	(1,138)	(8,722)	20,529	(20,529)
2038	Normal	22,737	2,356	18,183	3,102	12,184	747	(30,202)	(7,272)	(21,835)	59,308	(59,308)
2039	Dry	6,049	757	2,153	1,230	7,129	315	(8,983)	(1,254)	(7,397)	17,634	(17,634)
2040	Dry	3,279	331	1,419	1,097	4,426	244	(5,824)	(598)	(4,375)	10,797	(10,797)
2041	Normal	26,958	6,149	32,586	4,836	7,951	747	(46,600)	(10,520)	(22,106)	79,226	(79,226)
2042	Wet	74,728	20,429	41,226	6,031	14,652	817	(105,340)	(27,764)	(24,779)	157,884	(157,884)
2043	Wet	151,219	59,442	99,464	12,205	20,015	817	(260,844)	(54,856)	(27,462)	343,161	(343,161)
2044	Dry	13,735	3,569	3,689	1,828	13,788	315	(20,042)	(3,022)	(13,861)	36,925	(36,925)
2045	Wet	124,752	42,857	98,148	11,333	18,611	747	(232,577)	(37,809)	(26,061)	296,448	(296,448)
2046	Normal	12,047	5,091	16,422	3,526	13,207	817	(31,653)	(3,473)	(15,985)	51,111	(51,111)
2047	Normal	24,879	8,892	31,784	5,549	14,229	817	(58,289)	(6,599)	(21,263)	86,151	(86,151)
2048	Wet	149,849	78,566	134,899	16,232	19,075	817	(321,863)	(46,773)	(30,801)	399,438	(399,438)

Water Year	Year Type	Matilija Creek Inflows	San Antonio Creek Inflows	Ungauged Tributary Inflows	Direct Runoff	Groundwater Discharge to Stream	SW Diversion Simulated using WEL Package	Stream Outflows	Surface Water Diversions	Stream Percolation	Inflows	Outflows
2049	Dry	10,428	4,060	990	504	12,850	315	(16,955)	(865)	(11,327)	29,147	(29,147)
2050	Normal	23,452	6,005	26,843	4,278	13,105	747	(45,334)	(8,497)	(20,598)	74,429	(74,429)
2051	Wet	52,877	17,573	44,624	6,221	14,433	817	(99,429)	(15,260)	(21,857)	136,546	(136,546)
2052	Dry	7,652	1,052	341	370	7,511	315	(8,445)	(724)	(8,073)	17,242	(17,242)
2053	Normal	12,072	2,737	27,725	4,992	11,893	747	(35,409)	(3,785)	(20,972)	60,165	(60,165)
2054	Normal	10,249	1,952	15,990	2,741	10,051	817	(24,023)	(3,328)	(14,450)	41,801	(41,801)
2055	Wet	99,011	68,564	110,385	13,731	17,846	817	(255,971)	(26,421)	(27,961)	310,354	(310,354)
2056	Normal	36,146	10,151	29,305	4,746	14,923	817	(62,859)	(11,506)	(21,725)	96,089	(96,089)
2057	Dry	5,568	1,315	308	320	7,743	315	(8,977)	(724)	(5,867)	15,568	(15,568)
2058	Normal	39,941	10,096	35,524	5,724	12,286	747	(68,605)	(13,810)	(21,902)	104,317	(104,317)
2059	Dry	6,763	1,403	4,182	1,138	7,840	315	(11,226)	(1,504)	(8,912)	21,641	(21,641)
2060	Wet	21,742	4,628	33,758	5,618	14,037	747	(50,269)	(6,501)	(23,760)	80,530	(80,530)
2061	Wet	44,136	10,223	47,767	6,991	17,741	817	(87,007)	(13,803)	(26,866)	127,676	(127,676)
2062	Dry	11,662	878	1,043	600	9,384	315	(10,320)	(2,337)	(11,226)	23,883	(23,883)
2063	Dry	1,823	114	387	379	6,060	244	(6,179)	(567)	(2,261)	9,008	(9,008)
2064	Dry	4,004	647	1,036	795	2,913	244	(4,415)	(1,438)	(3,786)	9,639	(9,639)
2065	Dry	2,026	161	755	650	1,905	244	(2,319)	(565)	(2,856)	5,741	(5,741)
2066	Dry	1,191	554	2,889	1,299	1,117	244	(3,088)	(554)	(3,652)	7,293	(7,293)
2067	Wet	26,831	8,637	46,073	6,008	8,718	747	(63,580)	(8,437)	(24,996)	97,013	(97,013)
2068	Dry	7,869	1,288	1,367	1,058	5,888	315	(8,357)	(1,068)	(8,361)	17,786	(17,786)
2069	Wet	69,939	14,586	28,041	4,546	14,162	747	(78,625)	(26,324)	(27,071)	132,021	(132,020)
Average (2020-2069)		34,437	12,145	30,606	4,527	11,701	611	(65,724)	(11,024)	(17,279)	94,026	(94,026)

Sums of values may not match averages or totals due to rounding.

Table 3.3-13 UVRGB Projected Surface Water Inflows and Outflows by Water Year, 2070 Climate Change Factors.

Water Year	Year Type	Matilija Creek Inflows	San Antonio Creek Inflows	Ungauged Tributary Inflows	Direct Runoff	Groundwater Discharge to Stream	SW Diversion Simulated using WEL package	Stream Outflows	Surface Water Diversions	Stream Percolation	Inflows	Outflows
2020	Normal	15,317	4,580	20,279	3,011	13,904	854	(35,674)	(6,131)	(16,140)	57,944	(57,944)
2021	Normal	18,702	5,111	21,592	3,524	13,082	854	(38,904)	(4,549)	(19,411)	62,864	(62,864)
2022	Dry	9,597	1,765	2,620	1,310	7,701	329	(11,811)	(988)	(10,525)	23,323	(23,323)
2023	Wet	63,225	20,772	84,398	9,870	14,164	780	(142,105)	(26,311)	(24,792)	193,208	(193,208)
2024	Normal	18,951	4,985	20,438	3,677	13,552	854	(35,495)	(8,616)	(18,346)	62,457	(62,457)
2025	Normal	20,689	4,465	23,507	4,346	12,768	854	(37,485)	(7,791)	(21,354)	66,630	(66,630)
2026	Normal	25,994	3,276	6,049	4,423	9,841	854	(19,938)	(6,158)	(24,341)	50,437	(50,437)
2027	Dry	6,147	1,100	2,917	1,065	11,533	329	(13,931)	(1,279)	(7,882)	23,092	(23,092)
2028	Wet	146,975	58,484	128,600	15,154	17,192	780	(293,173)	(46,515)	(27,495)	367,184	(367,184)
2029	Wet	31,299	12,897	36,957	5,178	16,398	854	(71,427)	(11,295)	(20,860)	103,582	(103,582)
2030	Wet	77,878	30,487	80,397	10,044	16,505	854	(167,833)	(25,895)	(22,437)	216,165	(216,165)
2031	Normal	11,369	5,073	16,146	3,494	11,277	854	(29,288)	(4,269)	(14,656)	48,212	(48,212)
2032	Normal	9,516	3,094	13,987	2,755	8,679	854	(19,844)	(3,728)	(15,313)	38,885	(38,885)
2033	Wet	122,106	51,280	99,764	12,457	17,972	854	(233,636)	(41,853)	(28,944)	304,433	(304,433)
2034	Dry	13,116	4,504	13,608	2,310	15,372	329	(32,785)	(1,992)	(14,461)	49,239	(49,239)
2035	Dry	5,269	1,388	8,617	1,731	9,262	255	(15,103)	(669)	(10,750)	26,522	(26,522)
2036	Wet	68,192	14,674	64,834	8,881	13,034	780	(120,564)	(23,480)	(26,350)	170,395	(170,395)
2037	Dry	7,772	1,424	1,082	801	8,124	329	(10,223)	(1,178)	(8,131)	19,533	(19,533)
2038	Normal	21,914	2,270	17,056	3,003	11,673	780	(28,218)	(7,603)	(20,877)	56,697	(56,697)
2039	Dry	5,227	654	1,857	1,061	6,245	329	(7,740)	(1,189)	(6,444)	15,373	(15,373)
2040	Dry	3,900	394	1,688	1,292	3,967	255	(5,749)	(663)	(5,086)	11,497	(11,497)
2041	Normal	33,596	7,663	41,420	5,982	8,108	780	(61,848)	(13,210)	(22,490)	97,548	(97,548)
2042	Wet	82,495	22,552	45,858	6,563	14,189	854	(120,329)	(28,723)	(23,459)	172,511	(172,511)
2043	Wet	163,589	64,304	108,669	13,151	19,133	854	(286,758)	(57,095)	(25,846)	369,700	(369,700)
2044	Normal	15,818	4,110	4,127	2,076	11,472	854	(18,444)	(5,105)	(14,907)	38,457	(38,457)
2045	Wet	148,331	50,957	116,640	13,443	17,424	854	(278,804)	(42,863)	(25,982)	347,649	(347,649)

Water Year	Year Type	Matilija Creek Inflows	San Antonio Creek Inflows	Ungauged Tributary Inflows	Direct Runoff	Groundwater Discharge to Stream	SW Diversion Simulated using WEL package	Stream Outflows	Surface Water Diversions	Stream Percolation	Inflows	Outflows
2046	Normal	14,065	5,944	18,872	4,045	13,054	854	(35,957)	(4,578)	(16,300)	56,835	(56,835)
2047	Normal	23,524	8,408	31,331	5,178	13,705	854	(55,971)	(7,075)	(19,953)	82,999	(82,999)
2048	Wet	147,129	77,139	133,148	15,864	18,329	854	(317,800)	(45,247)	(29,416)	392,463	(392,463)
2049	Dry	9,464	3,685	849	460	11,136	329	(14,784)	(929)	(10,209)	25,922	(25,922)
2050	Normal	24,913	6,379	27,391	4,622	12,613	780	(47,044)	(9,567)	(20,086)	76,698	(76,698)
2051	Wet	62,537	20,783	53,207	7,306	14,111	854	(119,020)	(17,732)	(22,048)	158,799	(158,799)
2052	Dry	6,851	942	304	337	7,172	329	(7,942)	(756)	(7,237)	15,936	(15,936)
2053	Normal	10,110	2,292	23,860	4,194	10,782	780	(28,894)	(3,345)	(19,779)	52,018	(52,018)
2054	Normal	11,919	2,270	18,748	3,146	9,999	854	(27,455)	(4,015)	(15,467)	46,936	(46,936)
2055	Wet	108,576	75,188	122,751	14,955	17,850	854	(284,463)	(29,000)	(26,711)	340,174	(340,174)
2056	Normal	38,167	10,719	29,734	5,028	14,778	854	(65,184)	(12,249)	(21,847)	99,279	(99,279)
2057	Dry	5,451	1,287	300	315	7,430	329	(8,616)	(756)	(5,741)	15,113	(15,113)
2058	Normal	43,293	10,943	38,783	6,172	12,095	780	(75,719)	(14,921)	(21,426)	112,066	(112,066)
2059	Dry	5,846	1,212	3,765	958	7,207	329	(10,106)	(1,485)	(7,727)	19,318	(19,318)
2060	Wet	21,313	4,537	35,107	5,435	13,192	780	(49,632)	(7,533)	(23,199)	80,364	(80,364)
2061	Wet	42,002	9,729	45,642	6,620	17,191	854	(82,744)	(13,233)	(26,061)	122,038	(122,038)
2062	Dry	11,100	783	725	426	8,311	329	(9,009)	(2,369)	(10,297)	21,675	(21,675)
2063	Dry	1,823	114	314	290	5,613	255	(5,669)	(593)	(2,148)	8,410	(8,410)
2064	Dry	4,004	647	850	647	2,717	255	(4,006)	(1,462)	(3,652)	9,120	(9,120)
2065	Dry	2,026	161	571	487	1,703	255	(1,933)	(591)	(2,679)	5,203	(5,203)
2066	Dry	1,191	554	2,369	1,127	938	255	(2,540)	(578)	(3,315)	6,434	(6,434)
2067	Wet	26,831	8,637	46,156	6,020	8,484	780	(63,338)	(8,514)	(25,055)	96,907	(96,907)
2068	Dry	7,869	1,288	943	728	5,654	329	(7,717)	(1,100)	(7,994)	16,811	(16,811)
2069	Wet	78,001	16,795	24,412	4,068	13,702	780	(82,195)	(29,586)	(25,978)	137,759	(137,759)
Average (2020-2069)		37,100	13,054	32,865	4,781	11,407	650	(70,897)	(11,927)	(17,032)	99,856	(99,856)

Sums of values may not match averages or totals due to rounding.

Table 3.3-14 UVRGB Projected Groundwater Inflows and Outflows by Water Year, Future Baseline Conditions.

Water Year	Year Type	Precipitation-Based Recharge	Agricultural Return Flows	M&I Return Flows	Septic Return Flows	Distribution losses Return Flows	Net Stream Percolation from Losing Reaches	Net GW Discharge to Gaining Reaches	Shallow Groundwater Drainage to the East	SW Diversion simulated using WEL package	M&I Pumping	Agricultural Pumping	Domestic Pumping	GW ET from Riparian Vegetation	Inflows	Outflows	Change in Storage	Cumulative Change in Storage
2020	Normal	53	62	201	102	80	18,203	(14,334)	(13)	(784)	(6,261)	(468)	(193)	(1,294)	18,700	(23,347)	(4,548)	(4,548)
2021	Normal	1,336	62	201	102	80	20,213	(13,795)	(15)	(784)	(6,262)	(491)	(192)	(1,159)	21,994	(22,699)	(607)	(5,154)
2022	Dry	670	62	177	90	71	11,868	(9,160)	(15)	(302)	(4,053)	(520)	(188)	(946)	12,938	(15,185)	(2,139)	(7,294)
2023	Wet	3,590	62	193	98	77	26,002	(15,081)	(19)	(716)	(5,177)	(461)	(193)	(1,225)	30,021	(22,873)	7,244	(50)
2024	Normal	888	62	201	102	80	18,707	(14,646)	(20)	(784)	(6,262)	(480)	(193)	(1,135)	20,039	(23,521)	(3,383)	(3,432)
2025	Normal	782	62	201	102	80	23,604	(14,371)	(19)	(784)	(6,262)	(484)	(191)	(1,100)	24,831	(23,212)	1,729	(1,703)
2026	Dry	66	62	177	90	71	11,130	(7,523)	(17)	(302)	(4,053)	(501)	(187)	(892)	11,596	(13,475)	(1,777)	(3,480)
2027	Dry	30	62	169	86	68	6,556	(7,376)	(14)	(234)	(2,967)	(527)	(184)	(793)	6,970	(12,096)	(5,012)	(8,492)
2028	Wet	8,713	62	193	98	77	31,183	(17,358)	(34)	(716)	(5,177)	(431)	(196)	(1,443)	40,325	(25,355)	15,062	6,570
2029	Normal	1,887	62	201	102	80	23,025	(18,290)	(37)	(784)	(6,262)	(451)	(195)	(1,356)	25,356	(27,376)	(1,922)	4,648
2030	Wet	4,233	62	201	102	81	23,588	(18,163)	(46)	(784)	(6,262)	(446)	(198)	(1,361)	28,267	(27,260)	1,097	5,744
2031	Normal	69	62	201	102	80	13,958	(12,069)	(37)	(784)	(6,262)	(486)	(192)	(1,117)	14,472	(20,947)	(6,320)	(575)
2032	Normal	60	62	201	102	80	15,940	(9,017)	(31)	(784)	(6,262)	(489)	(187)	(939)	16,445	(17,710)	(1,111)	(1,687)
2033	Wet	5,935	62	201	102	80	33,073	(18,954)	(51)	(784)	(6,262)	(426)	(196)	(1,349)	39,452	(28,023)	11,517	9,830
2034	Normal	75	62	201	102	81	14,870	(16,633)	(42)	(784)	(6,262)	(477)	(192)	(1,184)	15,391	(25,576)	(9,996)	(167)
2035	Normal	87	62	201	102	80	12,791	(7,943)	(35)	(784)	(6,262)	(508)	(186)	(893)	13,322	(16,611)	(3,127)	(3,293)
2036	Wet	1,258	62	201	102	80	29,514	(13,203)	(36)	(784)	(6,262)	(458)	(190)	(1,249)	31,216	(22,183)	9,133	5,840
2037	Dry	0	62	177	90	71	7,972	(9,713)	(31)	(302)	(4,053)	(516)	(190)	(900)	8,371	(15,705)	(7,229)	(1,389)
2038	Normal	55	62	193	98	77	22,357	(12,134)	(27)	(716)	(5,177)	(508)	(191)	(1,179)	22,842	(19,932)	3,016	1,627
2039	Dry	36	62	177	90	71	7,400	(7,557)	(23)	(302)	(4,053)	(518)	(185)	(844)	7,835	(13,483)	(5,546)	(3,919)
2040	Dry	16	62	169	86	68	3,997	(4,564)	(21)	(234)	(2,967)	(534)	(178)	(620)	4,396	(9,118)	(4,613)	(8,532)
2041	Normal	1,658	62	193	98	77	23,217	(8,273)	(23)	(716)	(5,177)	(495)	(185)	(1,051)	25,304	(15,920)	9,495	962
2042	Wet	3,474	62	201	102	81	25,963	(15,553)	(31)	(784)	(6,262)	(466)	(194)	(1,322)	29,883	(24,613)	5,367	6,329
2043	Wet	6,739	62	201	102	80	30,548	(21,776)	(54)	(784)	(6,262)	(423)	(199)	(1,525)	37,732	(31,023)	6,801	13,130
2044	Dry	88	62	177	90	71	12,657	(15,742)	(41)	(302)	(4,053)	(488)	(193)	(1,137)	13,145	(21,957)	(8,698)	4,432
2045	Wet	6,751	62	193	98	77	28,389	(19,160)	(66)	(716)	(5,177)	(435)	(197)	(1,512)	35,569	(27,264)	8,397	12,829
2046	Normal	287	62	201	102	81	15,199	(14,384)	(54)	(784)	(6,262)	(475)	(194)	(1,253)	15,932	(23,407)	(7,380)	5,449
2047	Normal	1,307	62	201	102	80	21,742	(14,511)	(53)	(784)	(6,262)	(479)	(193)	(1,292)	23,494	(23,575)	26	5,475
2048	Wet	6,722	62	201	102	80	32,900	(19,646)	(87)	(784)	(6,262)	(410)	(197)	(1,492)	40,067	(28,878)	11,278	16,754
2049	Dry	1	62	177	90	71	11,049	(14,316)	(64)	(302)	(4,053)	(495)	(194)	(1,068)	11,449	(20,492)	(8,935)	7,819
2050	Normal	597	62	193	98	77	20,738	(13,178)	(57)	(716)	(5,177)	(500)	(191)	(1,284)	21,765	(21,103)	766	8,585
2051	Wet	2,185	62	201	102	80	23,379	(15,319)	(62)	(784)	(6,262)	(467)	(193)	(1,346)	26,009	(24,434)	1,671	10,256
2052	Dry	0	62	177	90	71	8,425	(8,314)	(50)	(302)	(4,053)	(527)	(188)	(756)	8,824	(14,190)	(5,256)	5,000
2053	Normal	260	62	193	98	77	21,285	(12,453)	(44)	(716)	(5,177)	(491)	(191)	(1,083)	21,974	(20,155)	1,945	6,945
2054	Dry	104	62	177	90	71	14,300	(12,043)	(39)	(302)	(4,053)	(499)	(189)	(1,020)	14,804	(18,145)	(3,248)	3,698
2055	Wet	7,991	62	193	98	77	28,030	(19,511)	(81)	(716)	(5,177)	(429)	(197)	(1,115)	36,451	(27,226)	9,314	13,012
2056	Wet	152	62	201	102	80	24,059	(16,550)	(60)	(784)	(6,262)	(448)	(194)	(1,002)	24,655	(25,300)	(552)	12,459
2057	Dry	0	62	177	90	71	5,679	(9,118)	(48)	(302)	(4,053)	(536)	(188)	(730)	6,078	(14,974)	(8,788)	3,672
2058	Normal	1,744	62	193	98	77	22,971	(12,935)	(50)	(716)	(5,177)	(495)	(191)	(1,123)	25,145	(20,688)	4,564	8,236
2059	Dry	44	62	177	90	71	9,279	(8,555)	(41)	(302)	(4,053)	(507)	(187)	(790)	9,721	(14,436)	(4,605)	3,631
2060	Wet	1,478	62	193	98	77	23,742	(14,380)	(43)	(716)	(5,177)	(478)	(191)	(973)	25,649	(21,959)	3,787	7,418
2061	Wet	2,215	62	201	102	80	27,834	(18,164)	(47)	(784)	(6,262)	(453)	(193)	(1,139)	30,493	(27,044)	3,539	10,958
2062	Dry	0	62	177	90	71	11,493	(10,563)	(39)	(302)	(4,053)	(507)	(192)	(918)	11,893	(16,575)	(4,572)	6,385
2063	Dry	5	62	169	86	68	2,380	(6,457)	(33)	(234)	(2,967)	(535)	(182)	(601)	2,768	(11,010)	(8,099)	(1,714)
2064	Dry	0	62	169	86	68	4,178	(3,153)	(28)	(234)	(2,692)	(503)	(175)	(566)	4,561	(7,353)	(2,704)	(4,418)
2065	Dry	42	62	169	86	68	2,989	(2,206)	(25)	(234)	(2,692)	(489)	(162)	(294)	3,414	(6,102)	(2,618)	(7,035)
2066	Dry	6	62	169	86	68	4,006	(1,407)	(22)	(234)	(2,692)	(479)	(157)	(365)	4,397	(5,358)	(876)	(7,911)
2067	Wet	1,724	62	193	98	77	24,973	(8,996)	(26)	(716)	(5,177)	(448)	(178)	(948)	27,127	(16,489)	10,851	2,940
2068	Dry	1,309	62	177	90	71	8,857	(6,282)	(25)	(302)	(4,053)	(508)	(185)	(759)	10,565	(12,114)	(1,421)	1,519
2069	Wet	1,570	62	193	98	77	28,880	(14,802)	(28)	(716)	(5,177)	(478)	(190)	(1,258)	30,880	(22,650)	8,331	9,849
Average (2020-2069)		1,566	62	189	96	76	17,902	(12,393)	(38)	(586)	(5,060)	(482)	(189)	(1,054)	19,891	(19,802)	197	2,944

Sums of values may not match averages or totals due to rounding.

Table 3.3-15 UVRGB Projected Groundwater Inflows and Outflows by Water Year, 2030 Climate Change Factors.

