



CHINO BASIN WATERMASTER

48TH ANNUAL REPORT

FISCAL YEAR 2024-25



SUPPORTING MORE THAN FOUR DECADES OF
PARTNERSHIPS AND SOLUTIONS FOR A SUSTAINABLE FUTURE

WATERMASTER AND BASIN MILESTONES

1970s

Conflicts over water threaten supply reliability, water quality, and the regional economy. In 1973, a pump tax is enacted to raise money to implement recharge projects.

1978

Chino Basin is adjudicated and the Chino Basin Municipal Water District Board is appointed as Watermaster. Planning and funding are initiated to manage the Basin.

1998

The nine-member Watermaster Board is created and tasked with developing the Optimum Basin Management Program (OBMP).

1999

The first OBMP provides a detailed blueprint to ensure a reliable water supply and quality.

2000

Stakeholders enter into the Peace Agreement, advancing the OBMP Implementation Plan. Basin monitoring begins in earnest, as does the first desalter expansion.

2002

The Recharge Master Plan implementation and funding agreement advances the \$40 million Chino Basin Facilities Project, securing grant funding for approximately half the cost.

2004

Santa Ana Regional Water Quality Control Board (Santa Ana Water Board) adopts the Max Benefit Salinity Management Program, enabling a massive recycled water and supplemental water recharge program and desalter expansion to achieve Hydraulic Control.

2007

Stakeholders enter into the Peace II Agreement for a second desalter expansion to meet the Maximum Benefit commitments, securing millions in grant funding and hundreds of millions in cost savings and benefits.

2013

The 2013 Amendment to the 2010 Recharge Master Plan Update (RMPU) reflects providers' revised Urban Water Management Plans, forming the foundation for cost-effective recharge using storm, imported, and recycled water to improve water quality and ensure a reliable supply. Recharge improvement projects begin.

2016

The Chino Basin Desalter Authority demonstrates Hydraulic Control. Desalter expansion continues.

2018

Appeals to the first Safe Yield Reset Court Order conclude, and the first Safe Yield Reset is adopted effective 2011; Safe Yield is set at 135,000 acre-feet per year.

2020

The 2020 OBMP is developed with stakeholder input and adopted by the Watermaster Board, updating the 20-year-old document. The Court orders a second Safe Yield Reset, setting the Safe Yield at 131,000 acre-feet per year.

2021

The Court approves an expansion of the current Storage Management Plan, from 500,000 acre-feet to 700,000 acre-feet, until 2030.

2023

Adaptive Management strategies are adopted, further increasing local water reserves.

2024

The Environmental Impact Report for the OBMP Update is certified.

2025

The Court allows for an increase in safe storage capacity to 900,000 acre-feet until June 30, 2040.

A MESSAGE FROM CHINO BASIN WATERMASTER

A YEAR OF TRANSITIONS AND PROGRESS

Once again, Chino Basin experienced a year defined by changes and transitions, both expected and unforeseen. All year, Watermaster has worked to meet the ongoing challenges for local water management, guided by our commitment to our core principles and management practices:

- **Adaptive management.** Whether reacting to the ongoing challenges of a shifting hydrologic cycle or planning for the impacts of continued development in the Basin, Watermaster remains dedicated to using adaptive management principles to sustainably manage our changing water landscape.
- **Productive stakeholder engagement.** By maintaining broad, effective engagement, the Watermaster Board, Pools, and Committees ensured an environment of openness and dialogue in addressing issues such as changes in hydrology, water use projections, and contract interpretations.
- **Collaboration.** Our most essential tool remains the broad spirit of collaboration among the Parties and stakeholders, which helps us navigate complex interests and manage the Basin responsibly.

These guiding principles led to progress on several critical projects in 2024–25.

- **The Court-ordered 2025 Safe Yield Reevaluation Report is substantially complete.** The report is undergoing a comprehensive independent peer review based on a scope of work approved by the Board and developed by Watermaster staff in conjunction with the Parties this year.
- **Work on the OBMP continues to advance.** Watermaster remains focused on effective long-term management and has updated the Chino Valley groundwater model and advanced discussions on adapting long-term recharge strategies, including measures to mitigate the potential loss of recharge areas that are currently in use.
- **Ongoing improvements to operational efficiency and effectiveness** this year include increased budget transparency and technology changes that save money and improve our connections with stakeholders.