Water Year	Year Type	Precipitation-Based Recharge	Agricultural Return Flows	M&I Return Flows	Septic Return Flows	Distribution losses Return Flows	Net Stream Percolation from Losing Reaches	Net GW Discharge to Gaining Reaches	Shallow Groundwater Drainage to the East	SW Diversion simulated using WEL package	M&I Pumping	Agricultural Pumping	Domestic Pumping	GW ET from Riparian Vegetation	Inflows	Outflows	Change in Storage	Cumulative Change in Storage
2020	Normal	46	64	209	102	80	15,737	(13,609)	(13)	(817)	(6,261)	(497)	(192)	(1,303)	16,238	(22,692)	(6,299)	(6,299)
2021	Normal	1,295	64	209	102	80	20,698	(13,270)	(15)	(817)	(6,262)	(511)	(191)	(1,201)	22,448	(22,267)	365	(5,935)
2022	Dry	690	64	185	90	71	12,347	(9,171)	(15)	(315)	(4,053)	(547)	(189)	(989)	13,447	(15,278)	(1,720)	(7,654)
2023	Wet	3,432	64	201	98	77	24,830	(14,750)	(19)	(747)	(5,177)	(490)	(193)	(1,257)	28,702	(22,632)	6,161	(1,493)
2024	Normal	819	64	209	102	80	17,971	(13,681)	(20)	(817)	(6,262)	(506)	(192)	(1,143)	19,246	(22,621)	(3,106)	(4,599)
2025	Normal	695	64	209	102	80	22,416	(13,260)	(19)	(817)	(6,262)	(519)	(191)	(1,104)	23,567	(22,172)	1,583	(3,016)
2026	Normal	69	64	210	102	81	12,781	(5,431)	(16)	(817)	(6,262)	(523)	(186)	(909)	13,307	(14,145)	(538)	(3,554)
2027	Dry	34	64	184	90	71	6,947	(6,572)	(14)	(315)	(4,053)	(545)	(183)	(819)	7,390	(12,501)	(4,998)	(8,552)
2028	Wet	8,377	64	201	98	77	29,308	(16,815)	(33)	(747)	(5,177)	(452)	(196)	(1,440)	38,125	(24,859)	13,361	4,809
2029	Wet	1,798	64	209	102	80	21,485	(16,634)	(35)	(817)	(6,262)	(474)	(195)	(1,351)	23,739	(25,769)	(1,936)	2,873
2030	Wet	4,142	64	210	102	81	22,639	(16,823)	(43)	(817)	(6,262)	(469)	(196)	(1,379)	27,238	(25,990)	1,358	4,231
2031	Normal	61	64	209	102	80	12,776	(10,610)	(35)	(817)	(6,262)	(513)	(189)	(1,117)	13,292	(19,544)	(5,895)	(1,664)
2032	Normal	53	64	209	102	80	14,955	(8,023)	(29)	(817)	(6,262)	(514)	(186)	(945)	15,463	(16,777)	(960)	(2,624)
2033	Wet	5,747	64	209	102	80	31,054	(18,097)	(48)	(817)	(6,262)	(445)	(196)	(1,356)	37,257	(27,221)	10,124	7,500
2034	Dry	78	64	185	90	71	15,897	(17,246)	(40)	(315)	(4,053)	(508)	(192)	(1,227)	16,385	(23,582)	(7,091)	409
2035	Dry	91	64	176	86	68	12,684	(10,823)	(34)	(244)	(2,967)	(539)	(187)	(974)	13,168	(15,768)	(2,493)	(2,084)
2036	Wet	1,216	64	201	98	77	26,296	(13,993)	(34)	(747)	(5,177)	(484)	(190)	(1,262)	27,952	(21,887)	6,163	4,079
2037	Dry	0	64	184	90	71	8,722	(8,551)	(29)	(315)	(4,053)	(538)	(188)	(931)	9,131	(14,606)	(5,367)	(1,288)
2038	Normal	56	64	201	98	77	21,835	(12,184)	(25)	(747)	(5,177)	(531)	(191)	(1,230)	22,332	(20,084)	2,354	1,066
2039	Dry	35	64	184	90	71	7,397	(7,129)	(22)	(315)	(4,053)	(540)	(185)	(866)	7,841	(13,111)	(5,160)	(4,094)
2040	Dry	15	64	176	86	68	4,375	(4,426)	(20)	(244)	(2,967)	(558)	(178)	(636)	4,784	(9,030)	(4,130)	(8,224)
2041	Normal	1,514	64	201	98	77	22,106	(7,951)	(22)	(747)	(5,177)	(513)	(184)	(1,079)	24,059	(15,673)	8,482	259
2042	Wet	3,373	64	210	102	81	24,779	(14,652)	(29)	(817)	(6,262)	(491)	(193)	(1,332)	28,609	(23,777)	4,927	5,185
2043	Wet	6,471	64	209	102	80	27,462	(20,015)	(50)	(817)	(6,262)	(448)	(199)	(1,482)	34,389	(29,274)	5,210	10,395
2044	Dry	93	64	184	90	71	13,861	(13,788)	(39)	(315)	(4,053)	(512)	(193)	(1,169)	14,363	(20,070)	(5,601)	4,795
2045	Wet	5,991	64	201	98	77	26,061	(18,611)	(57)	(747)	(5,177)	(464)	(196)	(1,523)	32,492	(26,776)	5,806	10,601
2046	Normal	292	64	210	102	81	15,985	(13,207)	(48)	(817)	(6,262)	(497)	(194)	(1,299)	16,735	(22,326)	(5,414)	5,187
2047	Normal	1,252	64	209	102	80	21,263	(14,229)	(47)	(817)	(6,262)	(501)	(192)	(1,337)	22,970	(23,386)	(53)	5,134
2048	Wet	7,117	64	209	102	80	30,801	(19,075)	(80)	(817)	(6,262)	(427)	(197)	(1,494)	38,374	(28,353)	10,111	15,245
2049	Dry	2	64	184	90	71	11,327	(12,850)	(60)	(315)	(4,053)	(515)	(194)	(1,093)	11,738	(19,079)	(7,222)	8,023
2050	Normal	592	64	201	98	77	20,598	(13,105)	(52)	(747)	(5,177)	(520)	(190)	(1,344)	21,631	(21,135)	606	8,629
2051	Wet	2,181	64	209	102	80	21,857	(14,433)	(57)	(817)	(6,262)	(494)	(193)	(1,352)	24,494	(23,610)	980	9,609
2052	Dry	0	64	184	90	71	8,073	(7,511)	(47)	(315)	(4,053)	(553)	(186)	(760)	8,482	(13,426)	(4,830)	4,779
2053	Normal	262	64	201	98	77	20,972	(11,893)	(42)	(747)	(5,177)	(519)	(189)	(1,108)	21,674	(19,676)	2,268	7,047
2054	Normal	106	64	210	102	81	14,450	(10,051)	(37)	(817)	(6,262)	(523)	(189)	(1,050)	15,013	(18,929)	(3,736)	3,311
2055	Wet	7,395	64	209	102	80	27,961	(17,846)	(72)	(817)	(6,262)	(459)	(197)	(1,130)	35,811	(26,783)	9,125	12,436
2056	Normal	138	64	209	102	80	21,725	(14,923)	(54)	(817)	(6,262)	(483)	(193)	(984)	22,319	(23,716)	(1,296)	11,141
2057	Dry	0	64	184	90	71	5,867	(7,743)	(44)	(315)	(4,053)	(562)	(185)	(716)	6,276	(13,618)	(7,228)	3,912
2058	Normal	1,631	64	201	98	77	21,902	(12,286)	(46)	(747)	(5,177)	(519)	(191)	(1,144)	23,975	(20,109)	3,978	7,891
2059	Dry	44	64	184	90	71	8,912	(7,840)	(38)	(315)	(4,053)	(528)	(186)	(799)	9,365	(13,759)	(4,287)	3,603
2060	Wet	1,443	64	201	98	77	23,760	(14,037)	(40)	(747)	(5,177)	(500)	(191)	(1,003)	25,643	(21,695)	4,188	7,792
2061	Wet	2,132	64	209	102	80	26,866	(17,741)	(44)	(817)	(6,262)	(484)	(193)	(1,168)	29,454	(26,710)	2,890	10,681
2062	Dry	0	64	185	90	71	11,226	(9,384)	(36)	(315)	(4,053)	(536)	(190)	(920)	11,636	(15,435)	(3,688)	6,994
2063	Dry	4	64	176	86	68	2,261	(6,060)	(30)	(244)	(2,967)	(564)	(181)	(597)	2,659	(10,644)	(7,835)	(841)
2064	Dry	0	64	176	86	68	3,786	(2,913)	(26)	(244)	(2,692)	(527)	(174)	(540)	4,179	(7,117)	(2,846)	(3,687)
2065	Dry	43	64	176	86	68	2,856	(1,905)	(23)	(244)	(2,692)	(514)	(158)	(264)	3,292	(5,801)	(2,431)	(6,118)
2066	Dry	7	64	176	86	68	3,652	(1,117)	(21)	(244)	(2,692)	(496)	(156)	(337)	4,053	(5,064)	(927)	(7,045)
2067	Wet	1,691	64	201	98	77	24,996	(8,718)	(25)	(747)	(5,177)	(468)	(178)	(977)	27,127	(16,289)	11,076	4,031
2068	Dry	1,106	64	184	90	71	8,361	(5,888)	(23)	(315)	(4,053)	(538)	(184)	(769)	9,876	(11,770)	(1,764)	2,267
2069	Wet	1,681	64	201	98	77	27,071	(14,162)	(27)	(747)	(5,177)	(511)	(190)	(1,264)	29,193	(22,077)	7,219	9,486
Average (2020-2069)		1,506	64	197	96	76	17,279	(11,701)	(35)	(611)	(5,060)	(507)	(188)	(1,069)	19,219	(19,172)	190	2,493

Sums of values may not match averages or totals due to rounding.

Table 3.3-16 UVRGB Projected Groundwater Inflows and Outflows by Water Year, 2070 Climate Change Factors.

Water Year	Year Type	Precipitation-Based Recharge	Agricultural Return Flows	M&I Return Flows	Septic Return Flows	Distribution losses Return Flows	Net Stream Percolation from Losing Reaches	Net GW Discharge to Gaining Reaches	Shallow interbasin flow to the east	Shallow Groundwater Drainage to the East	M&I Pumping	Agricultural Pumping	Domestic Pumping	GW ET from Riparian Vegetation	Inflows	Outflows	Change in Storage	Cumulative Change in Storage
2020	Normal	47	67	219	102	80	16,140	(13,904)	(13)	(687)	(6,261)	(510)	(196)	(1,392)	16,655	(22,963)	(6,201)	(6,201)
2021	Normal	1,269	67	219	102	80	19,411	(13,082)	(15)	(632)	(6,262)	(544)	(195)	(1,236)	21,149	(21,966)	(706)	(6,907)
2022	Dry	546	67	193	90	71	10,525	(7,701)	(14)	(323)	(4,053)	(568)	(191)	(957)	11,492	(13,807)	(2,197)	(9,104)
2023	Wet	3,683	67	210	98	77	24,792	(14,164)	(19)	(692)	(5,177)	(506)	(196)	(1,296)	28,927	(22,051)	6,978	(2,125)
2024	Normal	912	67	219	102	80	18,346	(13,552)	(20)	(534)	(6,262)	(524)	(195)	(1,201)	19,726	(22,288)	(2,446)	(4,571)
2025	Normal	693	67	219	102	80	21,354	(12,768)	(19)	(616)	(6,262)	(536)	(195)	(1,140)	22,515	(21,537)	1,091	(3,480)
2026	Normal	67	67	219	102	81	24,341	(9,841)	(17)	(792)	(6,262)	(526)	(194)	(1,162)	24,877	(18,795)	6,193	2,713
2027	Dry	40	67	193	90	71	7,882	(11,533)	(14)	(329)	(4,053)	(559)	(193)	(988)	8,343	(17,671)	(9,215)	(6,503)
2028	Wet	8,841	67	210	98	77	27,495	(17,192)	(35)	(733)	(5,177)	(463)	(200)	(1,476)	36,788	(25,276)	11,612	5,109
2029	Wet	1,916	67	219	102	80	20,860	(16,398)	(37)	(795)	(6,262)	(487)	(199)	(1,407)	23,244	(25,587)	(2,244)	2,865
2030	Wet	4,297	67	219	102	81	22,437	(16,505)	(47)	(716)	(6,262)	(481)	(200)	(1,443)	27,204	(25,655)	1,646	4,511
2031	Normal	68	67	219	102	80	14,656	(11,277)	(37)	(512)	(6,262)	(526)	(194)	(1,202)	15,192	(20,010)	(4,709)	(199)
2032	Normal	59	67	219	102	80	15,313	(8,679)	(31)	(485)	(6,262)	(526)	(191)	(1,005)	15,840	(17,181)	(1,232)	(1,430)
2033	Wet	6,003	67	219	102	80	28,944	(17,972)	(52)	(790)	(6,262)	(463)	(200)	(1,382)	35,415	(27,122)	8,388	6,958
2034	Dry	65	67	193	90	71	14,461	(15,372)	(43)	(326)	(4,053)	(529)	(196)	(1,212)	14,948	(21,732)	(6,671)	287
2035	Dry	79	67	184	86	68	10,750	(9,262)	(36)	(255)	(2,967)	(557)	(190)	(950)	11,234	(14,217)	(2,866)	(2,579)
2036	Wet	1,265	67	210	98	77	26,350	(13,034)	(36)	(724)	(5,177)	(502)	(194)	(1,297)	28,067	(20,965)	7,207	4,628
2037	Dry	0	67	193	90	71	8,131	(8,124)	(31)	(329)	(4,053)	(562)	(191)	(949)	8,552	(14,239)	(5,574)	(946)
2038	Normal	59	67	211	98	77	20,877	(11,673)	(27)	(758)	(5,177)	(552)	(194)	(1,249)	21,389	(19,631)	1,874	928
2039	Dry	31	67	193	90	71	6,444	(6,245)	(24)	(329)	(4,053)	(560)	(187)	(845)	6,895	(12,243)	(5,231)	(4,303)
2040	Dry	16	67	184	86	68	5,086	(3,967)	(21)	(254)	(2,967)	(578)	(182)	(648)	5,506	(8,618)	(2,992)	(7,296)
2041	Normal	1,703	67	210	98	77	22,490	(8,108)	(24)	(700)	(5,177)	(526)	(188)	(1,144)	24,646	(15,867)	8,616	1,321
2042	Wet	3,436	67	219	102	81	23,459	(14,189)	(32)	(854)	(6,262)	(504)	(197)	(1,357)	27,365	(23,396)	4,077	5,398
2043	Wet	6,849	67	219	102	80	25,846	(19,133)	(55)	(805)	(6,262)	(461)	(202)	(1,513)	33,163	(28,431)	4,832	10,230
2044	Normal	97	67	219	102	80	14,907	(11,472)	(42)	(791)	(6,262)	(530)	(197)	(1,199)	15,472	(20,492)	(4,904)	5,326
2045	Wet	6,653	67	219	102	80	25,982	(17,424)	(67)	(779)	(6,262)	(476)	(201)	(1,602)	33,104	(26,811)	6,397	11,723
2046	Normal	319	67	219	102	81	16,300	(13,054)	(55)	(591)	(6,262)	(512)	(197)	(1,354)	17,088	(22,026)	(4,831)	6,892
2047	Normal	1,444	67	219	102	80	19,953	(13,705)	(55)	(470)	(6,262)	(518)	(195)	(1,357)	21,865	(22,562)	(591)	6,302
2048	Wet	6,979	67	219	102	80	29,416	(18,329)	(90)	(825)	(6,262)	(445)	(201)	(1,517)	36,864	(27,669)	9,289	15,591
2049	Dry	2	67	193	90	71	10,209	(11,136)	(66)	(329)	(4,053)	(538)	(197)	(1,109)	10,631	(17,427)	(6,680)	8,911
2050	Normal	625	67	211	98	77	20,086	(12,613)	(58)	(737)	(5,177)	(540)	(194)	(1,375)	21,165	(20,696)	580	9,491
2051	Wet	2,376	67	219	102	80	22,048	(14,111)	(65)	(854)	(6,262)	(508)	(197)	(1,413)	24,892	(23,410)	1,577	11,067
2052	Dry	0	67	193	90	71	7,237	(7,172)	(52)	(329)	(4,053)	(577)	(189)	(761)	7,658	(13,133)	(5,346)	5,721
2053	Normal	231	67	210	98	77	19,779	(10,782)	(46)	(501)	(5,177)	(545)	(192)	(1,114)	20,462	(18,356)	2,220	7,941
2054	Normal	112	67	219	102	81	15,467	(9,999)	(40)	(652)	(6,262)	(543)	(193)	(1,115)	16,048	(18,804)	(2,644)	5,297
2055	Wet	8,071	67	219	102	80	26,711	(17,850)	(83)	(765)	(6,262)	(473)	(201)	(1,176)	35,250	(26,811)	8,542	13,839
2056	Normal	141	67	219	102	80	21,847	(14,778)	(61)	(808)	(6,262)	(501)	(197)	(1,040)	22,456	(23,647)	(1,082)	12,756
2057	Dry	0	67	193	90	71	5,741	(7,430)	(49)	(329)	(4,053)	(588)	(189)	(722)	6,161	(13,359)	(7,079)	5,678
2058	Normal	1,728	67	211	98	77	21,426	(12,095)	(52)	(558)	(5,177)	(536)	(195)	(1,187)	23,608	(19,799)	3,924	9,601
2059	Dry	42	67	193	90	71	7,727	(7,207)	(43)	(329)	(4,053)	(547)	(188)	(791)	8,189	(13,159)	(4,848)	4,754
2060	Wet	1,490	67	210	98	77	23,199	(13,192)	(44)	(484)	(5,177)	(521)	(194)	(1,027)	25,141	(20,639)	4,616	9,370
2061	Wet	2,159	67	219	102	80	26,061	(17,191)	(48)	(569)	(6,262)	(497)	(197)	(1,209)	28,688	(25,974)	2,777	12,146
2062	Dry	0	67	193	90	71	10,297	(8,311)	(40)	(329)	(4,053)	(558)	(192)	(916)	10,718	(14,398)	(3,568)	8,578
2063	Dry	4	67	184	86	68	2,148	(5,613)	(33)	(226)	(2,967)	(581)	(185)	(589)	2,556	(10,194)	(7,528)	1,050
2064	Dry	0	67	184	86	68	3,652	(2,717)	(29)	(250)	(2,692)	(551)	(178)	(532)	4,056	(6,949)	(2,798)	(1,747)
2065	Dry	38	67	184	86	68	2,679	(1,703)	(26)	(255)	(2,692)	(534)	(160)	(242)	3,122	(5,612)	(2,420)	(4,167)
2066	Dry	7	67	184	86	68	3,315	(938)	(23)	(238)	(2,692)	(515)	(158)	(308)	3,728	(4,874)	(1,073)	(5,240)
2067	Wet	1,733	67	210	98	77	25,055	(8,484)	(27)	(623)	(5,177)	(483)	(181)	(1,017)	27,240	(15,992)	11,330	6,090
2068	Dry	1,236	67	193	90	71	7,994	(5,654)	(26)	(313)	(4,053)	(551)	(188)	(779)	9,650	(11,563)	(1,796)	4,294
2069	Wet	1,784	67	210	98	77	25,978	(13,702)	(30)	(732)	(5,177)	(522)	(194)	(1,278)	28,213	(21,635)	6,682	10,976
Average (2020-2069)		1,584	67	207	96	76	17,032	(11,407)	(39)	(553)	(5,126)	(525)	(192)	(1,104)	19,063	(18,945)	220	3,431

Sums of values may not match averages or totals due to rounding.

Tables

Section 4

Table 4.4-01 Minimum Thresholds, Measurable Objectives, and Interim Milestones for Chronic Lowering of Groundwater Levels and Groundwater Storage.

State Well Identification Number	Well Name	Chronic Lowering of GW Levels MT (ft amsl)	Chronic Lowering of GW Levels MO (ft amsl)	GW Storage MT (ft amsl)	GW Storage MO (ft amsl)	IM 5-year (ft amsl)	IM 10-year (ft amsl)	IM 15-year (ft amsl)	IM 20-year (ft amsl)
05N23W33B03S	Kennedy 05N23W33B03S	792	806	792	806	792	806	806	806
05N23W33G01S	Kennedy 05N23W33G01S	787	797	787	797	787	797	797	797
04N23W04J01S	North Robles 04N23W04J01S	625	679	625	679	625	679	679	679
04N23W09B01S	North Robles 04N23W09B01S	573	648	573	648	573	648	648	648
04N23W16C-VRWD-MW-2	South Robles 04N23W16C-VRWD-MW-2	467	546	467	546	467	546	546	546
04N23W29F02S	Santa Ana 04N23W29F02S	334	385	334	385	334	385	385	385
03N23W08B07S	Casitas Springs 03N23W08B07S	215	225	215	225	215	225	225	225

Table 4.7-01 RWQCB-established WQOs, Minimum Thresholds, and Measurable Objectives for Nitrate.

Constituent	MCL (mg/L)	RWQCB WQO (mg/L)	Range of Average Historical Concentrations for Wells or Well Groups (mg/l)	MT isocontour (mg/L)[1]	MT Rationale	MO isocontour (mg/L)[2]	MO Rationale
Percolating Groundwater Areas (Kennedy, Robles, Mira Monte/Meiners Oaks, and Santa Ana Hydrogeologic Areas)							
Nitrate (as N)	10	10	1.1 – 12.6	10	Prevent significant and unreasonable impact to municipal and domestic beneficial uses of groundwater consistent with the MCL.	7.5	Preserve existing groundwater quality for municipal and domestic beneficial uses.
Areas with Rising Groundwater (Casitas Springs Hydrogeologic Areas)							
Nitrate (as N)	10	5 (Surface Water WQO)	1.1 – 1.4	10	Prevent significant and unreasonable impact to municipal and domestic beneficial uses of groundwater consistent with the MCL.	3	Preserve existing groundwater quality for municipal and domestic beneficial uses. Protect surface water beneficial uses consistent with the RWQCB surface water WQO (MO is lower than surface water WQO).

[1] SGMA undesirable results are considered to occur when any isocontour exceeds 10 mg/L outside of the Mira Monte / Meiners Oaks Area and encompasses an area with active domestic wells producing groundwater from the alluvial aquifer that lack an alternative drinking water source. If the minimum threshold is exceeded, UVRGA will investigate to determine if caused by pumping by a GSP project or management action.

[2] The measurable objectives are not intended to be applicable in the Meiners Oaks / Mira Monte Area because this area is known to be a source area for nitrate and is an existing area of nitrate impacts. If the measurable objective is not met, UVRGA will investigate to determine if caused by pumping by a GSP project or management action.

Table 4.9-01 Projected ISW Depletion Rates in Beneficial Use Areas.

South Kennedy (Boundary of Kennedy & Robles Area)(Near Private Ag Diversion)	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Median Flow (Baseline)	26.9	50.7	55.7	21.7	13.7	6.4	3.4	2.0	1.9	2.9	4.8	11.9
Median Flow (Baseline No Pumping)	27.3	51.2	56.1	22.2	14.3	7.2	4.3	2.9	2.5	3.5	5.2	12.3
Median Depletion	0.4	0.5	0.4	0.5	0.6	0.8	0.8	0.7	0.6	0.5	0.5	0.4
Robles Diversion (Gage 607)	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**
Median Flow (Baseline)	18.7	36.5	37.3	16.1	10.2	3.6	1.0	0.3	0.2	0.6	2.4	9.2
Median Flow (Baseline No Pumping)	19.0	36.9	37.8	16.6	10.8	4.4	1.8	0.6	0.5	1.1	2.9	9.6
Median Depletion	0.4	0.5	0.4	0.5	0.6	0.7	0.6	0.3	0.2	0.3	0.4	0.4
Robles Critical Riffle	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**
Median Flow (Baseline)	4.4	25.6	21.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8
Median Flow (Baseline No Pumping)	4.5	25.7	22.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8
Median Depletion	0.0	0.2	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Santa Ana Critical Riffle	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**
Median Flow (Baseline)	2.2	12.0	14.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Median Flow (Baseline No Pumping)	2.3	12.1	14.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Median Depletion	0.0	0.1	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Robles Aquatic Habitat Area	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**
Median Flow (Baseline)	14.1	31.9	31.6	11.4	6.0	0.6	0.0	0.0	0.0	0.0	0.5	5.2
Median Flow (Baseline No Pumping)	14.3	32.3	32.0	11.9	6.5	1.1	0.1	0.0	0.0	0.0	0.6	5.5
Median Depletion	0.3	0.4	0.4	0.5	0.5	0.5	0.0	0.0	0.0	0.0	0.1	0.2
Confluence Aquatic Habitat Area	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**
Median Flow (Baseline)	14.8	43.1	48.5	21.7	16.2	12.0	8.0	4.3	0.5	0.0	1.3	6.9
Median Flow (Baseline No Pumping)	16.7	44.9	50.6	22.2	17.0	13.1	9.6	6.4	3.7	1.9	3.9	8.4
Median Depletion	2.2	2.0	1.9	1.3	0.9	0.8	0.9	1.1	1.4	1.1	1.5	1.8
Foster Park Aquatic Habitat Area	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**Jun**	**Jul**	**Aug**	**Sep**	**Oct**	**Nov**	**Dec**
Median Flow (Baseline)	19.7	44.5	52.6	20.8	15.3	11.1	8.3	7.0	6.1	5.5	8.5	10.4
Median Flow (Baseline No Pumping)	22.7	51.4	61.2	28.0	22.9	18.8	15.7	13.2	12.2	11.8	12.5	15.2
Median Depletion	4.0	7.0	7.4	7.3	7.4	7.5	7.3	7.5	7.5	7.0	6.6	5.1

All values are cubic feet per second (cfs).

The term depletion refers to the direct or indirect reduction of stream flow resulting from groundwater extraction. Please see Section 3.2.6 for further description of direct versus indirect reductions (depletions) of surface water.

Table 4.9-02 Summary of Depletion Below 2 cfs at Foster Park, 50-Year Baseline Simulation.

Period No.	Period Depleted Below 2 cfs	Days Depleted Below 2 cfs	Avg Depletion (cfs)	Total Depletion (Acre-ft)	Upstream Pumping Depletion (Acre-ft)	City of Ventura Depletion (Acre-ft)
1	July 2027	31	4.6	285	208	77
2	July-Nov. 2035	149	5.4	1,589	1,209	380
3	Feb. 2040 – Feb. 2041	331	1.7	1,093	762	331
4	July 2052	31	4.7	292	204	88
5	July 2057	31	5.0	305	221	84
6	Apr. 2063 – Apr. 2065	611	1.6	1,969	1,356	613
7	Jan. 2066 – Aug. 2066	160	2.1	654	419	235
8	Dec. 2066 – Jan. 2067	18	2.1	74	40	34
Totals:		**1,362**	**N/A**	**6,261**	**4,419**	**1,842**

Note: Period Nos. 1 - 8 are indicated on Figure 4.9-03.

Depletion values do not include approximately 960 AF when undepleted flows are < 2cfs.

The term depletion refers to the direct or indirect reduction of stream flow resulting from groundwater extraction. Please see Section 3.2.6 for further description of direct versus indirect reductions (depletions) of surface water.

For context and comparison to estimated depletion, annual pumping by the City of Ventura at Foster Park under 50-Year Baseline conditions averages 3,257 AFY.

Table 4.9-03 City of Ventura Foster Park Pumping Schedule for 50-Year Future Model Simulations.

Year Type	Total Pumping	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Wet & Normal	4,200	161	278	385	398	429	416	410	414	389	379	313	228
1st & 2nd Dry Year	1,573	0	262	262	262	262	262	262	0	0	0	0	0
3rd Dry Year	1,298	0	216	216	216	216	216	216	0	0	0	0	0

Note: All values are acre-feet. Sum of values may not match totals due to rounding.

Table 4.9-04 Minimum Thresholds and Measurable Objectives for ISW Depletion, Foster Park Aquatic Habitat Area.

Undepleted Flow (without groundwater pumping – derived from groundwater model)	Depletion Minimum Threshold and Measurable Objective	Goal
> 2 cfs	Undepleted flow minus 2 cfs	The minimum threshold and measurable objective seek to prevent depletions of surface water flow caused by groundwater pumping that would cause surface water flow to be less than 2 cfs when surface water flow would not be less than 2 cfs without pumping.
< = 2 cfs	0 cfs	The minimum threshold and measurable objective seek to prevent depletions of surface water flow caused by groundwater pumping when surface water would already be 2 cfs or less without groundwater pumping.

Note: See Figure 4.9-04 for an example graph depicting the minimum threshold vs. depletion.

Table 4.9-05 Proposed Measurable Objective & Interim Milestones, Foster Park Aquatic Habitat Area.

IM	Year	Measurable Objective	Depletion in Excess of Measurable Objective	Comment
1	2027	Same as Minimum Threshold	10.7 cfs	Maximum depletion rate from model simulation
2	2032		10.7 cfs	
3	2037		10.7 cfs	
4	2042		0 cfs (attain MO)	Implement project(s) or management action(s) to achieve MO

The term depletion refers to the direct or indirect reduction of stream flow resulting from groundwater extraction. Please see Section 3.2.6 for further description of direct versus indirect reductions (depletions) of surface water.

Tables

Section 5

Table 5.3-01 Well Information for Groundwater Level Monitoring Sites.

State Well Identification Number	Local Well Identifier	CASGEM Master Site Code	Year Well Constructed	Longitude[a]	Latitude[a]	Ground Surface Elevation (feet amsl)[b]	Reference Point Elevation (feet amsl)[b]	Reference Point Description	Elevation Measurement Method	Elevation Measurement Accuracy	Reported (Original) Well Use	Well Pumping Status	Well Configuration	Depth of Screened Interval(s) (feet bgs)[c]	Borehole Depth (feet bgs)[c]	Total Well (Casing) Depth (feet bgs)[c]	Casing Diameter (inches)	Aquifers Monitored	Manual Quarterly by VCWPD	Transducer by UVRGA or Member Agency	Representative Monitoring Well	Comment
03N23W08B07S	County MW	343558N1193092W001	Unknown	-119.30935	34.35577	241.61	241.70	Unknown	Surveyed to a benchmark	0.1 ft.	Unknown	Unknown	Unknown	Unknown	60	60	20	Alluvial Aquifer	X		X	
03N23W08-FP-MW-1	FP MW-1	Unknown	Unknown	-119.30778	34.35278	223.82	226.01		Surveyed to a benchmark	0.1 ft.	Other			15-30	Unknown	40	Unknown			X		
03N23W08-FP-MW-4	FP MW-4	Unknown	Unknown	-119.31000	34.35722	237.98	240.84		Surveyed to a benchmark	0.1 ft.	Other			20-50	Unknown	51	Unknown			X		
04N23W03M01S	Private	344522N1192837W001	Unknown	-119.28421	34.45254	761.97	763.37		Surveyed to a benchmark	0.1 ft.	Domestic	Active		100-160	Unknown	172	Unknown		X			
04N23W04J01S	MOWD-8	Unknown	Unknown	-119.28686	34.45526	707.00	713.00		GPS	Unknown	Public Supply			76-126	Unknown	144	Unknown		X	X	X	Not pumped since 2013
04N23W09B01S	Private	344458N1192917W001	1949	-119.29179	34.44584	659.30	662.30		GPS	Unknown	Irrigation		Single Well	Unknown	180	180	Unknown		X	X	X	
04N23W15A02S	Private	344333N1192681W001	1949	-119.26845	34.43352	682.43	683.43		Surveyed to a benchmark	0.1 ft.	Irrigation			90-405	Unknown	417	10	Non-Alluvial Aquifer - Ojai Conglomerate	X			
04N23W15B01S	VRWD-5	Unknown	1992	-119.27215	34.43202	685.15	686.73		Surveyed to a benchmark	0.1 ft.	Public Supply		Unknown	Unknown	Unknown	665	12			X		VRWD operated transducer
04N23W15D02S	Private	344314N1192842W001	1919	-119.28420	34.43138	636.82	636.82		USGS quad	10 ft.	Domestic		Single Well	80-277	Unknown	207	10		X			
04N23W16C04S	Private	344300N1192965W001	Unknown	-119.29718	34.42996	570.01	571.61		USGS quad	20 ft.	Monitoring			Unknown	Unknown	227	Unknown		X			
04N23W16C-VRWD-MW-2	VRWD MW-2	Unknown	2014	-119.29674	34.43136	561.00	565.11		Surveyed to a benchmark	0.1 ft.	Monitoring		Unknown	66-126	144	136	2			X	X	
04N23W29F02S	Private	343997N1193123W001	1949	-119.31298	34.39955	393.90	396.00		GPS	Unknown	Domestic			Unknown	5	65	5' by 5' dug well		X	X	X	
05N23W33B03S	MOWD-1	Unknown	Unknown	-119.29123	34.47580	823.10	823.10		Unknown	Unknown	Public Supply			30-65	Unknown	65	Unknown		X		X	
05N23W33B04S	MOWD-2	Unknown	1969	-119.29164	34.47718	816.54	816.54		GPS	Unknown	Public Supply			60-115	115	115	12			X		MOWD operated transducer
05N23W33G01S	Private	344739N1192909W001	Unknown	-119.29070	34.47386	816.25	818.75		Surveyed to a benchmark	0.1 ft.	Irrigation		Single Well	Unknown	Unknown	108	Unknown		X		X	
TBD	Planned Site A	TBD																Alluvial Aquifer	TBD		X	Future monitoring site (new construction likely necessary)
TBD	Planned Site B																				X	Future monitoring site (assumes access granted to existing well)
TBD	Planned Site C																				X	Future monitoring site (new construction likely necessary)
TBD	Planned Site D																				X	Future monitoring site (assumes access granted to existing well)
TBD	Planned Site E																				X	Future monitoring site (resume monitoring at 04N23W20A01S if access is obtained from new landowner)

Notes:

"TBD" = To be determined.

[a] Longitude and latitude are in decimal degrees, North American Datum 1983 (NAD83).

[b] feet amsl = Feet above mean sea level, North American Vertical Datum 1988 (NAVD88).

[c] feet bgs = Feet below ground surface.

[d] VCWPD = Ventura County Watershed Protection District; VRWD = Ventura River Water District; MOWD = Meniers Oaks Water District; FP = Foster Park

Table 5.6-01 Well Information for Groundwater Quality Monitoring Sites.

Well Group	State Well Identification Number	Local Well Identifier	CASGEM Master Site Code	Longitude[a]	Latitude[a]	Ground Surface Elevation (ft amsl)[b]	Reference Point Elevation (ft amsl)[b]	Reference Point Description	Elevation Measurement Method	Elevation Measurement Accuracy	Reported Well Use	Depth of Screened Interval (ft bgs)[c]	Total Well Depth (ft bgs)[c]	Aquifers Monitored	Casing Diameter (inches)	Minimum Frequency of Groundwater Quality Sampling	Current Monitoring Entity[d]	Notes	Analytes for Sampling Events
1	05N23W33B03S	MOWD-1	Not currently in CASGEM	-119.29123	34.47580	823.10	823.10	Unknown	Unknown	Unknown	Public Supply	30-65	65	Alluvial Aquifer		per DDW requirements	Owner		TDS, sulfate, chloride, boron, and nitrate
	05N23W33B04S	MOWD-2		-119.29164	34.47718	816.54	816.54		GPS	Unknown		60-115	115						
2	04N23W09B05S	MOWD-4		-119.29093	34.44581	656.44	656.44		DEM	Unknown	Irrigation						Owner		
	04N23W09B04S	MOWD-7		-119.29104	34.44604	659.00	659.00		Unknown	Unknown	Public Supply		167						
	04N23W09G03S	Private		-119.29187	34.44402	688.71	688.71		DEM	Unknown	Domestic	45-125	125			Annually (subject to access)	VCWPD		
3	04N23W16C07S	VRWD-2		-119.29734	34.42991	580.00	580.00		Unknown	Unknown	Public Supply	65-230	230		13	per DDW requirements	Owner		
	04N23W16C08S	VRWD-1		-119.29659	34.43168	572.92	572.92		DEM	Unknown		92-132, 152-232	600		17				
	04N23W16C10S	VRWD-4		-119.29727	34.43020	569.95	569.95		DEM	Unknown			250						
	04N23W16C11S	VRWD-7		-119.29653	34.43202	577.85	577.85		DEM	Unknown									
	04N23W16F04S	VRWD-3		-119.29730	34.42908	573.97	573.97		DEM	Unknown		0-220	296		16				
4	03N23W08B01S	Ventura Nye 7		-119.31009	34.35972	250.68	250.68		DEM	Unknown			55						
	03N23W08B11S	Ventura Nye 11		-119.30989	34.35872	247.09	247.09		DEM	Unknown		15-60	62		18				
	03N23W08C02S	Ventura Nye 8		-119.31228	34.35991	249.84	249.84		DEM	Unknown		28-34	75		16				
	03N23W08-Subsurface Intake	Ventura Subsurface Intake		-119.31020	34.35530	229.60	229.60		DEM	Unknown	Public Supply								
N/A	03N23W05H01S	Casitas MWC		-119.30725	34.36986	281.88	281.88		DEM	Unknown	Public Supply		62	Alluvial Aquifer	12	per DDW requirements	Owner		
	04N23W15B02S	VRWD-6		-119.27313	34.43192	685.00	685.00		Unknown	Unknown		200-280, 300-360, 380-440	460	Non-Alluvial Aquifer - Ojai Conglomerate					
	04N23W16A01S	CMWD Mira Monte		-119.28669	34.43322	628.83	628.83		DEM	Unknown		130-256	270	Alluvial Aquifer	16				
	04N23W16B07S	Tico MWC		-119.29031	34.42963	627.01	627.01		DEM	Unknown			262		18				
	TBD	Planned Site A	TBD													Annually (subject to access)	UVRGA	Future monitoring site	
		Planned Site B																	
		Planned Site C																	
		Planned Site D																	
		Planned Site E																	

Notes:

"TBD" = To be determined

[a] Longitude and latitude are in decimal degrees, North American Datum 1983 (NAD83).

[b] feet amsl = Feet above mean sea level, North American Vertical Datum 1988 (NAVD88).

[c] feet bgs = Feet below ground surface.

[d] VCWPD = Ventura County Watershed Protection District; VRWD = Ventura River Water District; MOWD = Meiners Oaks Water District; CMWD = Casitas Municipal Water District

Table 5.8-01 Current and Proposed Streamflow Gages in the UVRGB.

Stream Gage Identifier	Stream monitored	General Site Location Description	USGS Station ID	Current Monitoring Entity[a]	Longitude[b]	Latitude[b]	Reference Point Elevation (ft amsl)[c]	Minimum Sampling Frequency	Notes
602B	Matilija Creek	Matilija Creek at Matilija Hot Springs	11115500	VCWPD	-119.30182	34.48269	937.10	daily	
604	North Fork Matilija Creek	North Fork Matilija Creek at Matilija Hot Springs	11116000	VCWPD	-119.30649	34.49275	1166.20		
605A	San Antonio Creek	San Antonio Creek at Old Creek Road	11117500	VCWPD	-119.30266	34.38255	327.30		
607	Ventura River	Downstream of Robles Diversion near Meiners Oaks	11116550	CMWD	-119.29063	34.46477	767.70		
608	Ventura River	Bridge over Ventura River on Casitas Vista Road	11118500	VCWPD	-119.30799	34.35238	210.80		
VR-1	Ventura River	North of Foster Park at confluence of channels	TBD	City of Ventura	-119.31086	34.36589	257.52	30 min	
VR-2	Ventura River	Adjacent to Foster Park Underground Dam	TBD	City of Ventura	-119.31007	34.35613	228.02	30 min	
Proposed Stream Gage A	Ventura River	Downstream of confluence of San Antonio Creek	TBD	UVRGA	-119.30748	34.37605	288.66	TBD	
Proposed DWR Gage at Santa Ana Blvd	Ventura River	Upstream of Santa Ana Blvd. Bridge	TBD	DWR	-119.30829	34.39972	398.84		Installed 6/2021
Proposed Camino Cielo Gage	Ventura River	Downstream of confluence of Matilija Creeks	TBD	UVRGA	-119.29634	34.48284	872.99		

Notes: "TBD" = To be determined

[a] VCWPD = Ventura County Watershed Protection District; DWR = California Department of Water Resources; CMWD = Casitas Municipal Water District

[b] Longitude and latitude are in decimal degrees, North American Datum 1983 (NAD83).

[c] feet amsl = Feet above mean sea level, North American Vertical Datum 1988 (NAVD88).

Table

Section 6

Table 6.1-01 Outline of Proposed Process for Developing and Implementing Projects and/or Management Actions to Address Indirect ISW Depletion in the Foster Park Aquatic Habitat Area.

Action No.	Action Description	Milestone	Target Date
IM #1 Period: 0-5 years (2022 – 2027)			
1-1	Develop Foster Park Aquatic Habitat Area Monitoring Plan	Foster Park Habitat Area Monitoring Plan approved by the UVRGA Board of Directors	6/30/2023
1-2	Initiate Foster Park Aquatic Habitat Area Monitoring Program	Initiate monitoring activities; annual monitoring data published in GSP annual reports	10/1/2023
1-3	Coordinate w/ OBGMA & others to assess San Antonio Creek flow depletion	Agreements for coordinated assessment and monitoring of San Antonio Creek flow depletion	9/30/2023
1-4	Add monitoring wells and stream gauge to monitoring networks	Access agreements, constructed monitoring wells, and stream gage installation	9/30/2025
1-5	Add new monitoring wells to groundwater level and quality monitoring networks	Initiate monitoring of new wells	10/1/2025
1-6	Update numerical model calibration and ISW depletion estimates	Model update tech memo and updated depletion simulation results	6/30/2026
1-7	Begin planning for project(s) and/or management action(s) to achieve measurable objective.	Memo: preliminary feasibility analysis of project(s) and/or management action(s) to achieve measurable objective	6/30/2026
1-8	5-year GSP assessment. Update SMC, if appropriate.	GSP assessment document and GSP update	1/31/2027
IM #2 Period: 5-10 years (2027 – 2032)			
2-1	Continued Foster Park Aquatic Habitat Area monitoring	Annual monitoring data published in GSP annual reports	Annually by April 1
2-2	Update numerical model calibration, update depletion simulations, simulate potential project(s) and/or management action(s)	Model update and simulations tech memo	6/30/2029
2-3	Feasibility study of project(s) and/or management action(s) to achieve measurable objective	Feasibility study report	12/31/2030
2-4	Select project(s) and/or management action(s) to achieve measurable objective	UVRGA Board-approved project(s) and/or management actions for inclusion in GSP update.	6/30/2031
2-5	5-year GSP assessment and update. Include updated SMC, if appropriate. Add projects and/or management actions selected to achieve measurable objective.	GSP assessment document and GSP update	1/31/2032
IM #3 Period: 10-15 years (2032 – 2037)			
3-1	Continued Foster Park Aquatic Habitat Area monitoring	Annual monitoring data published in GSP annual reports	Annually by April 1
3-2	Develop project(s) and/or management action(s)	Progress toward ordinance(s), agreement(s), or design, as appropriate, based on selected project(s) and/or management action(s).	1/31/2037
3-3	5-year GSP assessment. Update GSP, as needed	GSP assessment document and GSP update	1/31/2037
IM #4 Period: 15-20 years (2037 – 2042)			
4-1	Continued Foster Park Aquatic Habitat Area monitoring	Annual monitoring data published in GSP annual reports	Annually by April 1
4-2	Implement project(s) and/or management action(s)	Completed ordinance(s), agreement(s), or construction, as appropriate, based on selected project(s) and/or management action(s).	1/31/2040
4-3	5-year GSP assessment. Update GSP, as needed	GSP assessment document and GSP update	1/31/2042

Table

Section 7

Table 7.1-01 UVRGA 20-Year Budget for GSP.

Fiscal Year	Agency Administration	Legal Counsel	GW Mgmt., Coord., & Outreach	Monitoring Programs[1]	Annual Reports	Projects and Mgmt. Actions	Model Update and Simulations	GSP Evaluation	GSP Update	Respond to DWR Comments and Requests	Contingency Non-Capital	Monitoring Wells and Stream Gage Construction[2]	Contingency Capital Projects	Totals	Extraction Fee ($/AF)	Ending Cash
2022	$ 61,050	$ 35,000	$ 55,000	$ 71,624	$ 45,000	$ -	$ -	$ -	$ -	$ -	$ 26,767	$ 17,537	$ 1,754	$ 313,732	$ 79.16	$ 262,463
2023	$ 62,602	$ 25,000	$ 30,900	$ 138,511	$ 32,500	$ 5,000	$ -	$ -	$ -	$ -	$ 29,451	$ 72,253	$ 7,225	$ 403,441	$ 111.17	$ 236,521
2024	$ 64,207	$ 25,750	$ 31,827	$ 125,815	$ 33,475	$ 5,000	$ -	$ -	$ -	$ 50,000	$ 33,607	$ 111,630	$ 11,163	$ 492,475	$ 111.17	$ 286,546
2025	$ 65,868	$ 26,523	$ 32,782	$ 137,805	$ 34,479	$ 10,000	$ 54,636	$ -	$ -	$ -	$ 36,209	$ 167,303	$ 16,730	$ 582,336	$ 108.39	$ 233,148
2026	$ 67,844	$ 27,318	$ 33,765	$ 131,465	$ 35,514	$ 10,000	$ 56,275	$ 25,000	$ 50,000	$ -	$ 43,718	$ -	$ -	$ 480,900	$ 102.83	$ 254,060
2027	$ 69,880	$ 28,138	$ 34,778	$ 146,132	$ 36,579	$ 10,000	$ -	$ 25,000	$ 100,000	$ -	$ 45,051	$ -	$ -	$ 495,557	$ 100.05	$ 246,753
2028	$ 71,976	$ 28,982	$ 35,822	$ 107,555	$ 37,676	$ 10,000	$ -	$ -	$ -	$ 28,138	$ 32,015	$ -	$ -	$ 352,164	$ 100.05	$ 382,839
2029	$ 74,135	$ 29,851	$ 36,896	$ 110,782	$ 38,807	$ 125,000	$ -	$ -	$ -	$ -	$ 41,547	$ -	$ -	$ 457,019	$ 100.05	$ 414,070
2030	$ 76,359	$ 30,747	$ 38,003	$ 114,105	$ 39,971	$ 125,000	$ -	$ -	$ -	$ -	$ 42,419	$ -	$ -	$ 466,604	$ 100.05	$ 435,716
2031	$ 78,650	$ 31,669	$ 39,143	$ 117,529	$ 41,170	$ -	$ 65,017	$ 28,982	$ 57,964	$ -	$ 46,012	$ -	$ -	$ 506,136	$ 100.05	$ 417,829
2032	$ 81,010	$ 32,619	$ 40,317	$ 121,055	$ 42,405	$ -	$ -	$ 28,982	$ 115,927	$ -	$ 46,232	$ -	$ -	$ 508,547	$ 100.05	$ 397,532
2033	$ 83,440	$ 33,598	$ 41,527	$ 124,686	$ 43,677	$ -	$ -	$ -	$ -	$ 32,640	$ 35,957	$ -	$ -	$ 395,525	$ 100.05	$ 490,258
2034	$ 85,943	$ 34,606	$ 42,773	$ 128,427	$ 44,988	$ -	$ -	$ -	$ -	$ -	$ 33,674	$ -	$ -	$ 370,410	$ 100.05	$ 608,098
2035	$ 88,521	$ 35,644	$ 44,056	$ 132,280	$ 46,337	$ -	$ -	$ -	$ -	$ -	$ 34,684	$ -	$ -	$ 381,522	$ 97.27	$ 701,263
2036	$ 91,177	$ 36,713	$ 45,378	$ 136,248	$ 47,727	$ -	$ 73,144	$ 33,598	$ 67,196	$ -	$ 53,118	$ -	$ -	$ 584,300	$ 97.27	$ 591,651
2037	$ 93,912	$ 37,815	$ 46,739	$ 140,335	$ 49,159	$ -	$ -	$ 33,598	$ 134,392	$ -	$ 53,595	$ -	$ -	$ 589,545	$ 97.27	$ 476,793
2038	$ 96,730	$ 38,949	$ 48,141	$ 144,545	$ 50,634	$ -	$ -	$ -	$ -	$ 37,862	$ 41,686	$ -	$ -	$ 458,548	$ 97.27	$ 492,933
2039	$ 99,632	$ 40,118	$ 49,585	$ 148,882	$ 52,153	$ -	$ -	$ -	$ -	$ -	$ 39,037	$ -	$ -	$ 429,406	$ 100.05	$ 551,777
2040	$ 102,621	$ 41,321	$ 51,073	$ 153,348	$ 53,718	$ -	$ -	$ -	$ -	$ -	$ 40,208	$ -	$ -	$ 442,289	$ 100.05	$ 597,738
2041	$ 105,699	$ 42,561	$ 52,605	$ 157,949	$ 55,329	$ -	$ 82,287	$ 38,949	$ 77,898	$ -	$ 61,328	$ -	$ -	$ 674,606	$ 105.61	$ 438,507
2042	$ 108,870	$ 43,838	$ 54,183	$ 162,687	$ 56,989	$ -	$ -	$ 38,949	$ 155,797	$ -	$ 62,131	$ -	$ -	$ 683,445	$ 105.61	$ 270,438
Yrs. 1-5	$ 321,571	$ 139,591	$ 184,274	$ 605,221	$ 180,968	$ 30,000	$ 110,912	$ 25,000	$ 50,000	$ 50,000	$ 169,754	$ 368,723	$ 36,872	$ 2,272,885		
Yrs. 6-20	$ 1,408,555	$ 567,169	$ 701,020	$ 2,146,545	$ 737,319	$ 270,000	$ 220,449	$ 228,058	$ 709,174	$ 98,640	$ 708,693	$ -	$ -	$ 7,795,622		
Total	$ 1,730,127	$ 706,759	$ 885,295	$ 2,751,766	$ 918,287	$ 300,000	$ 331,361	$ 253,058	$ 759,174	$ 148,640	$ 878,447	$ 368,723	$ 36,872	$ 10,068,507		

Notes:

Section 7.1 activities wholly funded by Member Agencies are not listed in the table.

Costs escalated for inflation at an assume rate of 3% per year.

1. Includes costs for the Confluence Habitat Area Biological Monitoring Study (Section 6.7).
2. Includes costs for the Groundwater Level Monitoring Wells Data Gaps Project (Section 6.5) and Stream Gage Data Gaps Project (Section 6.6).

Appendix A

GSP Initial Notification

GSP Initial Notification

4-003.01 VENTURA RIVER VALLEY

Upper Ventura River Groundwater Agency GSA

Date Submitted: ***12/20/2017*** *Last M*

1. How many GSPs are planned for the basin?

   Single GSP for the entire basin

2. Select GSA(s) that will develop the GSP(s)

   Upper Ventura River Groundwater Agency GSA (Exclusive)

   a. (Optional) If one or more GSAs have identified a representative to submit an initial notification on their behalf, the designated representative shou evidence of that identified.

3. Select or add the point of contact for your GSP area or Plan Manager if identified.

   Bruce Kuebler
   (Upper Ventura River Groundwater Agency GSA)
   409 Old Baldwin Rd., Ojai, CA93023
   (805) 649-3050
   pbkuebler@sbcglobal.net

4. Please provide general information about the Agency's process for developing the GSP, including the manner in which interested parties may conta Agency and participate in the development and implementation of the GSP as required by Water Codes §10723.4 and §10727.8
   (Fill in the text box AND/OR attach a file).

   028_UpperVenturaRiverGSA_GSP-IN_2017-12-20.pdf (323.4kB) Uploaded on 01/17/2018 at 09:56AM

5. Please provide link(s) to the Agency's website where relevant information regarding the GSP is posted or will be posted.

   http://www.uvrgroundwater.org/

Upper Ventura River
GROUNDWATER
Sustainability Agency

December 20, 2017

Trevor Joseph, SGM Section Chief
California Department of Water Resources
901 P Street
P. O. Box 942836
Sacramento, CA 94236

Re: Initial Notification of Plan Development

Dear Mr. Joseph,

This is the initial notification that the Upper Ventura River Groundwater Agency is beginning development of a Groundwater Sustainability Plan as required by Section 353.6(a) of the GSP regulations and SGMA Section 10727.8.

The Agency's process for developing the Plan is described in the Grant Proposal for Upper Ventura River Groundwater Sustainability Agency and Plan, submitted for the Proposition 1 Sustainable Groundwater Planning Grant Program. In summary, the Agency will conduct studies to fill gaps in data and analysis during 2018 and 2019. During that period, work will begin on GSP chapter titled, 'Plan Area and Basin Setting'. As analyses are completed, chapters on Sustainable Management Criteria, Projects and Management Actions, and Plan Implementation will be prepared. Approval of chapters is scheduled for 2020 and early 2021 with Plan adoption in late 2021.

Stakeholder engagement is an important part of Plan development. One Director of the seven-member Board represents agricultural interests and one represents environmental interests. Each of those Directors communicates regularly with their interested parties to inform them of activities and receive ideas and comments. People can participate in Plan development by attending monthly afternoon meetings of the Agency's board, by going to occasional community outreach evening meetings, by signing up to be on the Interested Parties list to receive emails on Plan activities and status, by going to the Agency's website to learn about activities, topics, and Plan drafts that may be of interest, and by contacting Board members by phone or email. Board meetings with agenda packets are posted on the Agency's website. Each GSP chapter will be subject of a public meeting to receive comments prior to approval.

The Agency's Stakeholder Outreach Ad Hoc Committee interviewed a variety of people to determine how they would like to participate in GSP development and a Stakeholder Engagement Plan will be prepared. Additional opportunities for interested parties to participate, such as an advisory council, will evolve and be included as Plan development progresses.

Contacting the Agency can occur in several ways. Messages can be left on the Agency's website, uvrgroundwater.org; the Agency's Executive Director, Cece Vandermeer, can be contacted by phone at (805) 640-1247 or email at uvrga1@ gmail.com; Board Chair Bruce Kuebler can be contacted by phone at (805) 649-3050; he and other Board members can be reached using contact information on the Agency's website; or written letters can be sent to UVRGA at P. O. Box 1779, Ojai, CA 93024.

Sincerely,

Bruce Kuebler, Chair
Upper Ventura River Water Agency

Cc: Ventura County Board of Supervisors
City of San Buenaventura City Council
Interested Parties List
Ventura River Watershed Council
City of Ojai City Council

Appendix B

Elements of the Plan Table

Article 5.			Plan Contents for Upper Ventura River Basin	GSP Document References				
				Page Numbers of Plan	Or Section Numbers	Or Figure Numbers	Or Table Numbers	Notes
§ 354.			**Introduction to Plan Contents**					
			This Article describes the required contents of Plans submitted to the Department for evaluation, including administrative information, a description of the basin setting, sustainable management criteria, description of the monitoring network, and projects and management actions.					
			Note: Authority cited: Section 10733.2, Water Code.					
			Reference: Section 10733.2, Water Code.					
SubArticle 1.			**Administrative Information**					
§ 354.2.			**Introduction to Administrative Information**					
			This Subarticle describes information in the Plan relating to administrative and other general information about the Agency that has adopted the Plan and the area covered by the Plan.					
			Note: Authority cited: Section 10733.2, Water Code.					
			Reference: Section 10733.2, Water Code.					
§ 354.4.			**General Information**					
			Each Plan shall include the following general information:					
(a)			An executive summary written in plain language that provides an overview of the Plan and description of groundwater conditions in the basin.	3:30	ES			
(b)			A list of references and technical studies relied upon by the Agency in developing the Plan. Each Agency shall provide to the Department electronic copies of reports and other documents and materials cited as references that are not generally available to the public.	247:253	8.0			
			Note: Authority cited: Section 10733.2, Water Code.					
			Reference: Sections 10733.2 and 10733.4, Water Code.					
§ 354.6.			**Agency Information**					
			When submitting an adopted Plan to the Department, the Agency shall include a copy of the information provided pursuant to Water Code Section 10723.8, with any updates, if necessary, along with the following information:					
(a)			The name and mailing address of the Agency.	52	2.1.1			
(b)			The organization and management structure of the Agency, identifying persons with management authority for implementation of the Plan.	53	2.1.2			
(c)			The name and contact information, including the phone number, mailing address and electronic mail address, of the plan manager.	53	2.1.3			
(d)			The legal authority of the Agency, with specific reference to citations setting forth the duties, powers, and responsibilities of the Agency, demonstrating that the Agency has the legal authority to implement the Plan.	53	2.1.4			Appendix A Initial Notification, Appendix B GSP Formation
(e)			An estimate of the cost of implementing the Plan and a general description of how the Agency plans to meet those costs.	238:246	7.0		7.1-01	
			Note: Authority cited: Section 10733.2, Water Code.					
			Reference: Sections 10723.8, 10727.2, and 10733.2, Water Code.					
§ 354.8.			**Description of Plan Area**					
			Each Plan shall include a description of the geographic areas covered, including the following information:					
(a)			One or more maps of the basin that depict the following, as applicable:					

Article 5.			Plan Contents for Upper Ventura River Basin	GSP Document References				
				Page Numbers of Plan	Or Section Numbers	Or Figure Numbers	Or Table Numbers	Notes
	(1)		The area covered by the Plan, delineating areas managed by the Agency as an exclusive Agency and any areas for which the Agency is not an exclusive Agency, and the name and location of any adjacent basins.	55	2.2.1	2.1-01		
	(2)		Adjudicated areas, other Agencies within the basin, and areas covered by an Alternative.	NA				
	(3)		Jurisdictional boundaries of federal or state land (including the identity of the agency with jurisdiction over that land), tribal land, cities, counties, agencies with water management responsibilities, and areas covered by relevant general plans.	55	2.2.1	2.1-02		
	(4)		Existing land use designations and the identification of water use sector and water source type.	55	2.2.1	2.2-01		
	(5)		The density of wells per square mile, by dasymetric or similar mapping techniques, showing the general distribution of agricultural, industrial, and domestic water supply wells in the basin, including de minimis extractors, and the location and extent of communities dependent upon groundwater, utilizing data provided by the Department, as specified in Section 353.2, or the best available information.	55	2.2.1	2.2-02		
(b)			A written description of the Plan area, including a summary of the jurisdictional areas and other features depicted on the map.	55	2.2.1	2.1-02		
(c)			Identification of existing water resource monitoring and management programs, and description of any such programs the Agency plans to incorporate in its monitoring network or in development of its Plan. The Agency may coordinate with existing water resource monitoring and management programs to incorporate and adopt that program as part of the Plan.	57	2.2.2, 2.2.2.1, 2.2.2.2		2.2-01, 2.2-02	
(d)			A description of how existing water resource monitoring or management programs may limit operational flexibility in the basin, and how the Plan has been developed to adapt to those limits.	57	2.2.2			
(e)			A description of conjunctive use programs in the basin.	61	2.2.2.3			
(f)			A plain language description of the land use elements or topic categories of applicable general plans that includes the following:					
	(1)		A summary of general plans and other land use plans governing the basin.	61	2.2.3.1	2.2-01		
	(2)		A general description of how implementation of existing land use plans may change water demands within the basin or affect the ability of the Agency to achieve sustainable groundwater management over the planning and implementation horizon, and how the Plan addresses those potential effects	68	2.2.3.1.1	2.2-01		
	(3)		A general description of how implementation of the Plan may affect the water supply assumptions of relevant land use plans over the planning and implementation horizon.	68	2.2.3.1.2			
	(4)		A summary of the process for permitting new or replacement wells in the basin, including adopted standards in local well ordinances, zoning codes, and policies contained in adopted land use plans.	69	2.2.3.2	2.2-01		
	(5)		To the extent known, the Agency may include information regarding the implementation of land use plans outside the basin that could affect the ability of the Agency to achieve sustainable groundwater management.	68	2.2.3.1.3	2.2-01		
(g)			A description of any of the additional Plan elements included in Water Code Section 10727.4 that the Agency determines to be appropriate.	70:71	2.2.4			
			Note: Authority cited: Section 10733.2, Water Code.					