The progress described in this Annual Report is possible only because of the collaboration and commitment exhibited by all stakeholders in the Basin. Thanks to the dedication and support of the Watermaster Board, Advisory Committee, Pools, and staff, I am confident that we are well positioned to adapt to all the changes we see ahead and to sustainably manage the Basin for the benefit of all stakeholders. I look forward to charting this future with you.

Todd M. Corbin
General Manager, Chino Basin Watermaster

PARTNERS IN BASIN MANAGEMENT

ADAPTIVE MANAGEMENT FOR A RESILIENT FUTURE

SAFE YIELD REEVALUATION FOR A CHANGING BASIN

The Safe Yield Reevaluation (SYR) is the most significant initiative of fiscal year (FY) 2024–25. This in-depth, Court-mandated review of the Chino Basin's sustainable pumping limit is the first since 2020. Current analyses indicate that conditions have shifted.

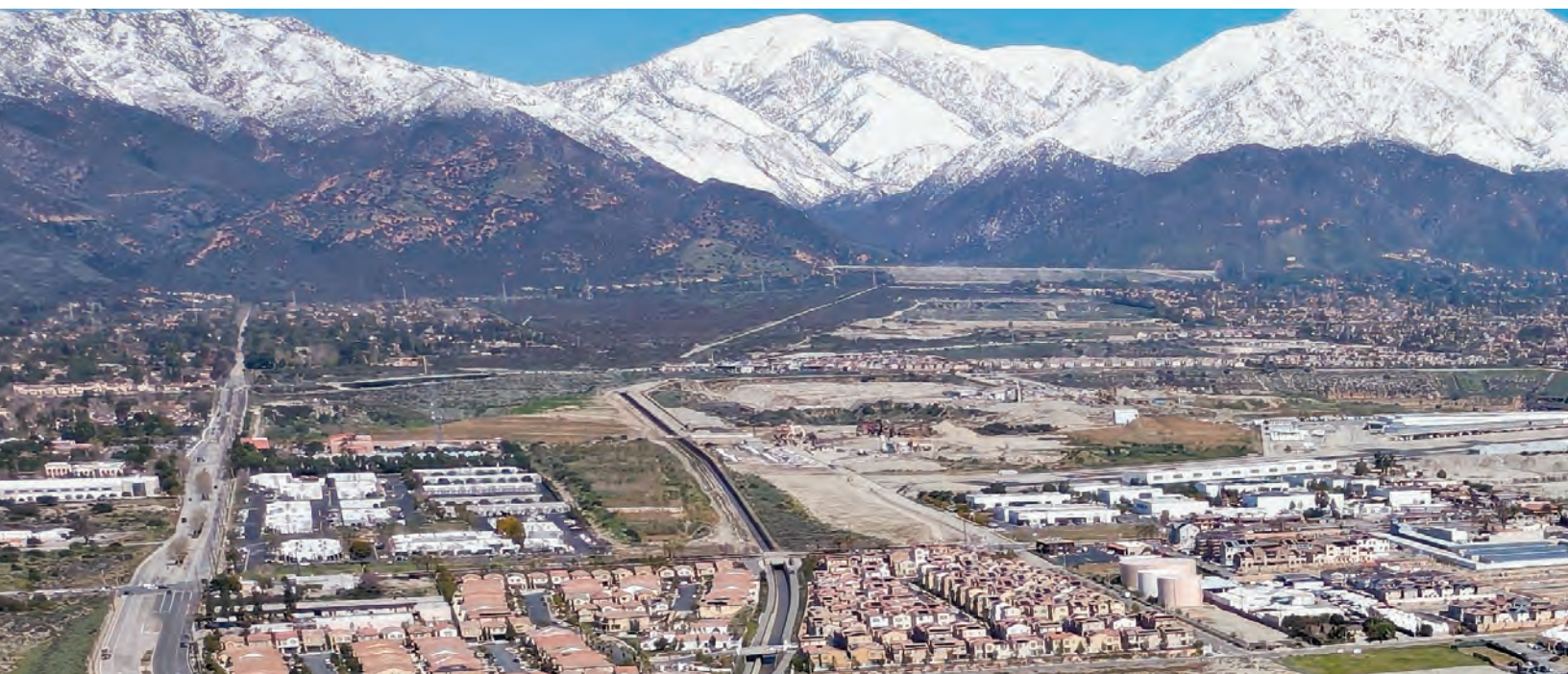
Watermaster hosted three workshops in FY 2024-25, which served as pivotal forums for collaboration and transparency. Participants reviewed preliminary modeling results, collaborated to finalize scenarios of projected conditions, and discussed thresholds for evaluating unacceptable impacts from pumping behaviors known as Material Physical Injury (MPI). All feedback was circulated and integrated into the documents.