Article 5.			Plan Contents for Upper Ventura River Basin	GSP Document References				
				Page Numbers of Plan	Or Section Numbers	Or Figure Numbers	Or Table Numbers	Notes
			Reference: Sections 10720.3, 10727.2, 10727.4, 10733, and 10733.2, Water Code.					
§ 354.10.			**Notice and Communication**					
			Each Plan shall include a summary of information relating to notification and communication by the Agency with other agencies and interested parties including the following:					
(a)			A description of the beneficial uses and users of groundwater in the basin, including the land uses and property interests potentially affected by the use of groundwater in the basin, the types of parties representing those interests, and the nature of consultation with those parties.	71	2.3.1	2.2-01		
(b)			A list of public meetings at which the Plan was discussed or considered by the Agency.	74	2.3.2			Appendix F List of Public Meetings
(c)			Comments regarding the Plan received by the Agency and a summary of any responses by the Agency.	74	2.3.3			Appendix G GSP Comments and Responses
(d)			A communication section of the Plan that includes the following:					
	(1)		An explanation of the Agency's decision-making process.	75	2.3.4.1			
	(2)		Identification of opportunities for public engagement and a discussion of how public input and response will be used.	76	2.3.4.2			Appendix E Stakeholder Engagement Plan
	(3)		A description of how the Agency encourages the active involvement of diverse social, cultural, and economic elements of the population within the basin.	76	2.3.4.2			Appendix E Stakeholder Engagement Plan
	(4)		The method the Agency shall follow to inform the public about progress implementing the Plan, including the status of projects and actions.	78	2.3.4.3			Appendix E Stakeholder Engagement Plan
			Note: Authority cited: Section 10733.2, Water Code.					
			Reference: Sections 10723.2, 10727.8, 10728.4, and 10733.2, Water Code					
SubArticle 2.			**Basin Setting**					
§ 354.12.			**Introduction to Basin Setting**					
			This Subarticle describes the information about the physical setting and characteristics of the basin and current conditions of the basin that shall be part of each Plan, including the identification of data gaps and levels of uncertainty, which comprise the basin setting that serves as the basis for defining and assessing reasonable sustainable management criteria and projects and management actions. Information provided pursuant to this Subarticle shall be prepared by or under the direction of a professional geologist or professional engineer.					
			Note: Authority cited: Section 10733.2, Water Code.					
			Reference: Section 10733.2, Water Code.					
§ 354.14.			**Hydrogeologic Conceptual Model**					
(a)			Each Plan shall include a descriptive hydrogeologic conceptual model of the basin based on technical studies and qualified maps that characterizes the physical components and interaction of the surface water and groundwater systems in the basin.	79:104	3.1			Appendix H Numerical Model
(b)			The hydrogeologic conceptual model shall be summarized in a written description that includes the following:					
	(1)		The regional geologic and structural setting of the basin including the immediate surrounding area, as necessary for geologic consistency.	85:88, 102:104	3.1.2, 3.1.2.1, 3.1.4	3.1-10a:3.1-11		

Article 5.			Plan Contents for Upper Ventura River Basin	GSP Document References				
				Page Numbers of Plan	Or Section Numbers	Or Figure Numbers	Or Table Numbers	Notes
	(2)		Lateral basin boundaries, including major geologic features that significantly affect groundwater flow.	89, 102:104	3.1.3.1.1, 3.1.4	3.1-01:3.1-03, 3.1-05, 3.1-14		
	(3)		The definable bottom of the basin.	89, 102:104	3.1.3.1.1, 3.1.4	3.1-15, 3.1-16		
	(4)		Principal aquifers and aquitards, including the following information:					
		(A)	Formation names, if defined.	89:104	3.1.3, 3.1.4	3.1-10a:3.1-11		
		(B)	Physical properties of aquifers and aquitards, including the vertical and lateral extent, hydraulic conductivity, and storativity, which may be based on existing technical studies or other best available information.	89, 93, 102:104	3.1.3.1.1, 3.1.3.1.3, 3.1.4	3.1-20:3.1-24		Appendix H Numerical Model
		(C)	Structural properties of the basin that restrict groundwater flow within the principal aquifers, including information regarding stratigraphic changes, truncation of units, or other features.	92, 102:104	3.1.3.1.2, 3.1.4	3.1-10a: 3.1-11, 3.1-17:3.1-19		
		(D)	General water quality of the principal aquifers, which may be based on information derived from existing technical studies or regulatory programs.	97, 102:104	3.1.3.3, 3.1.4	3.1-26:3.1-41	3.1-02	
		(E)	Identification of the primary use or uses of each aquifer, such as domestic, irrigation, or municipal water supply.	100:104	3.1.3.4, 3.1.4	3.1-15, 3.1-16, 3.1-42		
	(5)		Identification of data gaps and uncertainty within the hydrogeologic conceptual model	102:104	3.1.4			
(c)			The hydrogeologic conceptual model shall be represented graphically by at least two scaled cross-sections that display the information required by this section and are sufficient to depict major stratigraphic and structural features in the basin.	89, 92, 102:104	3.1.3.1.1, 3.1.3.1.2, 3.1.4	3.1-17:3.1-19		
(d)			Physical characteristics of the basin shall be represented on one or more maps that depict the following:					
	(1)		Topographic information derived from the U.S. Geological Survey or another reliable source.	81:83, 102:104	3.1.1.1, 3.1.4	3.1-03:3.1-05		
	(2)		Surficial geology derived from a qualified map including the locations of cross-sections required by this Section.	85:99, 102:104	3.1.2, 3.1.4	3.1-10a:3.1-11, 3.1-17		
	(3)		Soil characteristics as described by the appropriate Natural Resources Conservation Service soil survey or other applicable studies.	85:99, 102:104	3.1.2, 3.1.4	3.1-12, 3.1-13		
	(4)		Delineation of existing recharge areas that substantially contribute to the replenishment of the basin, potential recharge areas, and discharge areas, including significant active springs, seeps, and wetlands within or adjacent to the basin.	89:102, 95:97, 102:104	3.1.3, 3.1.3.2, 3.1.4	3.1-06, 3.1-25		Appendix H Numerical Model
	(5)		Surface water bodies that are significant to the management of the basin.	82:84, 102:104	3.1.1.2, 3.1.4	3.1-08, 3.1-09	3.1-01	
	(6)		The source and point of delivery for imported water supplies.	97:100, 102:104	3.1.1.3, 3.1.4			
			Note: Authority cited: Section 10733.2, Water Code.					
			Reference: Sections 10727.2, 10733, and 10733.2, Water Code.					
§ 354.16.			**Groundwater Conditions**					
			Each Plan shall provide a description of current and historical groundwater conditions in the basin, including data from January 1, 2015, to current conditions, based on the best available information that includes the following:					

Article 5.			Plan Contents for Upper Ventura River Basin	GSP Document References				
				Page Numbers of Plan	Or Section Numbers	Or Figure Numbers	Or Table Numbers	Notes
(a)			Groundwater elevation data demonstrating flow directions, lateral and vertical gradients, and regional pumping patterns, including:					
	(1)		Groundwater elevation contour maps depicting the groundwater table or potentiometric surface associated with the current seasonal high and seasonal low for each principal aquifer within the basin.	104:105	3.2.1.1	3.2-01:3.2-04		Appendix H Numerical Model
	(2)		Hydrographs depicting long-term groundwater elevations, historical highs and lows, and hydraulic gradients between principal aquifers.	106:107	3.2.1.2	3.2-05:3.2-07		
(b)			A graph depicting estimates of the change in groundwater in storage, based on data, demonstrating the annual and cumulative change in the volume of groundwater in storage between seasonal high groundwater conditions, including the annual groundwater use and water year type.	107:108	3.2.2	3.2-08, 3.3-03		Appendix H Numerical Model
(c)			Seawater intrusion conditions in the basin, including maps and cross-sections of the seawater intrusion front for each principal aquifer.	108:109	3.2.3			
(d)			Groundwater quality issues that may affect the supply and beneficial uses of groundwater, including a description and map of the location of known groundwater contamination sites and plumes.	109:110	3.2.4	3.1-26:3.1-41, 3.2-09	3.1-02	
(e)			The extent, cumulative total, and annual rate of land subsidence, including maps depicting total subsidence, utilizing data available from the Department, as specified in Section 353.2, or the best available information.	111:113	3.2.5			
(f)			Identification of interconnected surface water systems within the basin and an estimate of the quantity and timing of depletions of those systems, utilizing data available from the Department, as specified in Section 353.2, or the best available information.	113:115	3.2.6	3.2-10:3.2-13	3.2-01	Appendix H Numerical Model
(g)			Identification of groundwater dependent ecosystems within the basin, utilizing data available from the Department, as specified in Section 353.2, or the best available information.	116:119	3.2.7	3.2-14:3.2-16		
			Note: Authority cited: Section 10733.2, Water Code.					
			Reference: Sections 10723.2, 10727.2, 10727.4, and 10733.2, Water Code.					
§ 354.18.			**Water Budget**					
(a)			Each Plan shall include a water budget for the basin that provides an accounting and assessment of the total annual volume of groundwater and surface water entering and leaving the basin, including historical, current and projected water budget conditions, and the change in the volume of water stored. Water budget information shall be reported in tabular and graphical form.	120:145	3.3		3.3-01	Appendix H Numerical Model
(b)			The water budget shall quantify the following, either through direct measurements or estimates based on data:					
	(1)		Total surface water entering and leaving a basin by water source type.	127:143	3.3.1, 3.3.2, 3.3.3	3.1-06, 3.1-08, 3.3-01, 3.3-04	3.3-05, 3.3-11	Appendix H Numerical Model
	(2)		Inflow to the groundwater system by water source type, including subsurface groundwater inflow and infiltration of precipitation, applied water, and surface water systems, such as lakes, streams, rivers, canals, springs and conveyance systems.	127:143	3.3.1, 3.3.2, 3.3.3	3.1-25, 3.3-02, 3.3-07	3.3-06, 3.3-14	Appendix H Numerical Model
	(3)		Outflows from the groundwater system by water use sector, including evapotranspiration, groundwater extraction, groundwater discharge to surface water sources, and subsurface groundwater outflow.	127:143	3.3.1, 3.3.2, 3.3.3	3.3-02, 3.3-07	3.3-06, 3.3-14	Appendix H Numerical Model

Article 5.			Plan Contents for Upper Ventura River Basin	GSP Document References				
				Page Numbers of Plan	Or Section Numbers	Or Figure Numbers	Or Table Numbers	Notes
	(4)		The change in the annual volume of groundwater in storage between seasonal high conditions.	127:143	3.3.1, 3.3.2, 3.3.3	3.2-08, 3.3-03		
	(5)		If overdraft conditions occur, as defined in Bulletin 118, the water budget shall include a quantification of overdraft over a period of years during which water year and water supply conditions approximate average conditions.	144:145	3.3.4			
	(6)		The water year type associated with the annual supply, demand, and change in groundwater stored.	127:143	3.3.1, 3.3.2, 3.3.3	3.1-07, 3.3-03	3.3-02, 3.3-03	Appendix H Numerical Model
	(7)		An estimate of sustainable yield for the basin.	144:145	3.3.4			
(c)			Each Plan shall quantify the current, historical, and projected water budget for the basin as follows:					
	(1)		Current water budget information shall quantify current inflows and outflows for the basin using the most recent hydrology, water supply, water demand, and land use information.	134:136	3.3.2	3.3-01, 3.3-02	3.3-01, 3.3-05, 3.3-06	Appendix H Numerical Model
	(2)		Historical water budget information shall be used to evaluate availability or reliability of past surface water supply deliveries and aquifer response to water supply and demand trends relative to water year type. The historical water budget shall include the following:					
		(A)	A quantitative evaluation of the availability or reliability of historical surface water supply deliveries as a function of the historical planned versus actual annual surface water deliveries, by surface water source and water year type, and based on the most recent ten years of surface water supply information.	128	3.3.1.1		3.3-03, 3.3-04	
		(B)	A quantitative assessment of the historical water budget, starting with the most recently available information and extending back a minimum of 10 years, or as is sufficient to calibrate and reduce the uncertainty of the tools and methods used to estimate and project future water budget information and future aquifer response to proposed sustainable groundwater management practices over the planning and implementation horizon.	131:133	3.3.1.2, 3.3.1.3	3.3-01:3.3-03	3.3-05, 3.3-06	Appendix H Numerical Model
		(C)	A description of how historical conditions concerning hydrology, water demand, and surface water supply availability or reliability have impacted the ability of the Agency to operate the basin within sustainable yield. Basin hydrology may be characterized and evaluated using water year type.	133:134	3.3.1.4			
	(3)		Projected water budgets shall be used to estimate future baseline conditions of supply, demand, and aquifer response to Plan implementation, and to identify the uncertainties of these projected water budget components. The projected water budget shall utilize the following methodologies and assumptions to estimate future baseline conditions concerning hydrology, water demand and surface water supply availability or reliability over the planning and implementation horizon:					
		(A)	Projected hydrology shall utilize 50 years of historical precipitation, evapotranspiration, and streamflow information as the baseline condition for estimating future hydrology. The projected hydrology information shall also be applied as the baseline condition used to evaluate future scenarios of hydrologic uncertainty associated with projections of climate change and sea level rise.	137:138	3.3.3.1, 3.3.3.1.1			

Article 5.			Plan Contents for Upper Ventura River Basin	GSP Document References				
				Page Numbers of Plan	Or Section Numbers	Or Figure Numbers	Or Table Numbers	Notes
		(B)	Projected water demand shall utilize the most recent land use, evapotranspiration, and crop coefficient information as the baseline condition for estimating future water demand. The projected water demand information shall also be applied as the baseline condition used to evaluate future scenarios of water demand uncertainty associated with projected changes in local land use planning, population growth, and climate.	139:141	3.3.3.2		3.3-07:3.3-10	
		(C)	Projected surface water supply shall utilize the most recent water supply information as the baseline condition for estimating future surface water supply. The projected surface water supply shall also be applied as the baseline condition used to evaluate future scenarios of surface water supply availability and reliability as a function of the historical surface water supply identified in Section 354.18(c)(2)(A), and the projected changes in local land use planning, population growth, and climate.	139:141	3.3.3.2		3.3-08:3.3-10	
(d)			The Agency shall utilize the following information provided, as available, by the Department pursuant to Section 353.2, or other data of comparable quality, to develop the water budget:					
	(1)		Historical water budget information for mean annual temperature, mean annual precipitation, water year type, and land use.	137	3.3.3.1			
	(2)		Current water budget information for temperature, water year type, evapotranspiration, and land use.	137	3.3.3.1			
	(3)		Projected water budget information for population, population growth, climate change, and sea level rise.	137	3.3.3.1		3.3-07	
(e)			Each Plan shall rely on the best available information and best available science to quantify the water budget for the basin in order to provide an understanding of historical and projected hydrology, water demand, water supply, land use, population, climate change, sea level rise, groundwater and surface water interaction, and subsurface groundwater flow. If a numerical groundwater and surface water model is not used to quantify and evaluate the projected water budget conditions and the potential impacts to beneficial uses and users of groundwater, the Plan shall identify and describe an equally effective method, tool, or analytical model to evaluate projected water budget conditions.	138	3.3, 3.3.3.1	3.3-01:3.3-09	3.3-01 3.3-05 3.3-06 3.3-11:3.3-16	Appendix H Numerical Model
(f)			The Department shall provide the California Central Valley Groundwater-Surface Water Simulation Model (C2VSIM) and the Integrated Water Flow Model (IWFM) for use by Agencies in developing the water budget. Each Agency may choose to use a different groundwater and surface water model, pursuant to Section 352.4.	138	3.3, 3.3.3.1			Appendix H Numerical Model
			Note: Authority cited: Section 10733.2, Water Code.					
			Reference: Sections 10721, 10723.2, 10727.2, 10727.6, 10729, and 10733.2, Water Code.					
§ 354.20.			**Management Areas**					
(a)			Each Agency may define one or more management areas within a basin if the Agency has determined that creation of management areas will facilitate implementation of the Plan. Management areas may define different minimum thresholds and be operated to different measurable objectives than the basin at large, provided that undesirable results are defined consistently throughout the basin.	145	3.4			
(b)			A basin that includes one or more management areas shall describe the following in the Plan:					

Article 5.			Plan Contents for Upper Ventura River Basin	GSP Document References				
				Page Numbers of Plan	Or Section Numbers	Or Figure Numbers	Or Table Numbers	Notes
	(1)		The reason for the creation of each management area.		NA			
	(2)		The minimum thresholds and measurable objectives established for each management area, and an explanation of the rationale for selecting those values, if different from the basin at large.		NA			
	(3)		The level of monitoring and analysis appropriate for each management area.		NA			
	(4)		An explanation of how the management area can operate under different minimum thresholds and measurable objectives without causing undesirable results outside the management area, if applicable.		NA			
(c)			If a Plan includes one or more management areas, the Plan shall include descriptions, maps, and other information required by this Subarticle sufficient to describe conditions in those areas.		NA			
			Note: Authority cited: Section 10733.2, Water Code.					
			Reference: Sections 10733.2 and 10733.4, Water Code.					
SubArticle 3.			**Sustainable Management Criteria**					
§ 354.22.			**Introduction to Sustainable Management Criteria**					
			This Subarticle describes criteria by which an Agency defines conditions in its Plan that constitute sustainable groundwater management for the basin, including the process by which the Agency shall characterize undesirable results, and establish minimum thresholds and measurable objectives for each applicable sustainability indicator.					
			Note: Authority cited: Section 10733.2, Water Code.					
			Reference: Section 10733.2, Water Code.					
§ 354.24.			**Sustainability Goal**					
			Each Agency shall establish in its Plan a sustainability goal for the basin that culminates in the absence of undesirable results within 20 years of the applicable statutory deadline. The Plan shall include a description of the sustainability goal, including information from the basin setting used to establish the sustainability goal, a discussion of the measures that will be implemented to ensure that the basin will be operated within its sustainable yield, and an explanation of how the sustainability goal is likely to be achieved within 20 years of Plan implementation and is likely to be maintained through the planning and implementation horizon.	147:148	4.2			
			Note: Authority cited: Section 10733.2, Water Code.					
			Reference: Sections 10721, 10727, 10727.2, 10733.2, and 10733.8, Water Code.					
§ 354.26.			**Undesirable Results**					
(a)			Each Agency shall describe in its Plan the processes and criteria relied upon to define undesirable results applicable to the basin. Undesirable results occur when significant and unreasonable effects for any of the sustainability indicators are caused by groundwater conditions occurring throughout the basin.	149:151, 152:154, 162:163, 168:170, 177:184	4.3, 4.4.1, 4.5.1, 4.7.1, 4.9.1	4.4-01		
(b)			The description of undesirable results shall include the following:					

Article 5.			Plan Contents for Upper Ventura River Basin	GSP Document References				
				Page Numbers of Plan	Or Section Numbers	Or Figure Numbers	Or Table Numbers	Notes
	(1)		The cause of groundwater conditions occurring throughout the basin that would lead to or has led to undesirable results based on information described in the basin setting, and other data or models as appropriate.	152:154, 162:163, 168:170, 177:184	4.4.1, 4.5.1, 4.7.1, 4.9.1			Appendix H Numerical Model Apendix I GW Quality With MTs and MOs Appendix L Pumping Impacts on GW Levels Appendix N Pumping Impacts on Streamflow Appendix O Riparian GDEs Appendix Q GW Levels MTs and MOs
	(2)		The criteria used to define when and where the effects of the groundwater conditions cause undesirable results for each applicable sustainability indicator. The criteria shall be based on a quantitative description of the combination of minimum threshold exceedances that cause significant and unreasonable effects in the basin.	152:154, 162:163, 168:170, 177:184	4.4.1, 4.5.1, 4.7.1, 4.9.1	5.3-01		
	(3)		Potential effects on the beneficial uses and users of groundwater, on land uses and property interests, and other potential effects that may occur or are occurring from undesirable results.	152:154, 162:163, 168:170, 177:184	4.4.1, 4.5.1, 4.7.1, 4.9.1			
(c)			The Agency may need to evaluate multiple minimum thresholds to determine whether an undesirable result is occurring in the basin. The determination that undesirable results are occurring may depend upon measurements from multiple monitoring sites, rather than a single monitoring site.	156, 165, 172, 185	4.4.2.1.1, 4.5.2.1.1, 4.7.2.1.1, 4.9.2.1.1			
(d)			An Agency that is able to demonstrate that undesirable results related to one or more sustainability indicators are not present and are not likely to occur in a basin shall not be required to establish criteria for undesirable results related to those sustainability indicators.	152:154, 162:163, 168:170, 177:184	4.4.1, 4.5.1, 4.7.1, 4.9.1			
			Note: Authority cited: Section 10733.2, Water Code.					
			Reference: Sections 10721, 10723.2, 10727.2, 10733.2, and 10733.8, Water Code.					
§ 354.28.			**Minimum Thresholds**					
(a)			Each Agency in its Plan shall establish minimum thresholds that quantify groundwater conditions for each applicable sustainability indicator at each monitoring site or representative monitoring site established pursuant to Section 354.36. The numeric value used to define minimum thresholds shall represent a point in the basin that, if exceeded, may cause undesirable results as described in Section 354.26.	155:156, 164:165, 171:173, 184:185	4.4.2.1, 4.5.2.1, 4.7.2.1, 4.9.2.1	4.9-01:4.9-04	4.4-01:4.9-05	Appendix Q GW Levels MTs and MOs Appendix I GW Quality MTs and MOs
(b)			The description of minimum thresholds shall include the following:					
	(1)		The information and criteria relied upon to establish and justify the minimum thresholds for each sustainability indicator. The justification for the minimum threshold shall be supported by information provided in the basin setting, and other data or models as appropriate, and qualified by uncertainty in the understanding of the basin setting.	155:156, 164:165, 171:173, 184:185	4.4.2.1, 4.5.2.1, 4.7.2.1, 4.9.2.1		4.4-01	Appendix Q GW Levels MTs and MOs
	(2)		The relationship between the minimum thresholds for each sustainability indicator, including an explanation of how the Agency has determined that basin conditions at each minimum threshold will avoid undesirable results for each of the sustainability indicators.	156, 165, 173, 186	4.4.2.2, 4.5.2.2, 4.7.2.2, 4.9.2.2			Appendix H Numerical Model Appendix L Pumping Impacts on GW Levels Appendix M Groundwater Storage Correlation Appendix N Pumping Impacts on Streamflow

Article 5.			Plan Contents for Upper Ventura River Basin	GSP Document References				
				Page Numbers of Plan	Or Section Numbers	Or Figure Numbers	Or Table Numbers	Notes
	(3)		How minimum thresholds have been selected to avoid causing undesirable results in adjacent basins or affecting the ability of adjacent basins to achieve sustainability goals.	157, 165, 173, 186	4.4.2.3, 4.5.2.3, 4.7.2.3, 4.9.2.3			
	(4)		How minimum thresholds may affect the interests of beneficial uses and users of groundwater or land uses and property interests.	157, 166, 174, 187	4.4.2.4, 4.5.2.4, 4.7.2.4, 4.9.2.4			
	(5)		How state, federal, or local standards relate to the relevant sustainability indicator. If the minimum threshold differs from other regulatory standards, the Agency shall explain the nature of and basis for the difference.	159, 166, 174, 187	4.4.2.6, 4.5.2.5, 4.7.2.5, 4.9.2.5			
	(6)		How each minimum threshold will be quantitatively measured, consistent with the monitoring network requirements described in Subarticle 4.	159, 166, 174, 187	4.4.2.7, 4.5.2.6, 4.7.2.6, 4.9.2.6			
(c)			Minimum thresholds for each sustainability indicator shall be defined as follows:					
	(1)		Chronic Lowering of Groundwater Levels. The minimum threshold for chronic lowering of groundwater levels shall be the groundwater elevation indicating a depletion of supply at a given location that may lead to undesirable results. Minimum thresholds for chronic lowering of groundwater levels shall be supported by the following:					
		(A)	The rate of groundwater elevation decline based on historical trends, water year type, and projected water use in the basin.	155:156	4.4.2.1			Appendix Q GW Levels MTs and MOs
		(B)	Potential effects on other sustainability indicators.	158	4.4.2.5			
	(2)		Reduction of Groundwater Storage. The minimum threshold for reduction of groundwater storage shall be a total volume of groundwater that can be withdrawn from the basin without causing conditions that may lead to undesirable results. Minimum thresholds for reduction of groundwater storage shall be supported by the sustainable yield of the basin, calculated based on historical trends, water year type, and projected water use in the basin.	164:165	4.5.2.1	4.4-01	4.4-01	Appendix H Numerical Model Appendix Q GW Levels MTs and MOs
	(3)		Seawater Intrusion. The minimum threshold for seawater intrusion shall be defined by a chloride concentration isocontour for each principal aquifer where seawater intrusion may lead to undesirable results. Minimum thresholds for seawater intrusion shall be supported by the following:					
		(A)	Maps and cross-sections of the chloride concentration isocontour that defines the minimum threshold and measurable objective for each principal aquifer.		NA			
		(B)	A description of how the seawater intrusion minimum threshold considers the effects of current and projected sea levels.		NA			

Article 5.			Plan Contents for Upper Ventura River Basin	GSP Document References				
				Page Numbers of Plan	Or Section Numbers	Or Figure Numbers	Or Table Numbers	Notes
	(4)		Degraded Water Quality. The minimum threshold for degraded water quality shall be the degradation of water quality, including the migration of contaminant plumes that impair water supplies or other indicator of water quality as determined by the Agency that may lead to undesirable results. The minimum threshold shall be based on the number of supply wells, a volume of water, or a location of an isocontour that exceeds concentrations of constituents determined by the Agency to be of concern for the basin. In setting minimum thresholds for degraded water quality, the Agency shall consider local, state, and federal water quality standards applicable to the basin.	171:173	4.7.2.1	5.6-01	4.7-01	Apendix I GW Quality With MTs and MOs
	(5)		Land Subsidence. The minimum threshold for land subsidence shall be the rate and extent of subsidence that substantially interferes with surface land uses and may lead to undesirable results. Minimum thresholds for land subsidence shall be supported by the following:					
		(A)	Identification of land uses and property interests that have been affected or are likely to be affected by land subsidence in the basin, including an explanation of how the Agency has determined and considered those uses and interests, and the Agency's rationale for establishing minimum thresholds in light of those effects.		NA			
		(B)	Maps and graphs showing the extent and rate of land subsidence in the basin that defines the minimum threshold and measurable objectives.		NA			
	(6)		Depletions of Interconnected Surface Water. The minimum threshold for depletions of interconnected surface water shall be the rate or volume of surface water depletions caused by groundwater use that has adverse impacts on beneficial uses of the surface water and may lead to undesirable results. The minimum threshold established for depletions of interconnected surface water shall be supported by the following:					
		(A)	The location, quantity, and timing of depletions of interconnected surface water.	184:185	4.9.2.1	4.9-04	4.9-01, 4.9-02	
		(B)	A description of the groundwater and surface water model used to quantify surface water depletion. If a numerical groundwater and surface water model is not used to quantify surface water depletion, the Plan shall identify and describe an equally effective method, tool, or analytical model to accomplish the requirements of this Paragraph.	184:185	4.9.2.1	4.9-01:4.9-03	4.9-01, 4.9-02, 4.9-04, 4.9-05	Appendix H Numerical Model Appendix N Pumping Impacts on Streamflow
(d)			An Agency may establish a representative minimum threshold for groundwater elevation to serve as the value for multiple sustainability indicators, where the Agency can demonstrate that the representative value is a reasonable proxy for multiple individual minimum thresholds as supported by adequate evidence.	155:156, 164:165, 173, 185	4.4.2.1, 4.4.2.1.2, 4.5.2.1, 4.5.2.1.2, 4.7.2.1.2, 4.9.2.1.2		4.4-01	Appendix H Numerical Model Appendix Q GW Levels MTs and MOs
(e)			An Agency that has demonstrated that undesirable results related to one or more sustainability indicators are not present and are not likely to occur in a basin, as described in Section 354.26, shall not be required to establish minimum thresholds related to those sustainability indicators.	155:156, 164:165, 173, 184:185	4.4.2.1, 4.5.2.1, 4.7.2.2, 4.9.2.1			
			Note: Authority cited: Section 10733.2, Water Code.					
			Reference: Sections 10723.2, 10727.2, 10733, 10733.2, and 10733.8, Water Code.					
§ 354.30.			**Measurable Objectives**					

Article 5.			Plan Contents for Upper Ventura River Basin	GSP Document References				
				Page Numbers of Plan	Or Section Numbers	Or Figure Numbers	Or Table Numbers	Notes
(a)			Each Agency shall establish measurable objectives, including interim milestones in increments of five years, to achieve the sustainability goal for the basin within 20 years of Plan implementation and to continue to sustainably manage the groundwater basin over the planning and implementation horizon.	160:161, 167, 175:176, 188	4.4.3, 4.5.3, 4.7.3, 4.9.3		4.4-01, 4.7-01	Appendix Q GW Levels MTs and MOs
(b)			Measurable objectives shall be established for each sustainability indicator, based on quantitative values using the same metrics and monitoring sites as are used to define the minimum thresholds.	160:161, 167, 175:176, 188	4.4.3, 4.5.3, 4.7.3, 4.9.3	4.4-01	4.4-01, 4.7-01, 4.9-01:4.9-05	Apendix I GW Quality With MTs and MOs Appendix Q GW Levels MTs and MOs
(c)			Measurable objectives shall provide a reasonable margin of operational flexibility under adverse conditions which shall take into consideration components such as historical water budgets, seasonal and long-term trends, and periods of drought, and be commensurate with levels of uncertainty.	160:161, 167, 175:176, 188	4.4.3, 4.5.3, 4.7.3, 4.9.3	4.4-01	4.4-01, 4.7-01, 4.9-04, 4.9-05	Apendix I GW Quality With MTs and MOs Appendix Q GW Levels MTs and MOs
(d)			An Agency may establish a representative measurable objective for groundwater elevation to serve as the value for multiple sustainability indicators where the Agency can demonstrate that the representative value is a reasonable proxy for multiple individual measurable objectives as supported by adequate evidence.	160:161, 167, 175:176, 188	4.4.3, 4.5.3, 4.7.3, 4.9.3		4.4-01, 4.7-01	Appendix Q GW Levels MTs and MOs
(e)			Each Plan shall describe a reasonable path to achieve the sustainability goal for the basin within 20 years of Plan implementation, including a description of interim milestones for each relevant sustainability indicator, using the same metric as the measurable objective, in increments of five years. The description shall explain how the Plan is likely to maintain sustainable groundwater management over the planning and implementation horizon.	160:161, 167, 175:176, 188	4.4.3, 4.5.3, 4.7.3, 4.9.3		4.4-01, 4.9-04	Appendix Q GW Levels MTs and MOs
(f)			Each Plan may include measurable objectives and interim milestones for additional Plan elements described in Water Code Section 10727.4 where the Agency determines such measures are appropriate for sustainable groundwater management in the basin.	189	4.10			
(g)			An Agency may establish measurable objectives that exceed the reasonable margin of operational flexibility for the purpose of improving overall conditions in the basin, but failure to achieve those objectives shall not be grounds for a finding of inadequacy of the Plan.	160:161, 167, 175:176, 188	4.4.3, 4.5.3, 4.7.3, 4.9.3		4.7-01, 4.9-05	Apendix I GW Quality With MTs and MOs Appendix Q GW Levels MTs and MOs
			Note: Authority cited: Section 10733.2, Water Code.					
			Reference: Sections 10727.2, 10727.4, and 10733.2, Water Code.					
SubArticle 4.			**Monitoring Networks**					
§ 354.32.			**Introduction to Monitoring Networks**					
			This Subarticle describes the monitoring network that shall be developed for each basin, including monitoring objectives, monitoring protocols, and data reporting requirements. The monitoring network shall promote the collection of data of sufficient quality, frequency, and distribution to characterize groundwater and related surface water conditions in the basin and evaluate changing conditions that occur through implementation of the Plan.					
			Note: Authority cited: Section 10733.2, Water Code.					
			Reference: Section 10733.2, Water Code.					
§ 354.34.			**Monitoring Network**					
(a)			Each Agency shall develop a monitoring network capable of collecting sufficient data to demonstrate short-term, seasonal, and long-term trends in groundwater and related surface conditions, and yield representative information about groundwater conditions as necessary to evaluate Plan implementation.	191:195	5.2			

Article 5.			Plan Contents for Upper Ventura River Basin	GSP Document References				
				Page Numbers of Plan	Or Section Numbers	Or Figure Numbers	Or Table Numbers	Notes
(b)			Each Plan shall include a description of the monitoring network objectives for the basin, including an explanation of how the network will be developed and implemented to monitor groundwater and related surface conditions, and the interconnection of surface water and groundwater, with sufficient temporal frequency and spatial density to evaluate the affects and effectiveness of Plan implementation. The monitoring network objectives shall be implemented to accomplish the following:					
	(1)		Demonstrate progress toward achieving measurable objectives described in the Plan.	191:193	5.2.1			
	(2)		Monitor impacts to the beneficial uses or users of groundwater.	191:193	5.2.1			
	(3)		Monitor changes in groundwater conditions relative to measurable objectives and minimum thresholds.	191:193	5.2.1			
	(4)		Quantify annual changes in water budget components.	191:193	5.2.1			
(c)			Each monitoring network shall be designed to accomplish the following for each sustainability indicator:					
	(1)		Chronic Lowering of Groundwater Levels. Demonstrate groundwater occurrence, flow directions, and hydraulic gradients between principal aquifers and surface water features by the following methods:					
		(A)	A sufficient density of monitoring wells to collect representative measurements through depth-discrete perforated intervals to characterize the groundwater table or potentiometric surface for each principal aquifer.	196:197	5.3.1	5.3-01	5.3-01	
		(B)	Static groundwater elevation measurements shall be collected at least two times per year, to represent seasonal low and seasonal high groundwater conditions.	196:197	5.3.1		5.3-01	
	(2)		Reduction of Groundwater Storage. Provide an estimate of the change in annual groundwater in storage.	201	5.4.1			Appendix H Numerical Model Appendix M Storage Correlation
	(3)		Seawater Intrusion. Monitor seawater intrusion using chloride concentrations, or other measurements convertible to chloride concentrations, so that the current and projected rate and extent of seawater intrusion for each applicable principal aquifer may be calculated.	202	5.5			
	(4)		Degraded Water Quality. Collect sufficient spatial and temporal data from each applicable principal aquifer to determine groundwater quality trends for water quality indicators, as determined by the Agency, to address known water quality issues.	204 ;205	5.6.1	5.6-01	5.6-01	
	(5)		Land Subsidence. Identify the rate and extent of land subsidence, which may be measured by extensometers, surveying, remote sensing technology, or other appropriate method.	207	5.7			
	(6)		Depletions of Interconnected Surface Water. Monitor surface water and groundwater, where interconnected surface water conditions exist, to characterize the spatial and temporal exchanges between surface water and groundwater, and to calibrate and apply the tools and methods necessary to calculate depletions of surface water caused by groundwater extractions. The monitoring network shall be able to characterize the following:					
		(A)	Flow conditions including surface water discharge, surface water head, and baseflow contribution.	210:211	5.8.1			
		(B)	Identifying the approximate date and location where ephemeral or intermittent flowing streams and rivers cease to flow, if applicable.	210:211	5.8.1			

Article 5.			Plan Contents for Upper Ventura River Basin	GSP Document References				
				Page Numbers of Plan	Or Section Numbers	Or Figure Numbers	Or Table Numbers	Notes
		(C)	Temporal change in conditions due to variations in stream discharge and regional groundwater extraction.	210:211	5.8.1	5.8-01		
		(D)	Other factors that may be necessary to identify adverse impacts on beneficial uses of the surface water.	210:211	5.8.1			
(d)			The monitoring network shall be designed to ensure adequate coverage of sustainability indicators. If management areas are established, the quantity and density of monitoring sites in those areas shall be sufficient to evaluate conditions of the basin setting and sustainable management criteria specific to that area.	193:194	5.2.2			
(e)			A Plan may utilize site information and monitoring data from existing sources as part of the monitoring network.	195:213	5.3, 5.4, 5.5, 5.6, 5.7, 5.8			
(f)			The Agency shall determine the density of monitoring sites and frequency of measurements required to demonstrate short-term, seasonal, and long-term trends based upon the following factors:					
	(1)		Amount of current and projected groundwater use.	191:195	5.2			
	(2)		Aquifer characteristics, including confined or unconfined aquifer conditions, or other physical characteristics that affect groundwater flow.	191:195	5.2			
	(3)		Impacts to beneficial uses and users of groundwater and land uses and property interests affected by groundwater production, and adjacent basins that could affect the ability of that basin to meet the sustainability goal.	191:195	5.2			
	(4)		Whether the Agency has adequate long-term existing monitoring results or other technical information to demonstrate an understanding of aquifer response.	191:195	5.2			
(g)			Each Plan shall describe the following information about the monitoring network:					
	(1)		Scientific rationale for the monitoring site selection process.	196:197, 201, 204:205, 210:211	5.3.1, 5.4.1, 5.6.1, 5.8.1			
	(2)		Consistency with data and reporting standards described in Section 352.4. If a site is not consistent with those standards, the Plan shall explain the necessity of the site to the monitoring network, and how any variation from the standards will not affect the usefulness of the results obtained.	197:198, 201, 205, 211	5.3.2, 5.4.2, 5.6.2, 5.8.2	5.3-01:5.8-01	5.3-01:5.8-01	
	(3)		For each sustainability indicator, the quantitative values for the minimum threshold, measurable objective, and interim milestones that will be measured at each monitoring site or representative monitoring sites established pursuant to Section 354.36.	155:156, 164:165, 195:213	4.4.2.1, 4.5.2.1, 5.3, 5.4, 5.6, 5.8		4.4-01, 4.7-01, 4.9-04, 4.9-05	
(h)			The location and type of each monitoring site within the basin displayed on a map, and reported in tabular format, including information regarding the monitoring site type, frequency of measurement, and the purposes for which the monitoring site is being used.	195:213	5.3, 5.4, 5.5, 5.6, 5.8	5.3-01:5.8-01		
(i)			The monitoring protocols developed by each Agency shall include a description of technical standards, data collection methods, and other procedures or protocols pursuant to Water Code Section 10727.2(f) for monitoring sites or other data collection facilities to ensure that the monitoring network utilizes comparable data and methodologies.	198, 201, 205:206, 211	5.3.3, 5.4.3, 5.6.3, 5.8.3			Appendix R Data Collection Protocols Appendix S Data Quality Control

Article 5.			Plan Contents for Upper Ventura River Basin	GSP Document References				
				Page Numbers of Plan	Or Section Numbers	Or Figure Numbers	Or Table Numbers	Notes
(j)			An Agency that has demonstrated that undesirable results related to one or more sustainability indicators are not present and are not likely to occur in a basin, as described in Section 354.26, shall not be required to establish a monitoring network related to those sustainability indicators.	195:213	5.3, 5.4, 5.5, 5.6, 5.7, 5.8			
			Note: Authority cited: Section 10733.2, Water Code.					
			Reference: Sections 10723.2, 10727.2, 10727.4, 10728, 10733, 10733.2, and 10733.8, Water Code					
§ 354.36.			**Representative Monitoring**					
			Each Agency may designate a subset of monitoring sites as representative of conditions in the basin or an area of the basin, as follows:					
(a)			Representative monitoring sites may be designated by the Agency as the point at which sustainability indicators are monitored, and for which quantitative values for minimum thresholds, measurable objectives, and interim milestones are defined.	214:215	5.9	5.3-01, 5.6-01	5.3-01, 5.6-01	
(b)			(b) Groundwater elevations may be used as a proxy for monitoring other sustainability indicators if the Agency demonstrates the following:					
	(1)		Significant correlation exists between groundwater elevations and the sustainability indicators for which groundwater elevation measurements serve as a proxy.	214:215	5.9			
	(2)		Measurable objectives established for groundwater elevation shall include a reasonable margin of operational flexibility taking into consideration the basin setting to avoid undesirable results for the sustainability indicators for which groundwater elevation measurements serve as a proxy.	214:215	5.9			
(c)			The designation of a representative monitoring site shall be supported by adequate evidence demonstrating that the site reflects general conditions in the area.	214:215	5.9			
			Note: Authority cited: Section 10733.2, Water Code.					
			Reference: Sections 10727.2 and 10733.2, Water Code					
§ 354.38.			**Assessment and Improvement of Monitoring Network**					
(a)			Each Agency shall review the monitoring network and include an evaluation in the Plan and each five-year assessment, including a determination of uncertainty and whether there are data gaps that could affect the ability of the Plan to achieve the sustainability goal for the basin.	199:200, 202, 206:207, 212:213	5.3.4, 5.4.4, 5.6.4, 5.8.4			
(b)			Each Agency shall identify data gaps wherever the basin does not contain a sufficient number of monitoring sites, does not monitor sites at a sufficient frequency, or utilizes monitoring sites that are unreliable, including those that do not satisfy minimum standards of the monitoring network adopted by the Agency.	199:200, 202, 206:207, 212:213	5.3.4, 5.4.4, 5.6.4, 5.8.4	5.3-01:5.8-01	5.3-01:5.8-01	
(c)			If the monitoring network contains data gaps, the Plan shall include a description of the following:					
	(1)		The location and reason for data gaps in the monitoring network.	199:200, 202, 206:207, 212:213	5.3.4, 5.4.4, 5.6.4, 5.8.4	5.3-01:5.8-01	5.3-01:5.8-01	

Article 5.			Plan Contents for Upper Ventura River Basin	GSP Document References				
				Page Numbers of Plan	Or Section Numbers	Or Figure Numbers	Or Table Numbers	Notes
	(2)		Local issues and circumstances that limit or prevent monitoring.	199:200, 202, 206:207, 212:213	5.3.4, 5.4.4, 5.6.4, 5.8.4			
(d)			Each Agency shall describe steps that will be taken to fill data gaps before the next five-year assessment, including the location and purpose of newly added or installed monitoring sites.	199:200, 202, 206:207, 212:213	5.3.4, 5.4.4, 5.6.4, 5.8.4			
(e)			Each Agency shall adjust the monitoring frequency and density of monitoring sites to provide an adequate level of detail about site-specific surface water and groundwater conditions and to assess the effectiveness of management actions under circumstances that include the following:					
	(1)		Minimum threshold exceedances.	199:200, 202, 206:207, 212:213	5.3.4, 5.4.4, 5.6.4, 5.8.4			
	(2)		Highly variable spatial or temporal conditions.	199:200, 202, 206:207, 212:213	5.3.4, 5.4.4, 5.6.4, 5.8.4			
	(3)		Adverse impacts to beneficial uses and users of groundwater.	199:200, 202, 206:207, 212:213	5.3.4, 5.4.4, 5.6.4, 5.8.4			
	(4)		The potential to adversely affect the ability of an adjacent basin to implement its Plan or impede achievement of sustainability goals in an adjacent basin.	199:200, 202, 206:207, 212:213	5.3.4, 5.4.4, 5.6.4, 5.8.4			
			Note: Authority cited: Section 10733.2, Water Code.					
			Reference: Sections 10723.2, 10727.2, 10728.2, 10733, 10733.2, and 10733.8, Water Code					
§ 354.40.			**Reporting Monitoring Data to the Department**					
			Monitoring data shall be stored in the data management system developed pursuant to Section 352.6. A copy of the monitoring data shall be included in the Annual Report and submitted electronically on forms provided by the Department.					
			Note: Authority cited: Section 10733.2, Water Code.					
			Reference: Sections 10728, 10728.2, 10733.2, and 10733.8, Water Code.					
SubArticle 5.			**Projects and Management Actions**					
§ 354.42.			**Introduction to Projects and Management Actions**					
			This Subarticle describes the criteria for projects and management actions to be included in a Plan to meet the sustainability goal for the basin in a manner that can be maintained over the planning and implementation horizon.					
			Note: Authority cited: Section 10733.2, Water Code.					
			Reference: Section 10733.2, Water Code.					
§ 354.44.			**Projects and Management Actions**					

Article 5.			Plan Contents for Upper Ventura River Basin	GSP Document References				
				Page Numbers of Plan	Or Section Numbers	Or Figure Numbers	Or Table Numbers	Notes
(a)			Each Plan shall include a description of the projects and management actions the Agency has determined will achieve the sustainability goal for the basin, including projects and management actions to respond to changing conditions in the basin.	216:217	6.1			
(b)			Each Plan shall include a description of the projects and management actions that include the following:					
	(1)		A list of projects and management actions proposed in the Plan with a description of the measurable objective that is expected to benefit from the project or management action. The list shall include projects and management actions that may be utilized to meet interim milestones, the exceedance of minimum thresholds, or where undesirable results have occurred or are imminent. The Plan shall include the following:					
		(A)	A description of the circumstances under which projects or management actions shall be implemented, the criteria that would trigger implementation and termination of projects or management actions, and the process by which the Agency shall determine that conditions requiring the implementation of particular projects or management actions have occurred.	218, 221, 225, 228, 231:232, 235	6.2.2, 6.3.2, 6.4.2, 6.5.2, 6.6.2, 6.7.2			
		(B)	The process by which the Agency shall provide notice to the public and other agencies that the implementation of projects or management actions is being considered or has been implemented, including a description of the actions to be taken.	218, 222, 225, 228, 232, 235	6.2.3, 6.3.3, 6.4.3, 6.5.3, 6.6.3, 6.7.3			
	(2)		If overdraft conditions are identified through the analysis required by Section 354.18, the Plan shall describe projects or management actions, including a quantification of demand reduction or other methods, for the mitigation of overdraft.	216:217	6.1			
	(3)		A summary of the permitting and regulatory process required for each project and management action.	218, 222, 225, 228, 232, 235	6.2.4, 6.3.4, 6.4.4, 6.5.4, 6.6.4, 6.7.4		6.1-01	
	(4)		The status of each project and management action, including a time-table for expected initiation and completion, and the accrual of expected benefits.	219, 222, 225:226, 229, 232, 235	6.2.5, 6.3.5, 6.4.5, 6.5.5, 6.6.5, 6.7.5		6.1-01	
	(5)		An explanation of the benefits that are expected to be realized from the project or management action, and how those benefits will be evaluated.	219, 222, 226, 229:230, 233, 236	6.2.6, 6.3.6, 6.4.6, 6.5.6, 6.6.6, 6.7.6			

Article 5.			Plan Contents for Upper Ventura River Basin	GSP Document References				
				Page Numbers of Plan	Or Section Numbers	Or Figure Numbers	Or Table Numbers	Notes
	(6)		An explanation of how the project or management action will be accomplished. If the projects or management actions rely on water from outside the jurisdiction of the Agency, an explanation of the source and reliability of that water shall be included.	219, 223, 226, 230, 233, 236	6.2.7, 6.3.7, 6.4.7, 6.5.7, 6.6.7, 6.7.7			
	(7)		A description of the legal authority required for each project and management action, and the basis for that authority within the Agency.	219, 223, 226, 230, 233, 236	6.2.8, 6.3.8, 6.4.8, 6.5.8, 6.6.8, 6.7.8			
	(8)		A description of the estimated cost for each project and management action and a description of how the Agency plans to meet those costs.	219, 223, 227, 230, 234, 236	6.2.9, 6.3.9, 6.4.9, 6.5.9, 6.6.9, 6.7.9		6.1-01, 7.1-01	
	(9)		A description of the management of groundwater extractions and recharge to ensure that chronic lowering of groundwater levels or depletion of supply during periods of drought is offset by increases in groundwater levels or storage during other periods.	216:217	6.1			
(c)			Projects and management actions shall be supported by best available information and best available science.	216:217	6.1			
(d)			An Agency shall take into account the level of uncertainty associated with the basin setting when developing projects or management actions.	216:237	6.1, 6.2, 6.3, 6.4, 6.5, 6.6, 6.7			
			Note: Authority cited: Section 10733.2, Water Code.					
			Reference: Sections 10727.2, 10727.4, and 10733.2, Water Code.					

Appendix C

GSA Formation Pursuant to Water Code Section 10723.8

Upper Ventura River Groundwater Sustainability Agency Boundary

Upper Ventura River GROUNDWATER Sustainability Agency

OJAI VALLEY
4-02
4-002

VENTURA RIVER VALLEY
UPPER VENTURA RIVER
4-3.01
4-003.01

VENTURA RIVER VALLEY
LOWER VENTURA RIVER
4-3.02
4-003.02

Legend

- UVRGSA Boundary
- DWR Bulletin No. 118 Groundwater Basins
- cities

N W E S

0 0.5 1 2 Miles

BOARD OF DIRECTORS

UPPER VENTURA RIVER GROUNDWATER AGENCY

RESOLUTION NO. 2017-2

A RESOLUTION OF THE UPPER VENTURA RIVER GROUNDWATER AGENCY TO ELECT TO BECOME THE GROUNDWATER SUSTAINABILITY AGENCY FOR THE UPPER VENTURA RIVER BASIN PURSUANT TO THE SUSTAINABLE GROUNDWATER MANAGEMENT ACT

WHEREAS, the California Legislature has adopted, and the Governor has signed into law, the Sustainable Groundwater Management Act of 2014 ("Act"), which authorizes local agencies to manage groundwater in a sustainable fashion; and

WHEREAS, the legislative intent of the Act is to provide for sustainable management of groundwater basins, to enhance local management of groundwater, to establish minimum standards for sustainable groundwater management, and to provide local agencies with the authority and the technical and financial assistance necessary to sustainably manage groundwater; and

WHEREAS, in order to exercise the authority granted in the Act, a local agency or combination of local agencies must elect to become a groundwater sustainability agency ("GSA"); and

WHEREAS, the Upper Ventura River Groundwater Agency ("Agency") is a local agency, as the Act defines that term; and

WHEREAS, the Agency exercises jurisdiction upon land overlying the entire Upper Ventura River Groundwater Basin (designated basin number 4-003.01 in the Department of Water Resources' ("DWR") most recent changes to Bulletin No. 118) ("Basin"); and

WHEREAS, the Agency is committed to sustainable management of the Basin's groundwater resources; and

WHEREAS, the Act requires that a GSA be formed for all basins designated by DWR as a medium- or high-priority basins by June 30, 2017; and

WHEREAS, the Basin is designated as a medium-priority basin pursuant to the DWR's initial prioritization; and

WHEREAS, it is the intent of the Agency to work cooperatively with other local GSAs and stakeholders, as may be appropriate, to sustainably manage to Basin and ensure that the Act's goals are satisfied; and

WHEREAS, notice of a hearing on the Agency's election to become a GSA for the ("Notice") has been published in the Ventura County Star and the Ojai Valley News as provided by law; and

WHEREAS, on this day, the Agency held a public hearing to consider whether it should elect to become a GSA for the Basin; and

WHEREAS, it would be in the best interest of the Basin for the Agency to become a GSA for the Basin, and to begin the process of preparing a groundwater sustainability plan ("Sustainability Plan"); and

WHEREAS, the Agency's process to develop of the Sustainability Plan for the Basin will include stakeholder outreach and will provide multiple opportunities for public involvement; and

WHEREAS, adoption of this resolution does not constitute a "project" under California Environmental Quality Act Guidelines Section 15378(b)(5), including organization and administrative activities of government, because there would be no direct or indirect physical change in the environment.

THEREFORE, BE IT RESOLVED by the Board of Directors of the Upper Ventura River Groundwater Agency, as follows:

1. All the recitals in this resolution are true and correct and the Agency so finds, determines and represents.

2. The Agency hereby elects to become the GSA for the Basin.

3. Within thirty days of the date of this resolution, the Agency's interim Executive Director is directed to provide notice to DWR of the Agency's election to be the GSA for the Basin ("Notice of GSA Election") in the manner required by law.

4. One of the elements of the Notice of GSA Election is the boundary the Agency intends to manage as the GSA for the Basin. Until further action of the Agency, the boundaries of the GSA shall be the external boundary of the Basin, the entirety of which currently falls within the Agency's jurisdiction.

5. Upon submission of the Notice of GSA Election, the Agency's Board of Director's shall begin discussions with interested stakeholders and beneficial users within the Basin in order to begin the process of developing a Sustainability Plan for the Basin.

6. The Agency's acting Executive Director is designated as the point-of-contact and is directed to report back to the Agency's Board of Directors at least quarterly on the progress toward developing the Sustainability Plan.

7. This resolution shall take effect immediately upon passage and adoption.

WE, THE UNDERSIGNED, do hereby certify that the above and foregoing Resolution No. 2017-2 was duly adopted and passed by the Board of Directors of the Upper Ventura River Groundwater Agency at a meeting held on the 9th day of March, 2017, by the following vote:

AYES:
NOES:
ABSENT:

Bruce Kuebler, Board Chair
Upper Ventura River Groundwater Agency

ATTEST:

Jennifer Tribo, Interim Executive Director

Certificate of Publication

Ad #1494343

In Matter of Publication of:

Public Notice

State of California)
))§
County of Ventura)

I, **Maria Rodriguez**, hereby certify that the **Ventura County Star Newspaper** has been adjudged a newspaper of general circulation by the Superior Court of California, County of Ventura within the provisions of the Government Code of the State of California, printed in the City of Camarillo, for circulation in the County of Ventura, State of California; that I am a clerk of the printer of said paper; that the annexed clipping is a true printed copy and publishing in said newspaper on the following dates to wit:

Feb. 22, March 01, 2017

I, Maria Rodriguez certify under penalty of perjury, that the foregoing is true and correct.

Dated this March 01, 2017; in Camarillo, California, County of Ventura.

Maria Rodriguez
(Signature)

NOTICE OF PUBLIC HEARING

NOTICE IS HEREBY GIVEN that a Public Hearing of the Upper Ventura River Groundwater Agency Board of Directors will be held:

--Thursday, March 9, 2017 at 6:30pm--
UPPER VENTURA RIVER GROUNDWATER AGENCY
Oak View Community Center
18 Valley Road, Oak View, California 93022

The purpose of this Public Hearing is to accept public comment regarding the Upper Ventura River Groundwater Agency's ("Agency") election to become the designated Groundwater Sustainability Agency ("GSA") pursuant to the Sustainable Groundwater Management Act ("SGMA") for the Upper Ventura River Groundwater Basin ("Basin"). Under SGMA, a local agency is required to elect to become a GSA for the Basin by June 30, 2017. Failure to comply with this deadline subjects the Basin to state intervention under SGMA. Once a GSA is formed for the Basin, the GSA will begin holding public meetings to discuss development of a Groundwater Sustainability Plan. Additional information can be found at: http://www.uvrgroundwater.org/ and by contacting pbkuebler@sbcglobal.net or 805-649-3050.

Bruce Kuebler
Chair, Upper Ventura River Groundwater Agency

UPPER VENTURA RIVER GROUNDWATER AGENCY BOARD OF DIRECTORS

Publish: February 22, 2017 and March 1, 2017 Ad No. 1494343

PROOF OF PUBLICATION
(SECTION 2015.5 CCP)

STATE OF CALIFORNIA
COUNTY OF VENTURA
I am a citizen of the United States and a resident of the aforesaid County; I am over the age of eighteen, and not interested in the above entitled matter. I am now, and at all times embraced in the publication herein mentioned, was a principal clerk of the printers and publishers of THE OJAI VALLEY NEWS, a newspaper of general circulation, printed and published every Friday at Ojai in the above-named County and State; that the Legal Advertisement

Public Hearing

of which the annexed clipping is a true printed copy, was published in the above-named newspaper, and not in any supplement thereof, on the following dates, to-wit:

Feb. 24 & March 3

that said newspaper was duly and regularly ascertained and established newspaper of general circulation by Decree entered in the Superior Court of the County of Ventura, State of California, on February 14, 1958, under the provision of Chapter 1, Division 7, Title 1 of the California Code of the State of California. I certify (or declare) under penalty of perjury that the foregoing is true and correct.

Linda Griffin
Ojai Valley News

Linda Griffin

Dated this 3rd Day of March
2017 at Ojai Valley News, Ventura County, California

OVN02-19-2017
Published Ojai Valley News
February 24 & March 3, 2017
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Bruce Kuebler
Chair, Upper Ventura River Groundwater Agency
UPPER VENTURA RIVER GROUNDWATER AGENCY
BOARD OF DIRECTORS

JOINT EXERCISE OF POWERS AGREEMENT

by and among

THE CASITAS MUNICIPAL WATER DISTRICT

THE CITY OF SAN BUENAVENTURA

THE COUNTY OF VENTURA

THE MEINERS OAKS WATER DISTRICT

and

THE VENTURA RIVER WATER DISTRICT

creating

THE UPPER VENTURA RIVER GROUNDWATER AGENCY

DECEMBER 2016

TABLE OF CONTENTS

TABLE OF CONTENTS
(continued)

TABLE OF CONTENTS
(continued)

JOINT EXERCISE OF POWERS AGREEMENT
THE UPPER VENTURA RIVER GROUNDWATER AGENCY

This **Joint Exercise of Powers Agreement ("Agreement")** is made and effective on the last date executed ("**Effective Date**"), by and among the Casitas Municipal Water District, the City of San Buenaventura, the County of Ventura, the Meiners Oaks Water District, and the Ventura River Water District, sometimes referred to herein individually as a "**Member**" and collectively as the "**Members,**" for purposes of forming the Upper Ventura River Groundwater Agency ("**Agency**") and setting forth the terms pursuant to which the Agency shall operate. Capitalized defined terms used herein shall have the meanings given to them in Article 1 of this Agreement.

RECITALS

A. Each of the Members is a local agency, as defined by the Sustainable Groundwater Management Act of 2014 ("**SGMA**"), duly organized and existing under and by virtue of the laws of the State of California, and each Member can exercise powers related to groundwater management.

B. For groundwater basins designated by the Department of Water Resources ("**DWR**") as medium- and high-priority but that have not been designated by DWR as subject to critical conditions of overdraft, SGMA requires establishment of a groundwater sustainability agency ("**GSA**") by June 30, 2017, and adoption of a groundwater sustainability plan ("**GSP**") by January 31, 2022.

C. The Upper Ventura River Basin (designated basin number 4-3.01 in the DWR's Bulletin No. 118) ("**Basin**") is designated as a medium-priority sub-basin.

D. Under SGMA, a combination of local agencies may form a GSA through a joint exercise of powers agreement.

E. The Members have determined that the sustainable management of the Basin pursuant to SGMA may best be achieved through the cooperation of the Members operating through a joint powers authority.

F. The Joint Exercise of Powers Act of 2000 ("**Act**") authorizes the Members to create a joint powers authority, and to jointly exercise any power common to the Members and to exercise additional powers granted under the Act.

G. The Act, including the Marks-Roos Local Bond Pooling Act of 1985 (Government Code sections 6584, *et seq.*), authorizes an entity created pursuant to the Act to issue bonds, and under certain circumstances, to purchase bonds issued by, or to make loans to, the Members for financing public capital improvements, working capital, liability and other insurance needs or projects whenever doing so would result in significant public benefits, as determined by the Members. The Act further authorizes and empowers a joint powers authority to sell bonds so issued or purchased to public or private purchasers at public or negotiated sales.

H. Based on the foregoing legal authority, the Members desire to create a joint powers authority for the purpose of taking all actions deemed necessary by the joint powers authority to ensure sustainable management of the Basin as required by SGMA.

I. The governing board of each Member has determined it to be in the Member's best interest and in the public interest that this Agreement be executed.

TERMS OF AGREEMENT

In consideration of the mutual promises and covenants herein contained, the Members agree as follows:

ARTICLE 1
DEFINITIONS

The following terms have the following meanings for purposes of this Agreement:

1.1 "Act" means the Joint Exercise of Powers Act, set forth in Chapter 5 of Division 7 of Title 1 of the Government Code, sections 6500, *et seq.*, including all laws supplemental thereto.

1.2 "Agreement" has the meaning assigned thereto in the Preamble.

1.3 "Auditor" means the auditor of the financial affairs of the Agency appointed by the Board of Directors pursuant to Section 13.3 of this Agreement.

1.4 "Agency" has the meaning assigned thereto in the Preamble.

1.5 "Basin" has the meaning assigned thereto in Recital C.

1.6 "Board of Directors" or "Board" means the governing body of the Agency as established by Article 6 of this Agreement.

1.7 "Bylaws" means the bylaws adopted by the Board of Directors pursuant to Article 11 of this Agreement to govern the day-to-day operations of the Agency.

1.8 "Director" and "Alternate Director" shall mean a director or alternate director appointed by a Member pursuant to Article 6 of this Agreement.

1.9 "DWR" has the meaning assigned thereto in Recital B.

1.10 "Effective Date" has the meaning assigned thereto in the Preamble.

1.11 "Executive Director" means the chief administrative officer of the Agency to be appointed by the Board of Directors pursuant to Article 10 of this Agreement.

1.12 "Farm Bureau" means the Farm Bureau of Ventura County.

1.13 "GSA" has the meaning assigned thereto in Recital B.

1.14 "GSP" has the meaning assigned thereto in Recital B.

1.15 "Member" has the meaning assigned thereto in the Preamble and further means each party to this Agreement that satisfies the requirements of Section 5.1 of this Agreement, including any new members as may be authorized by the Board, pursuant to Section 5.2 of this Agreement.

1.16 "Member Director" means a Director appointed pursuant to Article 6 of this Agreement that represents a Member.

1.17 "Officer(s)" means the chair, vice chair, secretary, or treasurer of the Agency to be appointed by the Board of Directors pursuant to Section 7.1 of this Agreement.

1.18 "Quorum" shall have the meaning assigned to it in Section 9.1.

1.19 "SGMA" has the meaning assigned thereto in Recital A.

1.20 "Special Projects" shall mean a project undertaken pursuant to Article 17.

1.21 "Stakeholder Director" means a Director appointed pursuant to Article 6 that represents stakeholder interests.

1.22 "State" means the State of California.

1.23 "Supermajority" shall mean the following:

1.23.1 If either six (6) or seven (7) Directors are in attendance and eligible to vote, a supermajority shall mean six (6) affirmative votes.

1.23.2 If only six (6) Directors are in attendance and one (1) of those six (6) Directors is prevented from voting due to a conflict of interest, a supermajority vote shall mean five (5) affirmative votes.

1.23.3 If only six (6) Directors are in attendance and two (2) of those six (6) Directors are prevented from voting due to a conflict of interest, a supermajority shall mean four (4) affirmative votes, provided that all four (4) affirmative votes are by Member Directors.

1.23.4 If fewer than six (6) Directors are in attendance at the meeting, a matter subject to a supermajority vote pursuant to Section 9.3 shall not be called for a vote.

ARTICLE 2
CREATION OF THE AGENCY

2.1 Creation of the Agency. There is hereby created pursuant to the Act a joint

powers authority, which will be a public entity separate from the Members to this Agreement and shall be known as the Upper Ventura River Groundwater Agency ("**Agency**"). Within thirty (30) days after the Effective Date of this Agreement and after any amendment to this Agreement, the Agency shall cause a notice of this Agreement or amendment to be prepared and filed with the office of the California Secretary of State containing the information required by Government Code section 6503.5. Within seventy (70) days after the Effective Date of this Agreement, the Agency shall cause a statement of the information concerning the Agency, required by Government Code section 53051, to be filed with the office of the California Secretary of State and with the Clerk for the County of Ventura, setting forth the facts required to be stated pursuant to Government Code section 53051(a).

2.2 Purpose of the Agency. Each Member to this Agreement has in common the power to study, plan, develop, finance, acquire, construct, maintain, repair, manage, operate, control, and govern water supply projects and exercise groundwater management authority within the Basin either alone or in cooperation with other public or private non-member entities, and each is a local agency eligible to serve as the GSA in the Basin, either alone or jointly through a joint powers agreement as provided for by SGMA. This Agreement is being entered into in order to jointly exercise some or all of the foregoing common powers, as appropriate, and for the exercise of such additional powers as may be authorized by law in the manner herein set forth, in order to effectuate the purposes of this Agreement. The purpose of the Agency is to serve as the GSA for the Basin and to develop, adopt, and implement the GSP for the Basin pursuant to SGMA and other applicable provisions of law.

ARTICLE 3
TERM

This Agreement shall become effective upon its execution by each of the Members and shall remain in effect until terminated pursuant to the provisions of Article 16 of this Agreement.

ARTICLE 4
POWERS

The Agency shall possess the power in its own name to exercise any and all common powers of its Members reasonably related to the purposes of the Agency, including but not limited to the powers set forth below. For purposes of Government Code section 6509, and unless the Agency has adopted applicable rules, regulations, policies, bylaws and procedures, the powers of the Agency shall be exercised subject to the restrictions upon the manner of exercising such powers as are imposed on the County of Ventura, and in the event of the withdrawal of the County of Ventura as a Member under this Agreement, then the powers of the Agency shall be exercised subject to the restrictions upon the manner of exercising such powers as are imposed on the City of San Buenaventura.

4.1. To exercise all powers afforded to the Agency under SGMA, including without limitation:

4.1.1 To adopt rules, regulations, policies, bylaws and procedures governing the operation of the Agency.

4.1.2 To develop, adopt and implement a GSP for the Basin, and to exercise jointly the common powers of the Members in doing so.

4.1.3 To obtain rights, permits and other authorizations for, or pertaining to, implementation of a GSP for the Basin.

4.1.4 To collect and monitor data on the extraction of groundwater from, and the quality of groundwater in, the Basin.

4.1.5 To acquire property and other assets by grant, lease, purchase, bequest, devise, gift, or eminent domain, and to hold, enjoy, lease or sell, or otherwise dispose of, property, including real property, water rights, and personal property, necessary for the full exercise of the Agency's powers.

4.1.6 To establish and administer a conjunctive use program for the purposes of maintaining sustainable yields in the Basin consistent with the requirements of SGMA.

4.1.7 To exchange and distribute water.

4.1.8 To regulate groundwater extractions as permitted by SGMA.

4.1.9 To spread, sink and inject water into the Basin.

4.1.10 To store, transport, recapture, recycle, purify, treat or otherwise manage and control water for beneficial use.

4.1.11 To develop and facilitate market-based solutions for the use and management of water rights.

4.1.12 To impose assessments, groundwater extraction fees or other charges, and to undertake other means of financing the Agency as authorized by Chapter 8 of SGMA, commencing at section 10730 of the Water Code.

4.1.13 To perform other ancillary tasks relating to the operation of the Agency pursuant to SGMA, including without limitation, environmental review, engineering, and design.

4.2 To apply for, accept and receive licenses, permits, water rights, approvals, agreements, grants, loans, contributions, donations or other aid from any agency of the United States, the State of California or other public agencies or private persons or entities necessary for the Agency's purposes.

4.3 To develop, collect, provide, and disseminate information that furthers the purposes of the Agency.

4.4 To make and enter contracts necessary to the full exercise of the Agency's power.

4.5 To employ, designate, or otherwise contract for the services of, agents, officers, employees, attorneys, engineers, planners, financial consultants, technical specialists, advisors, and independent contractors.

4.6 To incur debts, liabilities or obligations, to issue bonds, notes, certificates of participation, guarantees, equipment leases, reimbursement obligations and other indebtedness, as authorized by the Act.

4.7 To cooperate, act in conjunction and contract with the United States, the State of California, or any agency thereof, counties, municipalities, public and private corporations of any kind (including without limitation, investor-owned utilities), and individuals, or any of them, for any and all purposes necessary or convenient for the full exercise of the powers of the Agency.

4.8 To sue and be sued in the Agency's own name.

4.9. To provide for the prosecution of, defense of, or other participation in, actions or proceedings at law or in public hearings in which the Members, pursuant to this Agreement, have an interest and employ counsel and other expert assistance for these purposes.

4.10. To accumulate operating and reserve funds for the purposes herein stated.

4.11. To invest money that is not required for the immediate necessities of the Agency, as the Agency determines is advisable, in the same manner and upon the same conditions as Members, pursuant to Government Code section 53601, as that section now exists or may hereafter be amended.

4.12. To undertake any investigations, studies, and matters of general administration.

4.13. To undertake Special Projects, as set forth in Article 17.

4.14. To perform all other acts necessary or proper to carry out fully the purposes of this Agreement.

ARTICLE 5
MEMBERSHIP

5.1 Members. The Members of the Agency shall be the Casitas Municipal Water District, the City of San Buenaventura, the County of Ventura, the Meiners Oaks Water District, and the Ventura River Water District, as long as they have not, pursuant to the provisions hereof, withdrawn from this Agreement.

5.2 New Members. It is recognized that a public agency that is not a Member on the Effective Date of this Agreement may wish to participate in the Agency. Additional public agencies or mutual water companies may become members of the Agency upon such terms and conditions as established by the Board of Directors and upon the unanimous consent of the existing Members, evidenced by the execution of a written amendment to this Agreement signed by all of the Members, including the additional public agency or mutual water company. The addition of new Members shall not affect any rights of existing Members without the consent of all affected Members.

ARTICLE 6
BOARD OF DIRECTORS AND OFFICERS

6.1 Formation of the Board of Directors. The Agency shall be governed by a Board of Directors ("**Board of Directors**" or "**Board**"). The Board shall be composed of seven (7) Directors consisting of the following representatives, who shall be appointed in the manner set forth in Section 6.3:

6.1.1 Five (5) Member Directors, with one (1) Member Director appointed by the governing board of each Member.

6.1.2 Two (2) Stakeholder Directors, one of which shall be representative of agricultural stakeholders and interests within the Basin and one of which shall be representative of environmental stakeholders and interests within the Basin. The two (2) Stakeholder Directors shall meet the following qualifications:

(a) Agricultural Stakeholder Director. The Agricultural Stakeholder Director shall meet one or more of the following three criteria, determined at the sole discretion of the Member Directors: (i) own and operate an agricultural business with its principal operations on land overlying the Basin; (ii) own or lease property overlying the Basin and extract groundwater from the Basin for the irrigation of at least two (2) acres of crops in commercial operation; or (iii) be a representative of an agricultural organization currently active within the Members' service area boundaries.

(b) Environmental Stakeholder Director. The Environmental Stakeholder Director shall be an active member of a nonprofit, 501(c)(3) organization which, at the sole discretion of the Member Directors, meets the following requirements: (i) is currently active within Ventura County; (ii) has an adopted budget; and (iii) has a mission that advances, or is furthered by, groundwater sustainability.

6.2 Duties of the Board of Directors. The business and affairs of the Agency, and all of the powers of the Agency, including without limitation all powers set forth in Article 4, are reserved to and shall be exercised by and through the Board of Directors, except as may be expressly delegated to the Executive Director or others pursuant to this Agreement, Bylaws, or by specific action of the Board of Directors.

6.3 Appointment of Directors. The Directors shall be appointed as follows:

6.3.1 One (1) Member Director from the Casitas Municipal Water District shall be appointed by resolution of the Casitas Municipal Water District Board of Directors.

6.3.2 One (1) Member Director from the City of San Buenaventura shall be appointed by resolution of the City of San Buenaventura City Council.

6.3.3 One (1) Member Director from the County of Ventura shall be appointed by resolution of the County of Ventura Board of Supervisors.

6.3.4 One (1) Member Director from the Meiners Oaks Water District shall be appointed by resolution of the Meiners Oaks Water District Board of Directors.

6.3.5 One (1) Member Director from the Ventura River Water District shall be appointed by resolution of the Ventura River Water District Board of Directors.

6.3.6 The two (2) Stakeholder Directors shall be appointed as follows:

(a) Agricultural Stakeholder Director: The Member Directors shall select the Agricultural Stakeholder Director from a list of three (3) qualified nominees submitted by the Farm Bureau of Ventura County ("**Farm Bureau**"). The Farm Bureau shall submit its nominees to the Member Directors pursuant to a process determined by the Member Directors. The Member Directors shall consider the nominees at a regular meeting and at that meeting shall appoint the Agricultural Stakeholder Director upon a vote of all Member Directors.

(b) Environmental Stakeholder Director. The Member Directors shall select the Environmental Stakeholder Director from qualified nominees submitted by environmental nonprofit, 501(c)(3) organizations meeting the criteria specified in Section 6.1.2(b). The nominations shall be submitted to the Member Directors pursuant to a process determined by the Member Directors. The Member Directors shall consider the nominees at a regular meeting and shall appoint the Environmental Stakeholder Director upon a vote of all Member Directors.

6.4 Alternate Directors. Each Member may also appoint one Alternate Director to the Board of Directors. A Stakeholder Director shall not have an Alternate Director. All Alternate Directors shall be appointed in the same manner as set forth in Section 6.3. Unless appearing as a substitute for a Member Director due to absence or conflict of interest, Alternate Directors shall have no vote, and shall not participate in any discussions or deliberations of the Board. If the Director is not present, or if the Director has a conflict of interest which precludes participation by the Director in any decision-making process of the Board, the Alternate Director appointed to act in his/her place shall assume all rights of the Director, and shall have the authority to act in his/her absence, including casting votes on matters before the Board. Each Alternate Director shall be appointed prior to the third meeting of the Board. Alternate Directors are encouraged to attend all Board meetings and stay informed on current issues before the Board.

6.5 Term, Reappointment, and Removal. Directors and Alternate Directors shall serve for terms of two (2) years, provided that for the purpose of establishing staggered terms among the Directors and Alternate Directors, three (3) of the Member Directors and their respective Alternate Directors shall serve an initial term of three (3) years. The Member Directors and Alternative Directors that will serve an initial term of three (3) years shall be determined by resolution of the Board of Directors at its first meeting. A Member Director or Alternate Director may be removed during his or her term or reappointed for multiple terms at the pleasure of the Member that appointed him or her. A Member Director or Alternate Director shall be either a member of the appointing agency's staff or governing board and shall cease to be a Member Director or Alternate Director when no longer a member of the appointing agency's staff or governing board. A Stakeholder Director may be removed or reappointed by a vote of all Member Directors.

6.6 Vacancies. A vacancy on the Board of Directors shall occur when a Director resigns or reaches the end of that Director's term, as set forth in Section 6.5. For Member Directors, a vacancy shall also occur when he or she is removed by his or her appointing Member. For Stakeholder Directors, a vacancy shall also occur when the Stakeholder Director is removed, as set forth in Section 6.5. Upon the vacancy of a Member Director, the Alternate Director shall serve as Director until a new Director is appointed as set forth in Section 6.3 unless the Alternate Director is already serving as an Alternate Director in the event of a prior vacancy, in which case, the seat shall remain vacant until a replacement Director is appointed as set forth in Section 6.3. Members shall submit any changes in Director or Alternate Director positions to the Executive Director by written notice signed by an authorized representative of the Member. The written notice shall include a resolution of the governing board of the Member directing such change in the Director or Alternative Director position.

6.7 Conflicts of Interest. No Director shall be allowed to participate in any matter before the Board in which he or she has a conflict of interest. A Member Director is deemed to have a conflict of interest and disqualified from participating in related matters before the Board if that Member Director (i) is personally, or (ii) was appointed by a Member that is named as an adverse party in any litigation in which the Agency is a party. A Stakeholder Director is deemed to have a conflict of interest and disqualified from participating in related matters before the Board if that Stakeholder Director (i) is personally, (ii) was nominated by, (iii) is employed by, or (iv) acts as a manager or executive director to, or sits on the board of, an entity that is named as an adverse party in litigation in which the Agency is a party. In such an event, the Director shall be deemed disqualified in all matters related to the issue being litigated, shall not be eligible to receive confidential information relating to the litigation from the Agency or its legal counsel, and shall not be eligible to attend any closed session where the litigation is discussed. In the event a Director deemed to have conflict of interest refuses to withdraw from matters related to the conflict, the other Directors shall jointly seek a court order preventing the conflicted Director from participating in those related matters.

ARTICLE 7
OFFICERS

7.1 Officers. The officers of the Agency shall be a chair, vice chair, secretary selected from among the Member Directors. The Agency shall also appoint a treasurer consistent with the provisions of Section 13.3. The vice chair, or in the vice chair's absence, the secretary, shall exercise all powers of the chair in the chair's absence or inability to act.

7.2 Appointment of Officers. Officers shall be elected by, and serve at the pleasure of, the Board of Directors, in accordance with the Bylaws.

7.3 Principal Office. The principal office of the Agency shall be established by the Board of Directors, and may thereafter be changed by a vote of the Board.

ARTICLE 8
DIRECTOR MEETINGS

8.1 Initial Meeting. The initial meeting of the Board of Directors shall be held in the County of Ventura, California, within thirty (30) days of the Effective Date of this Agreement.

8.2 Time and Place. The Board of Directors shall meet at least quarterly, at a date, time and place set by the Board, within the jurisdictional boundaries of one or more of the Members, and at such times as may be determined by the Board.

8.3 Special Meetings. Special meetings of the Board of Directors may be called by the Chair or by a vote of the Directors in accordance with the provisions of Government Code section 54956.

8.4 Conduct. All meetings of the Board of Directors, including special meetings, shall be noticed, held, and conducted in accordance with the Ralph M. Brown Act (Government Code sections 54950, *et seq*.). The Board may use teleconferencing in connection with any meeting in conformance with and to the extent authorized by applicable law.

8.5 Local Conflict of Interest Code. The Board of Directors shall adopt a local conflict of interest code pursuant to the provisions of the Political Reform Act of 1974 (Government Code sections 81000, *et seq*.) within six (6) months following the appointment of both Stakeholder Directors.

ARTICLE 9
MEMBER VOTING

9.1 Quorum. A quorum of any meeting of the Board of Directors shall consist of a majority of the total number of Directors plus one Director ("**Quorum**"). In the absence of a quorum, any meeting of the Directors may be adjourned by a vote of the Directors present, but no other business may be transacted at the meeting. For purposes of this Article, a Director shall be deemed present if the Director appears at the meeting in person or participates telephonically, provided the telephone appearance is consistent with the requirements of the Ralph M. Brown Act.

9.2 Director Votes. Voting by the Board of Directors shall be made on the basis of one vote for each Director. A Director, or an Alternate Director when acting in the absence of his or her Director, may vote on all matters of Agency business unless disqualified because of a conflict of interest pursuant to California law or the local conflict of interest code adopted by the Board of Directors.

9.3 Affirmative Decisions of the Board of Directors. The structure of voting and the determination of affirmative decisions of the Board of Directors, as set forth herein, are designed to encourage and facilitate consensus, pursuant to the following procedure:

9.3.1 First Reading. A matter may be approved on the first reading of the matter pursuant to a unanimous vote of all Directors.

9.3.2 Second Reading. If unanimity is not obtained on the first reading of a matter, the Board shall continue a final vote on the matter for a second reading. The second reading shall occur at the next regular meeting of the Board, unless the Board votes to continue the second reading of the matter to another regular or special meeting of the Board.

(a) Matters Requiring Supermajority Vote on Second Reading. Decisions concerning the following matters shall require a supermajority vote in order to pass on the second reading: (i) any capital expenditure of $50,000 or more; (ii) the Agency's annual budget and amendments thereto; (iii) the GSP for the Basin or any amendments thereto; (iv) the Agency's adoption of groundwater extraction fees; (v) the Agency's adoption of any taxes, fees, or assessments subject to Proposition 218; (vi) the issuance of assessments for contributions by Members pursuant to Section 14.2; or (vii) any stipulation to resolve litigation concerning groundwater rights within, or groundwater management for, the Basin. A supermajority vote shall be calculated pursuant to Section 1.23.

(b) Simple Majority Vote for All Other Matters on Second Reading. Unless otherwise specified in this Agreement, for all matters not specified in Section 9.3.2(a), an affirmative decision of the Board on the second reading shall require a simple majority of all Directors present at the meeting and eligible to vote on the matter.

ARTICLE 10
EXECUTIVE DIRECTOR AND STAFF

10.1 Appointment. The Board of Directors shall appoint an Executive Director, who may be, though need not be, an officer, employee, or representative of one of the Members. The Executive Director's compensation, if any, shall be determined by the Board of Directors.

10.2 Duties. If appointed, the Executive Director shall be the chief administrative officer of the Agency, shall serve at the pleasure of the Board of Directors, and shall be responsible to the Board for the proper and efficient administration of the Agency. The Executive Director shall have the powers designated by the Board, or otherwise as set forth in the Bylaws.

10.3 Term and Termination. The Executive Director shall serve until he/she resigns or the Board of Directors terminates his/her appointment.

10.4 Staff and Services. The Executive Director may employ such additional full-time and/or part-time employees, assistants and independent contractors who may be necessary from time to time to accomplish the purposes of the Agency, subject to the approval of the Board of Directors. The Agency may contract with a Member or other public agency or private entity for various services, including without limitation, those related to the Agency's finances, purchasing, risk management, information technology and human resources. A written agreement shall be entered between the Agency and the Member or other public agency or private entity contracting to provide such service, and that agreement shall specify the terms on which such services shall be provided, including without limitation, the compensation, if any, that shall be made for the provision of such services.

ARTICLE 11
BYLAWS

The Board of Directors shall cause to be drafted, approve, and amend Bylaws of the Agency to govern the day-to-day operations of the Agency. The Bylaws shall be adopted at or before the first anniversary of the Board's first meeting.

ARTICLE 12
ADVISORY COMMITTEES

The Board of Directors may from time to time appoint one or more advisory committees or establish standing or ad hoc committees to assist in carrying out the purposes and objectives of the Agency. The Board shall determine the purpose and need for such committees and the necessary qualifications for individuals appointed to them. Each committee shall include a Director as the chair thereof. Other members of each committee may be composed of those individuals approved by the Board of Directors for participation on the committee. However, no committee or participant on such committee shall have any authority to act on behalf of the Agency.

ARTICLE 13
ACCOUNTING PRACTICES

13.1 General. The Board of Directors shall establish and maintain such funds and accounts as may be required by generally accepted public agency accounting practices. The Agency shall maintain strict accountability of all funds and report all receipts and disbursements of the Agency.

13.2 Fiscal Year. Unless the Board of Directors decides otherwise, the fiscal year for the Agency shall run from July 1 to June 30.

13.3 Appointment of Treasurer and Auditor; Duties. The treasurer and Auditor shall be appointed and/or retained in the manner, and shall perform such duties and responsibilities, specified in sections 6505, 6505.5 and 6505.6 of the Act. The treasurer shall be bonded in accordance with the provisions of Government Code section 6505.1.

ARTICLE 14
BUDGET AND EXPENSES

14.1 Budget. Within one hundred and twenty (120) days after the first meeting of the Board of Directors, and thereafter prior to the commencement of each fiscal year, the Board shall adopt a budget for the Agency for the ensuing fiscal year. In the event that a budget is not so approved, the prior year's budget shall be deemed approved for the ensuing fiscal year, and any groundwater extraction fee or assessment(s) of contributions by Members, or both, approved by the Board during the prior fiscal year shall again be assessed in the same amount and terms for the ensuing fiscal year.

14.2 Agency Funding and Contributions. For the purpose of funding the expenses and ongoing operations of the Agency, the Board of Directors shall maintain a funding account in connection with the annual budget process. The Board of Directors may fund the Agency and the GSP for the Basin as provided in Chapter 8 of SGMA (commencing with section 10730 of the Water Code), through voluntary contributions from Members, and through the assessment of Member contributions, with the intent that the Agency will reimburse each Member at a later date. Such assessment of Member contributions shall be in the amount and frequency determined necessary by a supermajority vote of the Board (as set forth is Section 9.3) and shall be paid by each Member to the Agency within one hundred and twenty (120) days of assessment by the Board, unless otherwise directed by the Board.

14.3 Return of Contributions. The Agency may reimburse Members for all or any part of any contributions made by Members, and any revenues by the Agency may be distributed by the Board of Directors at such time and upon such terms as the Board of Directors may decide; provided that (i) any distributions shall be made in proportion to the contributions paid by each Member to the Agency, and (ii) any capital contribution paid by a Member voluntarily, and without obligation to make such capital contribution pursuant to Section 14.2, shall be returned to the contributing Member, together with accrued interest at the annual rate published as the yield of the Local Agency Investment Fund administered by the California State Treasurer, before any other return of contributions to the Members is made. The Agency shall hold title to all funds and property acquired by the Agency during the term of this Agreement.

14.4 Issuance of Indebtedness. The Agency may issue bonds, notes or other forms of indebtedness, as permitted under Section 4.6, provided such issuance is approved by a unanimous vote of the Member Directors.

ARTICLE 15
LIABILITIES

15.1 Liability. In accordance with Government Code section 6507, the debt, liabilities and obligations of the Agency shall be the debts, liabilities and obligations of the Agency alone, and not the individual Members.

15.2 Indemnity. Funds of the Agency may be used to defend, indemnify, and hold harmless the Agency, each Member, each Director, and any officers, agents and employees of the Agency for their actions taken within the course and scope of their duties while acting on behalf of the Agency. To the fullest extent permitted by law, the Agency agrees to save, indemnify, defend and hold harmless each Member from any liability, claims, suits, actions, arbitration proceedings, administrative proceedings, regulatory proceedings, losses, expenses or costs of any kind, whether actual, alleged or threatened, including attorney's fees and costs, court costs, interest, defense costs, and expert witness fees, where the same arise out of, or are in any way attributable in whole or in part to, acts or omissions of the Agency or its employees, officers or agents or negligent acts or omissions (not including gross negligence or wrongful conduct) of the employees, officers or agents of any Member, while acting within the course and scope of a Member relationship with the Agency.

15.3 Hazardous Materials. The Agency shall not handle, receive, use, or dispose of hazardous materials unless first amending this Agreement to provide indemnification by the Agency of all of Members in relation to the Agency's handling, receipt, use or disposal of hazardous materials.

15.4 Liability Insurance. The Board of Directors shall obtain, and maintain in effect, appropriate liability insurance to cover the activities of the Agency's Directors and staff in the ordinary course of their duties.

15.5 Privileges and Immunities. All of the privileges and immunities from liability, exemption from laws, ordinances and rules, all pension, relief, disability, workers compensation, and other benefits which apply to the activity of officers, agents, or employees of any of the Members when performing their respective functions shall apply to them to the same degree and extent while engaged in the performance of any of the functions and other duties under this Agreement. None of the officers, agents, or employees appointed by the Board of Directors shall be deemed, by reason of their employment by the Board of Directors, to be employed by any of the Members or, by reason of their employment by the Board of Directors to be subject to any of the requirements of such Members.

ARTICLE 16
WITHDRAWAL OF MEMBERS

16.1 Unilateral Withdrawal. Subject to the Dispute Resolution provisions set forth in Section 18.9, a Member may unilaterally withdraw from this Agreement without causing or requiring termination of this Agreement, effective upon sixty (60) days written notice to the Executive Director.

16.2 Rescission or Termination of Agency. This Agreement may be rescinded and the Agency terminated by unanimous written consent of all Members, except during the outstanding term of any Agency indebtedness.

16.3 Effect of Withdrawal or Termination. Upon termination of this Agreement or unilateral withdrawal, a Member shall remain obligated to pay its share of all debts, liabilities and obligations of the Agency required of the Member pursuant to the terms of this Agreement

which were incurred or accrued prior to the date of such termination or withdrawal, including, without limitation, those debts, liabilities and obligations pursuant to Sections 4.6 and 14.4. Any Member that withdraws from the Agency shall have no right to participate in the business and affairs of the Agency or to exercise any rights of a Member under this Agreement or the Act, but shall continue to share in distributions from the Agency on the same basis as if such Member had not withdrawn, provided that a Member that has withdrawn from the Agency shall not receive distributions in excess of the contributions made to the Agency while a Member. The right to share in distributions granted under this Section shall be in lieu of any right the withdrawn Member may have to receive a distribution or payment of the fair value of the Member's interest in the Agency.

16.4 Return of Contribution. Upon termination of this Agreement, any surplus money on-hand shall be returned to the Members in proportion to their contributions made. The Board of Directors shall first offer any property, works, rights and interests of the Agency for sale to the Members on terms and conditions determined by the Board of Directors. If no such sale to Members is consummated, the Board of Directors shall offer the property, works, rights, and interest of the Agency for sale to any non-member for good and adequate consideration. The net proceeds from any sale shall be distributed among the Members in proportion to their contributions made.

ARTICLE 17
SPECIAL PROJECTS

17.1 Special Projects. In addition to the general activities undertaken by all Members of the Agency, the Agency may initiate Special Projects that involve fewer than all Members. No Member shall be required to be involved in a Special Project that involves fewer than all Members.

17.2 Special Project Agreement. With the unanimous approval of Member Directors, Members may undertake Special Projects in the name of the Agency. Prior to undertaking a Special Project, the Members electing to participate in the Special Project shall enter into an activity agreement. Such activity agreement shall provide that (i) no Special Project undertaken pursuant to such agreement shall conflict with the terms of this Agreement; and (ii) the Members to the activity agreement shall indemnify, defend and hold the Agency, and the Agency's other Members, harmless from and against any liabilities, costs or expenses of any kind resulting from the Special Project described in the activity agreement. All assets, rights, benefits, debts, liabilities and obligations attributable to a Special Project shall be assets, rights, benefits, debts, liabilities and obligations solely of the Members that have entered into the activity agreement for that Special Project, in accordance with the terms of the activity agreement, and shall not be the assets, rights, benefits, debts, liabilities and obligations of those Members that have not executed the activity agreement. Members not electing to participate in the Special Project shall have no rights, benefits, debts, liabilities or obligations attributable to such Special Project.

ARTICLE 18
MISCELLANEOUS PROVISIONS

18.1 No Predetermination or Irretrievable Commitment of Resources. Nothing in this Agreement shall constitute a determination by the Agency or any of its Members that any action shall be undertaken or that any unconditional or irretrievable commitment of resources shall be made, until such time as the required compliance with all local, state, or federal laws, including without limitation the California Environmental Quality Act, National Environmental Policy Act, or permit requirements, as applicable, has been completed.

18.2 Notices. Notices to a Director or Member hereunder shall be sufficient if delivered to the City Clerk, Board Clerk, or Board Secretary of the respective Director or Member and addressed to the Director or Member. Delivery may be accomplished by U.S. Postal Service, private mail service or electronic mail.

18.3 Amendments to Agreement. This Agreement may be amended or modified at any time only by subsequent written agreement approved and executed by all of the Members.

18.4 Agreement Complete. This Agreement constitutes the full and complete agreement of the Members. This Agreement supersedes all prior agreements and understandings, whether in writing or oral, related to the subject matter of this Agreement that are not set forth in writing herein.

18.5 Severability. Should any part, term or provision of this Agreement be decided by a court of competent jurisdiction to be illegal or in conflict with any applicable federal law or any law of the State of California, or otherwise be rendered unenforceable or ineffectual, the validity of the remaining parts, terms, or provisions of this Agreement shall not be affected thereby, provided however, that if the remaining parts, terms, or provisions do not comply with the Act, this Agreement shall terminate.

18.6 Withdrawal by Operation of Law. Should the participation of any Member to this Agreement be decided by the courts to be illegal or in excess of that Member's authority or in conflict with any law, the validity of this Agreement as to the remaining Members shall not be affected thereby.

18.7 Assignment. The rights and duties of the Members may not be assigned or delegated without the written consent of all other Members. Any attempt to assign or delegate such rights or duties in contravention of this Agreement shall be null and void.

18.8 Binding on Successors. This Agreement shall inure to the benefit of, and be binding upon, the successors or assigns of the Members.

18.9 Dispute Resolution. In the event that any dispute arises among the Members relating to (i) this Agreement, (ii) the rights and obligations arising from this Agreement, (iii) a Member proposing to withdraw from membership in the Agency, or (iv) a Member proposing to initiate litigation in relation to legal rights to groundwater within the Basin or the management of the Basin, the aggrieved Member or Members proposing to withdraw from membership shall provide written notice to the other Members of the controversy or proposal to withdraw from

membership. Within forty-five (45) days after such written notice, the Members shall attempt in good faith to resolve the controversy through informal means. If the Members cannot agree upon a resolution of the controversy within forty-five (45) days from the providing of written notice specified above, the dispute shall be submitted to mediation prior to commencement of any legal action or prior to withdrawal of a Member proposing to withdraw from membership. The mediation shall be no less than a full day (unless agreed otherwise among the Members) and the cost of mediation shall be paid in equal proportion among the Members. The mediator shall be either voluntarily agreed to or appointed by the Superior Court upon a suit and motion for appointment of a neutral mediator. Upon completion of mediation, if the controversy has not been resolved, any Member may exercise all rights to bring a legal action relating to the controversy or withdraw from membership as otherwise authorized pursuant to this Agreement. The Agency may, at its discretion, participate in mediation upon request by a Stakeholder Director concerning a dispute alleged by the Stakeholder Director concerning the management of the Basin or rights to extract groundwater from the Basin, with the terms of such mediation to be determined in the sole discretion of the Member Directors.

18.10 Counterparts. This Agreement may be executed in counterparts, each of which shall be deemed an original.

18.11 Singular Includes Plural. Whenever used in this Agreement, the singular form of any term includes the plural form and the plural form includes the singular form.

18.12 No Third-Party Rights. Nothing in this Agreement, whether express or implied, is intended to confer any rights or remedies under, or by reason of, this Agreement on any person other than the Members and their respective successors and assigns, nor is anything in this Agreement intended to relieve or discharge the obligations or liability of any third person to any Member, nor shall any provision give any third person any right of subrogation or action over or against any Member.

18.13 Member Authorization. The legislative bodies of the Members have each authorized execution of this Agreement, as evidenced by the signatures below.

IN WITNESS WHEREOF, the Members hereto have executed this Agreement by authorized officials thereof on the dates indicated below, which Agreement may be executed in counterparts.

CASITAS MUNICIPAL WATER DISTRICT DATED: 11/23/16

APPROVED AS TO FORM:

By: _____
Title: President

By: _____
Title: Secretary

[Signatures continue on the following page.]

CITY OF SAN BUENAVENTURA DATED: _____

APPROVED AS TO FORM:

By: _____
Title: _____

By: _____
Title: _____

COUNTY OF VENTURA DATED: _____

APPROVED AS TO FORM:

By: _____
Title: _____

By: _____
Title: _____

MEINERS OAKS WATER DISTRICT DATED: _____

APPROVED AS TO FORM:

By: _____
Title: _____

By: _____
Title: _____

CASITAS MUNICIPAL WATER DISTRICT

By: _____
Title: _____

DATED: _____

APPROVED AS TO FORM:

By: _____
Title: _____

[Signatures continue on the following page.]

CITY OF SAN BUENAVENTURA

By: E.J. as member
Title: Mayor

DATED: 12-12-16

APPROVED AS TO FORM:

By: _____
Title: _____

COUNTY OF VENTURA

By: _____
Title: _____

DATED: _____

APPROVED AS TO FORM:

By: _____
Title: _____

MEINERS OAKS WATER DISTRICT

By: _____
Title: _____

DATED: _____

APPROVED AS TO FORM:

By: _____
Title: _____

CASITAS MUNICIPAL WATER DISTRICT DATED: _____

APPROVED AS TO FORM:

By: _____ By: _____
Title: _____ Title: _____

[Signatures continue on the following page.]

CITY OF SAN BUENAVENTURA DATED: _____

APPROVED AS TO FORM:

By: _____ By: _____
Title: _____ Title: _____

COUNTY OF VENTURA DATED: 12/6/16

APPROVED AS TO FORM:

By: Linda Parks
Title: Chair, Board of Supervisors
County of Ventura

By: _____
Title: _____

MEINERS OAKS WATER DISTRICT DATED: _____

APPROVED AS TO FORM:

By: _____ By: _____
Title: _____ Title: _____

CASITAS MUNICIPAL WATER DISTRICT DATED:______________________

APPROVED AS TO FORM:

By: ______________________ By: ______________________
Title: ______________________ Title: ______________________

[Signatures continue on the following page.]

CITY OF SAN BUENAVENTURA DATED:______________________

APPROVED AS TO FORM:

By: ______________________ By: ______________________
Title: ______________________ Title: ______________________

COUNTY OF VENTURA DATED:______________________

APPROVED AS TO FORM:

By: [signature] By: [signature]
Title: Board President Title: General Manger

MEINERS OAKS WATER DISTRICT DATED: November 15, 2016

APPROVED AS TO FORM:

By: ______________________ By: [signature]
Title: ______________________ Title: District Counsel

VENTURA RIVER WATER DISTRICT

DATED: NOVEMBER 9, 2016

APPROVED AS TO FORM:

By: _____
Title: _____

Ed Lee, President

By: _____
Title: DISTRICT COUNSEL

Lindsay Nielson,
District Counsel

BYLAWS

of the

UPPER VENTURA RIVER GROUNDWATER AGENCY

Adopted on
December 14, 2017

PREAMBLE

These Bylaws are adopted pursuant to Section 4.1.1 and Article 11 of the Joint Exercise of Powers Agreement (Agreement) creating the Upper Ventura River Groundwater Agency.

ARTICLE 1

DEFINITIONS AND CONSTRUCTION

1.1 Definitions and Construction. Unless specifically defined in these Bylaws, all defined terms shall have the same meaning ascribed to them in the Agreement. If any term of these Bylaws conflicts with any term of the Agreement, the Agreement's terms shall prevail, and these Bylaws shall be amended to eliminate such conflict of terms. Unless the context or reference to the Agreement requires otherwise, the general provisions, rules of construction, and definitions in the California Civil Code will govern the interpretation of these Bylaws.

DEFINITIONS

The following terms have the following meanings for purposes of the Bylaws.

1.2 "Agreement" has the meaning The Joint Exercise of Powers Agreement by and among the Casitas Municipal Water District, the City of San Buenaventura, the County of Ventura, the Meiners Oaks Water District, and the Ventura River Water District for purposes of forming the Upper Ventura River Groundwater Agency and setting forth the terms pursuant to which the Agency shall operate.

1.3 "Auditor" means the auditor of the financial affairs of the Agency appointed by the Board of Directors pursuant to Section 13.3 of the Agreement.

1.4 "Agency" means the Upper Ventura River Groundwater Agency

1.5 "Board of Directors" or "Board" means the governing body of the Agency as established by Article 6 of the Agreement.

1.6 "Bylaws" means these Bylaws adopted by the Board of Directors pursuant to Section 4.1.1 and Article 11 of the Agreement to govern the day-to-day operations of the Agency.

1.7 "Director" and "Alternate Director" shall mean a director or alternate director appointed by a Member or by the Board pursuant to Article 6 of the Agreement.

1.8 "Executive Director" means the chief administrative officer of the Agency to be appointed by the Board of Directors pursuant to Article 10 of the Agreement.

1.9 "Farm Bureau" means the Farm Bureau of Ventura County.

1.10 "GSP" means a Groundwater Sustainability Plan for the Basin.

1.11 "Member" means any Agency Member, as determined pursuant to Article 5 of the Agreement. "Members" shall refer collectively to all Members of the Agency.

1.12 "Member Director" means a Director appointed pursuant to Article 6 of the Agreement that represents a Member.

1.13 "Officer(s)" means the chair, vice chair, secretary, or treasurer of the Agency to be appointed by the Board of Directors pursuant to Article 7 of the Agreement.

1.14 "Quorum" shall have the meaning assigned to it in Section 9.1 of the Agreement.

1.15 "Special Projects" means a project undertaken pursuant to Article 17 of the Agreement.

1.16 "Stakeholder Director" means a Director appointed pursuant to Article 6 of the Agreement that represents stakeholder interests.

ARTICLE 2

THE AGENCY

2.1 Name of the Agency. The name of the Agency created by the Agreement is the Upper Ventora River Groundwater Agency.

2.2 Principal Office of the Agency. The principal office of the Agency is the shared office of the Ojai Groundwater Basin Management Agency and the Upper Ventura River Groundwater Agency, located at 428 Bryant Circle, Ojai, CA 93023.

2.3 Agency Powers. The powers of the Agency are established in Article 4 of the Agreement and vested in the Board. The Board reserves the right to delegate such powers as are appropriate and permissible by law.

ARTICLE 3

MEETINGS

3.1 Time and Place. The Board of Directors shall meet at least quarterly, at a date, time, and place set by the Board, within the jurisdictional boundaries of one or more of the Members, and at such times as may be determined by the Board.

3.2 Special Meetings. Special meetings of the Board of Directors may be called by the Chair or by a vote of the Directors in accordance with the requirements of the Ralph M. Brown Act, Government Code Section 54950, *et seq.* ("Brown Act").

3.3 Conduct. All meetings of the Board of Directors, including special meetings, shall be noticed, held, and conducted in accordance with the Brown Act. The Board may use teleconferencing in connection with any meeting in conformance with and to the extent authorized by the Brown Act.

3.4 Local Conflict of Interest Code. The Board of Directors has adopted a local conflict of interest code pursuant to the provisions of the Political Reform Act of 1974, Government Code Section 81000, *et seq.* The Board shall take all actions necessary to ensure the code remains in compliance with applicable laws, including updating the code as required.

3.5 Agenda. The Executive Director, in consultation with Board Chair, shall prepare the draft agenda. The Board Chair shall approve the draft agenda before its finalization and posting. The agenda shall in all respects comply with the Brown Act.

3.6 Quorum. Quorum will be determined as provided in Section 9.1 of the Agreement.

3.7 Official Act. The Agency shall take action by motion, resolution, or ordinance. Every action shall be by a vote of the Board in accordance with the applicable provisions of the Agreement, the Bylaws, and State laws.

3.8 Director Voting. All votes of the Board of Directors shall be in accord with the procedures set forth in Article 9 of the Agreement, supplemented by the Collaborative Decision-Making Approach set forth in Section 3.9 of these Bylaws.

3.9 Collaborative Decision-Making Approach. The Board shall seek to achieve unanimous consensus among its members by following these procedures for collaborative decision-making. All actions taken pursuant to this Section 3.9 shall be conducted in accordance with the requirements of the Brown Act and provisions of the Agreement. If any conflict arises between the procedures required by this Section 3.9 and the requirements of the Brown Act or the provisions of the Agreement, the Brown Act and/or Agreement shall control.

3.9.1 Guiding Principles for Collaborative Decision-Making Approach.

3.9.1.1 Consensus. The Directors shall seek to reach consensus on all decisions. Consensus means that each Member of the GSA Board does not reject a proposal. In reaching consensus, some Directors may "support" a particular decision while others may only be able to "live with it." Still others may choose to "stand aside" by verbally noting disagreement, yet allowing the Board to reach consensus without them. Any of these actions constitutes consensus. A lack of consensus is when one or more Members cannot support, live with, or stand aside on a topic.

3.9.1.2 Consensus with Accountability. The Board will seek mutually acceptable and beneficial decisions whenever possible. In an attempt to achieve consensus, any Director that disagrees with a decision must provide an alternative that attempts to meet his/her agency's/constituency's interests while also meeting the interests of other Directors. The consensus decision method is based on principles of "consensus with accountability."

3.9.1.3 Consensus Seeking. As stated above, the Board will seek to achieve consensus. This reflects an aspiration, however. The work of the Board must be timely and efficient and attempts to reach consensus cannot continue indefinitely. Therefore, "consensus seeking" represents an approach through which the Board will make a robust, reasonable attempt to reach consensus, the duration of which must be decided by the Board. After such attempts are made, if the Board cannot reach consensus, the approach and outcomes are memorialized, and the Board may proceed to a vote.

3.9.1.4 Agreements in Principle/Agreements in Detail. In a collaborative decision-making process, it is beneficial for Directors to have the space and time to propose initial ideas to be discussed amongst, and potentially modified by, their Board colleagues, rather than to move straight to a binding vote. This can be achieved using "straw polls" or similar methods whereby a Director proposes an idea in principle, the Board discusses and modifies it, the Board seeks to reach an informal "agreement in principle," and then votes on the item. This method allows Members time to informally discuss ideas, test feasibility with other colleagues/leadership or their Member organizations, and eventually reach consensus.

3.9.2 Consensus Seeking Decision Approach

3.9.2.1 Preliminary Discussions. The Board shall employ a consensus seeking decision approach whereby Directors and Members become informed on the item under consideration by the Board, Directors deliberate over the issues, and Directors then create proposals to test the feasibility of a decision to achieve consensus. In this step the Directors shall employ straw polls, agreements in principle, and consensus with accountability.

3.9.2.2 First Vote. At a point where the Board feels that a matter has been sufficiently discussed, a Director should make a motion for a formal vote. The result of the first vote is either a consensus decision or failure to reach consensus. If the Board achieves consensus on a first vote, then the decision is final. If the Board does not achieve consensus, the matter will be continued to a future Board meeting where final action may be taken upon a second vote.

3.9.2.3 Consensus Review. In the time period between a first and a second vote, the Directors will review the discussion and outcome regarding the first vote and should prepare alternatives to the item under consideration that will meet the interests of all Members. Communications between Directors shall be conducted in strict compliance with the requirements of the Brown Act. The Board may hold noticed public workshops or meetings between the first and second vote as necessary to foster further consensus-based discussion of the matter. Consideration of viewpoints and alternatives will be particularly important for any Directors that could not support the topic at the first vote. The duration of this consensus review period is at the discretion of the Board.

3.9.2.4 Second Vote. After the prescribed period of time has passed, the Board will place the item on the agenda for a second vote. At that time, Directors will discuss the item under consideration with a particular emphasis placed on proposed alternatives that ideally achieve the interests of all Members. After a sufficient discussion period, the Board will conduct the second vote, which shall be final.

3.9.2.5 Dispute Resolution. In the event that an outcome of the second vote is considered untenable by one or more Members, the Member(s) may initiate the dispute resolution process provided by Section 18.9 of the Agreement.

3.10 Actions Not Subject to Consensus Voting Procedure. The Board may approve the regular monthly receivables by a simple majority vote, rather than the procedures required by Article 9 of the Agreement and Section 3.9 of these Bylaws, so long as the routine costs and bills making up the regular monthly receivables have not been objected to by any Director. A Director may

voice an oral objection at the meeting or file an objection in writing prior to the meeting. Likewise, any meeting of the Board may be adjourned by a simple majority vote.

3.11 Roll Call Vote. The vote on resolutions, ordinances, and on such other matters as may be requested by majority of the Board or required by law, shall be accomplished by roll call vote and the vote of each Director shall be entered upon the minutes of such meeting.

3.12 Supermajority Voting. When a supermajority vote is required by Section 9.3 of the Agreement, it shall be determined as follows:

3.12.1 If either six (6) or seven (7) Directors are in attendance and eligible to vote, a supermajority shall mean six (6) affirmative votes.

3.12.2 If only six (6) Directors are in attendance and one (1) of those six (6) Directors is prevented from voting due to a conflict of interest, a supermajority vote shall mean five (5) affirmative votes.

3.12.3 If only six (6) Directors are in attendance and two (2) of those six (6) Directors are prevented from voting due to a conflict of interest, a supermajority shall mean four (4) affirmative votes, provided that all four (4) affirmative votes are by Member Directors.

3.12.4 If fewer than six (6) Directors are in attendance at the meeting, a matter subject to a supermajority vote pursuant to Section 9.3 shall not be called for a vote.

3.13 Unanimous Vote. Provisions the Agreement requiring a unanimous vote of the Board shall mean a unanimous vote of the Directors present at the meeting.

3.14 Rules of Order. All rules of order not otherwise provided for in these Bylaws shall be determined, to the extent practicable, in accordance with "Robert's Rules of Order"; provided, however, that no action shall be invalidated or its legality otherwise affected by the failure or omission to observe or follow "Robert's Rules of Order."

3.15 Minutes. The Executive Director shall prepare written minutes of the Board meetings, which shall be available for public inspection when approved by the Board. The record shall contain the votes and abstentions on each matter for which a vote is taken.

ARTICLE 4

BOARD OFFICERS, EXECUTIVE DIRECTOR AND STAFF

4.1 Officers. Officers of the Agency shall be as set forth in Section 7.2 of the Agreement and elected as set forth in Section 7.2.

4.2 Term of Board Officers. The term of office for officers shall be one year and elections shall be held at first meeting at the start of the fiscal year. Officers may serve consecutive terms with no limit.

4.3 Board Secretary. The Secretary may, with oversight, assign designated day-to-day responsibilities to be carried out by the Executive Director. The Executive Director shall keep the administrative records of the Agency, act as secretary at meetings of the Agency, record all votes and keep a record of the proceedings of the Agency to be kept for such purpose, and perform all duties incident to the Secretary's office. The Executive Director shall maintain a record of all official proceedings of the Board. The Executive Director shall also establish and maintain a list of persons interested in receiving notices regarding plan preparation, meeting announcements, and availability of draft plans, maps, and other relevant documents pursuant to Water Code Section 10723.4.

4.4 Executive Director. The Executive Director shall be appointed by, and serve at the pleasure of, the Board. The Executive Director shall have general supervision over the administration of Agency business and affairs, subject to the direction of the Board. Compensation shall be set by contract with the Executive Director. The Executive Director may execute contracts, deeds, and other documents and instruments as authorized by the Board. The Board shall maintain a job description of the duties and requirements of the Executive Director.

4.5 General Counsel. The Agency's General Counsel shall serve at the pleasure of the Board of Directors. General Counsel shall be appointed by the Board, and shall be directly responsible to the Board. The General Counsel shall give advice or written opinions as needed and/or directed by the Board, and shall prepare proposed resolutions, laws, rules, contracts, and other legal documents for the Agency as directed by the Board Chair, Executive Committee, or Board of Directors. The General Counsel shall attend to all lawsuits and other matters to which the Agency is a party or in which the Agency may be legally interested and do such other things pertaining to the General Counsel's office as may be requested. Additionally, the General Counsel shall, when deemed appropriate or called upon, seek the advice and consultation of the legal counsels, and possibly staff, from Agency Members on legal issues facing the Agency. Agency General Counsel will recommend appointment of Special Counsel for matters involving more specialized legal service as required. Compensation for General Counsel shall be set by agreement between the Agency and General Counsel approved by the Board.

4.6 Principal Office. The principal office of the Agency is 428 Bryant Circle, Ojai, CA 93023. It may be changed at any time by a vote of the Board.

4.7 Staff Compensation. Staff of the Agency shall receive compensation as set by written contract approved by the Board. When, and only if, specifically authorized by the Board in advance, staff may receive reimbursement of their actual and necessary expenses incurred in carrying out Agency business at the then current IRS reimbursement rate.

4.8 Fiscal Agent and Treasurer. The Treasurer and Auditor for the Agency shall be appointed as set forth in Section 13.3 of the Agreement. The Treasurer shall be depository for and shall have the responsibility for all money of the Agency from whatever source. All funds of the Agency shall be strictly and separately accounted for and regular reports shall be rendered of all receipts and disbursements during the fiscal year, as designated by the Board. The books and records of the Agency shall be open to inspection by the Member and Stakeholder Directors, and the Treasurer shall provide strict accountability of said funds in accordance with Government

Code sections 6505 and 6505.5 and all other applicable provisions of law, including any amendments thereto.

4.9 Consultants. The Agency may, by vote of the Board, hire and engage consultants to assist the Agency in carrying out its functions and duties. Consultants shall possess the technical background, expertise, and experience necessary to perform the work directed by the Board.

4.10 GSP Project Manager. The Agency may, by vote of the Board, hire and engage a consultant to assist in preparation and implementation of a Groundwater Sustainability Plan ("GSP"). This position shall be named the GSP Project Manager and shall be responsible for preparing and implementing the GSP, as directed by the Board. An engineering or other technical firm may perform these duties; but, if performed by a firm, an individual shall be appointed to serve as the primary project manager. In preparing the GSP, the Agency's GSP Project Manager may consult with any committee established by the Board, as directed by the Board. The Agency's GSP Project Manager shall also provide technical information and reports to the Board as needed and/or directed by the Board. Following the adoption of the GSP, the Agency's GSP Project Manager shall be responsible for all work needed to implement the terms of the GSP as directed by the Board, including, if so directed, the preparation of an annual report.

ARTICLE 5

DIRECTOR COMPENSATION AND EXPENSES

5.1 Compensation. Directors are not compensated by the Agency for their service.

5.2 Expenses. If previously approved by the Board, a Director shall receive actual, reasonable, and necessary reimbursement for travel, meals, lodging, registration, and similar expenses incurred in performing Agency business. The reimbursement rates for lodging shall not exceed the posted rates for a trade conference. If lodging at the posted rates is not available, the reimbursement rate shall be comparable to the posted rates. For travel of 250 miles or less, directors shall be reimbursed at the IRS mileage rate. For travel over 250 miles, directors shall be reimbursed at a rate determined by the Board. As used herein, "transportation" includes travel to and from terminals. Automobile rental expenses shall be approved in advance. Reimbursement for meals shall be at the rate established by the IRS or actual reasonable cost not to exceed $90 per day. Reimbursement will not be provided for alcoholic beverages. Directors may declare the amount of the meal under penalty of perjury in lieu of receipts if the amount is less than the IRS rate. Claims for expense reimbursement shall be submitted to the Board on forms provided by the Agency within 30 days after the expense has been incurred. The Executive Director shall determine whether the claim satisfies the requirements of this section, and if the claim is denied, the claimant may appeal to the Board. In accordance with Government Code Section 53065.5, the Agency shall, at least annually, disclose any reimbursement paid within the immediately preceding fiscal year of at least one hundred dollars ($100) for each individual charge. The disclosure requirement shall be fulfilled by including the reimbursement information in a document published or printed at least annually by a date determined by that Board and shall be made available for public inspection.

ARTICLE 6

COMMITTEES

6.1 Establishment of Advisory Committees. In accordance with Article 12 of the Agreement, the Board may from time to time establish advisory committees for the purpose of making recommendations to the Board on the various activities of the Agency. The establishment of any advisory committee and its duties shall require a vote of the Board. Advisory committees may be established as standing or ad hoc committees.

6.2 Establishment of Standing Committees. The Board may from time to time establish standing committees for the purpose of making recommendations to the Board on the various activities of the Agency. The establishment of any standing committee and its duties shall require a vote of the Board. The Board may by vote dissolve a standing committee at any time.

6.3 Conduct of Standing Committees. All standing committee meetings shall be noticed, held, and conducted in accordance with the provisions of the Brown Act. The Board may further establish rules of conduct for said standing committees. Each standing committee shall establish a time and place for regular meetings and may call special meetings in the same manner as the Board. Standing committee meetings shall be recorded and minutes prepared, which, upon approval, shall be distributed to the Board.

6.4 Standing Committee Membership. Standing committee membership and appointments shall be at the Board's sole discretion. Likewise, the Board shall have the sole discretion to remove or admonish any member, or members, of any standing committee at any time. The Board may, at its sole discretion, appoint an alternate to any standing committee.

6.5 Standing Committee Direction. In establishing a standing committee, the Board shall provide specific direction to the standing committee as to its tasks, expected duration for completion of its tasks, and a summary of the resources, including staff or consultant support available to the standing committee in performing its tasks.

6.6 Executive Committee. The Board may establish a standing committee named the Executive Committee. The Executive Committee, when specifically designated and assigned by the Board, may advise the Board on the development and implementation of the GSP and work with the Executive Director as needed. The Board shall establish the time and place for Executive Committee meetings in consultation with the members of the Committee.

6.7 Ad Hoc Committees. The Board may from time to time establish ad hoc committees for the purpose of making recommendations to the Board on the various activities of the Agency. The establishment of any ad hoc committee and its duties shall require a vote of the Board. Ad hoc committees shall exist for the term specified in the action creating the committee and the Board may dissolve an ad hoc committee at any time through a vote of the Board. Ad hoc committees made of less than a quorum of the Board shall not be required to comply with the provisions of the Brown Act.

ARTICLE 7

BUDGET AND FINANCES

7.1 Budget. The Agency shall operate pursuant to an operating budget adopted in accordance with Section 14.1 of the Agreement. The Agency shall endeavor to operate each year pursuant to an annually balanced budget so that projected annual expenses do not exceed projected annual revenues. If the Executive Director or Chair determines the approved budget is inadequate, he or she shall submit recommended modifications to the Board for consideration and action. The Executive Director shall implement the approved or revised budget; provided, however, that all expenditures for capital improvements shall be approved by the Board before they are undertaken.

7.2 Approval of Warrants and Signature of Checks. The Board shall approve all warrants and authorize issuance of checks in payment thereof. A check register showing the check number, payee, amount, and the purpose of each check, as prepared by the Treasurer, will be sent to the Board as required by law. Checks in payment of utility bills, postage, payroll, payroll taxes, credit union collections, petty cash, emergency repairs, invoices subject to discount and interfund transfers, and similar payments may be disbursed prior to Board approval. Such items shall be set forth on the next regular check register and presented to the Board.

7.3 General and Special Books of Account. The Executive Director, in concordance with the Treasurer, shall maintain books of account in accordance with accepted accounting principles showing the status of all monies received and disbursed. Such general and special fund accounts shall be maintained as are necessary to accomplish the purpose of the Agency.

7.4 Fund Depositories. All funds of the Agency shall be deposited into the Agency's bank account. If the Board desires to designate a new depository for Agency funds, the Board shall do so through formal action and amendment of these Bylaws.

ARTICLE 8

DEBTS AND LIABILITIES

8.1 Debts and Liabilities. Except as may be specifically provided for in the Agreement and/or California Government Code Section 895.2, as amended or supplemented, the debts, liabilities and obligations of the Agency are not and will not be the debts, liabilities, or obligations of any or all of the Members. The Members may amend the Agreement to be jointly and/or severally liable, in whole or in part, for any debt, obligation or liability of the Agency, including but not limited to, any bond or other debt instrument issued by the Agency.

ARTICLE 9

RECORDS RETENTION

9.1 Records Retention Policy. The Agency shall adopt a records retention policy. This policy will provide criteria and procedures for the retention or destruction of Agency records.

9.2 Maintenance and Inspection of Agreement and Bylaws. The Agency will keep at its principal executive office the original or copy of the Agreement and these Bylaws, as amended to date, which will be open to inspection by any Director, Member, and all members of the public at all reasonable times during office hours.

9.3 Inspection Rights of Members. Provided that upon the advice of General Counsel no legal conflict exists, any Member may inspect any record of the Agency, including, but not limited to, the accounting books and records and minutes of the proceedings of the Board and committees of the Board, at any reasonable time. A designated representative of the entity may make any inspection and copying under this section, and the right of inspection includes the right to copy.

9.4 Inspection by Directors. Provided that upon the advice of General Counsel no legal conflict exists, any Director may inspect any record of the Agency, including, but not limited to, the accounting books and records and minutes of the proceedings of the Board and committees of the Board, at any reasonable time. A designated representative of the Director may make any inspection and copying under this section, and the right of inspection includes the right to copy.

9.5 Inspection by the Public. As directed and permitted by law, Agency records are open to inspection by the public.

ARTICLE 10

EMAIL POLICY

10.1 Purpose and Scope. The purpose of this Article is to establish rules for appropriate use of Agency email accounts. This policy is intended to ensure compliance with applicable policies and laws and advise officials and employees of their responsibilities in using Agency email accounts. This policy applies to all email accounts assigned to officials and employees by the Agency.

10.2 Assignment of Email Account. Each member of the Board, including alternate directors, and each employee shall be assigned an Agency email account by the Agency ("Agency Email Accounts").

10.3 Use of Email Accounts. Agency Email Accounts shall be used only to transact Agency business. Agency Email Accounts shall not be used for: (1) personal purposes unrelated to Agency business; (2) discriminatory, unethical, or unprofessional activities; (3) personal gain; (4) any purposes that would jeopardize the legitimate interests of the Agency; or (5) any purposes that would violate any law. Agency Directors, officers, and employees shall not use personal email accounts to transact Agency business.

10.4 Privacy and Disclosure. There is no expectation of privacy in the use of Agency Email Accounts. All communications sent or received on Agency Email Accounts may be subject to disclosure under the California Public Records Act or other disclosure laws, unless an exception provided in law applies.

10.5 Security. Agency Directors, officers, and employees shall take reasonable precautions to prevent the use of Agency Email Accounts by any person other than the account holder.

ARTICLE 11

CODE OF ETHICS

11.1 Declaration of Policy. The proper operation of democratic government requires that public officials and employees be independent, impartial and responsible to the people; that government decisions and policy he made in the proper channels of the governmental structure; that public office not be used for personal gain; and that the public have confidence in the integrity of its government. In recognition of these goals, there is hereby established a code of ethics for all Directors, officers, and employees, whether elected or appointed, paid or unpaid. This article establishes ethical standards of conduct for Agency Directors, officers, and employees by setting forth those acts or actions that are incompatible with the best interests of the Agency and by directing the disclosure of private financial or other interests in matters affecting the Agency. Agency Directors, officers, and employees shall comply with this Article, in addition to all applicable State and Federal ethics laws and regulations.

11.2 Responsibilities of Public Office. Public officials and employees are agents of public purpose and hold office for the benefit of the public. They are bound to uphold the United States and State Constitutions and to carry out impartially the laws of the nation, State, and the Agency, and to foster respect for all governments. They are bound to observe, in their official acts, the highest standards of performance and to discharge faithfully the duties of their office, regardless of personal considerations. Recognizing that the public interests must be their primary concern, their conduct in both their official and private affairs should be above reproach.

11.3 Dedicated Service. Directors, officers, and employees owe a duty of loyalty to the political objectives expressed by the electorate and the programs developed by the Board to attain those objectives. Directors, officers, and employees should adhere to the rules of work and performance established as the standards for their positions. Directors, officers, and employees should not exceed their Agency authority or breach the law, or ask others to do so, and owe a duty to cooperate fully with other public officials and employees unless prohibited from so doing by law or by the officially recognized confidentiality of their work.

11.4 Fair and Equal Treatment. The canvassing of members of the Board, directly or indirectly, to obtain preferential consideration in connection with any appointment to the municipal service, shall disqualify the candidate for appointment, except with reference to positions filled by appointment by the Board. Directors, officers, and employees shall not request or permit the use of Agency-owned vehicles, equipment, materials, or property for personal convenience or profit. Services may be available to Directors, officers, and employees when such services are made available to the public generally or when provided for the use of such a Director, officer, or employee in the conduct of official business. Directors, officers, and employees shall not grant special consideration, treatment, or advantage to a member of the public beyond what is available to every other member of the public.

11.5 Political Activities. Directors, officers, and employees shall not solicit or participate in soliciting a contribution to a political party during working hours on property owned by the Agency and shall conform to the provisions of Government Code Sections 3201, *et seq.* Directors, officers, and employees shall not promise appointment to a position with the Agency.

11.6 Ex Parte Communications. A written communication received by a Director, officer, or employee relevant to an item under consideration by the Board shall be made part of the record

of decision on that item. A communication concerning only the status of a pending matter shall not be regarded as an ex parte communication.

11.7 Avoidance of Impressions of Corruptibility. Directors, officers, and employees shall conduct their official and private affairs so as not to give a reasonable basis for the impression that they can be improperly influenced in the performance of public duties. Directors, officers, and employees shall endeavor to maintain public confidence in their performance of the public trust in the Agency. They should not be a source of embarrassment to the Agency and shall avoid even the appearance of conflict between their public duties and private interests.

11.8 No Discrimination in Appointments. No person shall be appointed to, removed from, or in any way favored or discriminated against with respect to any appointive administrative office because of such person's race, color, age, religion, gender identification, national origin, political opinions, affiliations, or functional limitation, as defined by applicable State or Federal laws, if otherwise qualified for the position or office. This provision shall not be construed to impair administrative discretion in determining the requirements of a position or in a job assignment of a person holding such a position, subject to review by the Board.

11.9 Agency Allegiance and Proper Conduct. Directors, officers, and employees shall not engage in or accept any private employment, or render services for private interest, when such employment or service is incompatible with proper discharge of official duties or would tend to impair independence of judgment or action in the performance of those duties. Directors, officers, and employees shall not disclose confidential information concerning the property, government, or affairs of the Agency, and shall not use confidential information for personal financial gain. Directors, officers, and employees shall not accept a gift in excess of limits established by State law. Directors, officers, and employees shall not accept any gift contingent upon a specific action by the Board. Directors, officers, and employees shall not appear on behalf of business or private interests of another before the Board where such appearance would create a potential of having to abstain from participating on that matter or would be incompatible with official duties. Directors, officers, and employees shall not represent a private interest of another person or entity in any action or proceeding against the interest of the Agency in any litigation to which the Agency is a party. A Director may appear before the Agency on behalf of constituents in the course of duties as a representative of the electorate or in the performance of public or civic obligations.

11.10 Penalties. In addition to any other penalties or remedies provided by law, violation of this Article shall constitute a cause for suspension, removal from office or employment, or other disciplinary action. In the case of misconduct by a Stakeholder Director or Agency employee, no disciplinary action shall be taken except upon notice and a hearing. In the case of misconduct by a Member Director, the matter shall be referred to the appointing Member for appropriate action as determined by the Member. If other Members are not satisfied by the action taken by the appointing Member, the Members may resort to the dispute resolution procedures set forth in Section 18.9 of the Agreement.

11.11 Ethics Training. All Directors shall be required to comply with Assembly Bill 1234. Directors that have complied with AB 1234 through service for a separate public agency are deemed to have satisfied this Section 10.11.

ARTICLE 12

CLAIMS AGAINST THE AGENCY

12.1 [RESERVED]

ARTICLE 13

PURCHASING POLICY

13.1 [RESERVED]

ARTICLE 14

INVESTMENT POLICY

14.1 [RESERVED]

ARTICLE 15

CONFLICT OF INTEREST CODE

15.1 [RESERVED]

ARTICLE 16

AMENDMENT

16.1 Amendment. These Bylaws may be amended from time to time by resolution of the Board. Any amendments must be in accordance with the terms of the Agreement.

ARTICLE 17

SPECIAL PROJECTS

17.1 Special Projects. The Agency may undertake Special Projects as permitted by Article 17 of the Agreement.

ARTICLE 18

MISCELLANEOUS PROVISIONS

18.1 No Predetermination or Irretrievable Commitment of Resources. Nothing in the Bylaws shall constitute a determination by the Agency or any of its Members that any action shall be undertaken or that any unconditional or irretrievable commitment of resources shall be made, until such time as the required compliance with all local, State, or federal laws, including, without limitation, the California Environmental Quality Act, National Environmental Policy Act, or permit requirements, as applicable, have been achieved.

18.2 Notices. Notices to a Director or Member hereunder shall be sufficient if delivered to the City Clerk, Board Clerk, or Board Secretary of the respective Director or Member and addressed to the Director or Member. Delivery may be accomplished by U.S. Postal Service, private mail service, or electronic mail.

18.3 Severability. Should any part, term or Article of the Bylaws be decided by a court of competent jurisdiction to be illegal or in conflict with any applicable federal law or any law of the State, or otherwise be rendered unenforceable or ineffectual, the validity of the remainder of the Bylaws shall not be affected thereby; provided, however, that if the remaining parts, terms, or Articles do not comply with the Joint Exercise of Powers Act, Government Code Sections 6500, *et seq.*, including all laws supplemental thereto, the Board shall amend the Bylaws to comply with law or rescind them in their entirety.

18.4 Singular Includes Plural. Whenever used in these Bylaws, the singular form of any term includes the plural form and the plural form includes the singular form.

LIST OF ALL BENEFICIAL USES AND USERS OF GROUNDWATER

Pursuant to Water Code Sections 10723.8(a)(4) and 10723.2, the Agency will consider the interests of all beneficial uses and users of groundwater, as well as those responsible for implementing a Groundwater Sustainability Plan ("Plan").

The Upper Ventura River Groundwater Agency ("Agency") has engaged stakeholders in the development of the Agency to serve as the groundwater sustainability agency ("GSA"). For example, during development of the joint powers authority agreement ("JPA Agreement") forming the Agency, the signatory members held numerous public meetings to discuss important terms to be included in the JPA Agreement. The signatory members also held multiple stakeholder outreach meetings to engage and educate stakeholders within the Upper Ventura Basin ("Basin") about the requirements of the Sustainable Groundwater Management Act ("SGMA"), the JPA Agreement, and the Agency's intention to form a GSA for the Basin. In addition to the Agency's public outreach efforts, it also designated two seats on its seven-seat Board of Directors for Stakeholder Directors: one seat is reserved for an Agricultural Stakeholder Director and one seat is reserved for an Environmental Stakeholder Director.

The Agency plans to continue its practice of seeking broad stakeholder engagement in management of the Basin's groundwater resources as it undertakes the process to develop and implement the Plan for the Basin over the next several years. The Agency will solicit and welcome participation from the following stakeholder groups:

Holders of Overlying Groundwater Rights, including:

- **Agricultural Users.** There are agricultural users of groundwater operating on land overlying the Basin. To account for these users' interests, the Agency designated a seat on its seven-member governing board to be filled by an Agricultural Stakeholder Director. The Agricultural Stakeholder Director is appointed from nominations received by the Ventura County Farm Bureau. The Agricultural Stakeholder Director is responsible for engaging the Basin's agricultural users of groundwater and representing their interests before the Agency.
- **Domestic Well Owners.** There are many domestic wells overlying the Basin. It is believed that the majority—if not all—of these domestic well owners are de minimus users, as defined by SGMA. The Agency anticipates that the Plan will address the collective interests of domestic users of groundwater wells and plans to engage in outreach to domestic well owners throughout the development of the Plan through inviting their participation in the Agency's public meetings and reserving a seat for domestic well owners on a to-be-established advisory committee.

Municipal Well Operators. The Agency is a joint powers authority created by five local public agencies. Two of the Agency's signatory members—the City of San Buenaventura and Casitas

Municipal Water District—operate municipal wells within the Basin and are represented on the Agency's Board of Directors.

Public Water Systems. The following public water systems are located within the Agency's boundaries:

- Casitas Municipal Water District
- Casitas Mutual Water Company
- Del Vasco Mutual Water Company
- Krotona Institute of Theosophy
- Meiners Oaks Water District
- Ojala Mutual Water Company
- Rancho Del Cielo Mutual Water Company
- Sheriff's Honor Farm
- Tico Mutual Water Company
- Ventura River Water District
- Ventura Water (City of San Buenaventura)
- Villanova Road Water Well Associates

Signatory members to the JPA Agreement forming the Agency, as well as the Agency itself, have communicated with these entities throughout development of the JPA Agreement and the Agency's decision to form a GSA for the Basin. The Agency will continue to communicate with these entities concerning Plan development and implementation and opportunities to participate in the process, including through the advisory committee to be established. In addition to holding multiple public meetings, the Agency also plans to retain a seat on an advisory committee for a representative chosen from among the public water companies overlying the basin.

Local Land Use Planning Agencies. Both the County of Ventura ("County") and the City of Ojai have land use planning authority on land overlying the Basin. The County is a signatory member to the JPA Agreement forming the Agency and represented on the Agency's Board of Directors. As noted above, although the City of Ojai declined to patriciate in the JPA, the Agency intends to coordinate with the City of Ojai and keep them informed about Plan development activities through public meetings and other outreach.

Environmental Users of Groundwater. There are numerous environmental organizations dedicated to preserving and maintaining environmental values operating within the boundaries of the Basin. To account for these users' interests, the Agency designated a seat on its seven-member governing board to be filled by an Environmental Stakeholder Director. The Environmental Stakeholder Director is appointed from nominations received from local environmental nonprofit organizations supportive of the Basin's groundwater sustainability. The Environmental Stakeholder Director is responsible for engaging stakeholders within the Basin representing environmental users of surface and groundwater and representing their interests before the Agency.

Surface Water Users, if there is a hydrologic connection between surface and groundwater bodies. Based on past studies performed in the Basin, there is a hydrologic connection between surface and groundwater in certain areas of the Ventura River. The State Water Resources Control Board ("SWRCB") identifies five entities and/or individuals that have claimed either riparian or appropriative surface water rights to the Ventura River. Three of these five rights holders are signatory members to the JPA Agreement forming the Agency and represented on the Agency's Board of Directors. The Agency plans to engage with the other two water rights holders throughout development of the Plan to better understand and take into account their interests.

Federal Government, including, but not limited to, the military and managers of federal lands. N/A. No land overlying the Basin is managed by the Federal Government.

California Native American Tribes. A representative of overlying California Native American tribes is on the Agency's interested parties list, as a result of which this individual receives notices of all Agency meetings and other stakeholder involvement opportunities.

Disadvantaged Communities, including, but not limited to those served by private domestic wells or small community water systems. The community of Casitas Springs is recognized as a disadvantaged community. The community is served by Casitas Mutual Water Company, Ventura River Water District, and Casitas Municipal Water District, the latter two being signatory members to the JPA Agreement forming the Agency. Thus the community is represented on the Agency's Board of Directors. The Agency also plans to form an advisory committee and reserve a seat for domestic well owners.

Entities Listed in Section 10927 that are Monitoring and Reporting Groundwater Elevations in all or a part of the Groundwater Basin Managed by the GSA. The County is the designated California Statewide Groundwater Elevation Monitoring ("CASGEM") entity for the Basin. The County is a signatory member to the JPA Agreement forming the Agency and represented on the Agency's Board of Directors.

The Agency's and other stakeholders' roles and responsibilities will be further developed and defined in the Sustainability Plan. The Agency's staff welcomes feedback during this process from the State, any of the agencies or organizations listed herein, and any other interested stakeholders.

If the Department of Water Resources ("DWR") requires anything further prior to the acceptance of this notification of the Agency's election to serve as the GSA for the Basin, please address your inquiry to:

Bruce Kuebler
Ventura River Water District
409 Old Baldwin Rd.
Ojai, California 93023

Appendix D

Santa Barbara Channelkeeper v. State Water Resources Control Board and the City of San Buenaventura (Los Angeles County Superior Court, Case No. 19STCP01176) Settlement Agreement and Amendments

Chanelkeeper**'s First Amended Complaint**