Water Plan Scenarios were developed for each agency, outlining scenarios for expected, low, and high water use. These scenarios, a central feature of the SYR, combine historical pumping, conservation data, and projected demands and climate conditions in the Chino Valley Model. Stakeholders aligned Watermaster worked with stakeholders to develop water supply and demand projections.

Reduced irrigation and pumping have reduced Basin recharge and, in turn, the Safe Yield. Watermaster's and the municipal agencies' conservation and recharge goals have created a paradox of success: storage levels are at record highs and water conservation is strong, yet both conditions reduce the incidental recharge to the Basin. In addition, changing rainfall patterns and growth of impervious land cover are diminishing natural recharge. These cumulative effects led to a reduction in the net recharge into the Basin.

As part of standard Safe Yield review practice, the Watermaster Board requested an independent peer review. This review will ensure the analysis is scientifically sound, enhance transparency, and increase the confidence of the Court and stakeholders.

The technical work for the determination of the Safe Yield is expected by December 2025. In the coming months, Watermaster will collaborate in completing the Board-directed peer review and finalizing the technical models to determine the Safe Yield. The results will then undergo stakeholder review and discussion.



THE FINAL SYR WILL PROVIDE A SCIENTIFICALLY VALIDATED, BROADLY SUPPORTED FOUNDATION FOR SUSTAINABLE GROUNDWATER MANAGEMENT IN THE NEXT DECADE.

FROM RECORD DROUGHT TO RECORD RECHARGE

Exceptional recharge has positioned the Basin in a strong hydrologic position entering 2025. Groundwater levels are up, storage is high, and the Basin remains balanced despite massive climatic swings. These conditions and adaptive pumping operations enhance drought resilience and help maintain Hydraulic Control, preventing unwanted groundwater outflow.

RECHARGE OPPORTUNITIES IN A TIME OF EXTREMES

Turning two wet years into long-term reliability. After the driest 24-year period on record (1999–2022), the Chino Basin experienced two very wet years, and Watermaster made every drop count. Thanks to basin-wide coordination and years of infrastructure preparation, Watermaster’s stakeholders managed to recharge and store about 156,000 acre-feet of water over these two years. During the current fiscal year, recharge efforts added about 40,000 acre-feet to the Basin despite below-average rainfall.

INCREASED STORAGE LIMITS WILL ALLOW GREATER OPERATIONAL FLEXIBILITY

By the end of FY 2023–24, total managed groundwater storage had climbed to roughly 709,000 acre-feet, an all-time high that exceeded the then-current Safe Storage Capacity in the Chino Basin, a Court-approved volume limit for managed groundwater storage.

In December 2024, Watermaster filed a court motion to increase the Chino Basin’s Safe Storage Capacity to 900,000 acre-feet, a volume determined to be non-injurious based on recent technical work. In January 2025, the Court approved the increase through June 30, 2040, ensuring that Watermaster Parties have the flexibility to add to their storage accounts in wet years without harming the Basin.

ECONOMIC STUDY WILL PROVIDE CLARITY ON MANAGEMENT COSTS AND BENEFITS

Identifying the costs and benefits of different management choices. Watermaster launched a comprehensive economic study to evaluate financial and economic factors in Chino Basin water management. This study is intended to inform long-term planning and decision-making by clarifying the economic costs and benefits of various management actions.

San Bernardino Mountains and the valley below.



NEAR-RECORD STORAGE LEVELS CONFIRMED THE EFFECTIVENESS OF WATERMASTER’S ADAPTIVE MANAGEMENT, WHICH IS KEEPING THE BASIN STABLE THROUGH RECORD-SETTING VARIABILITY.

PLANNING FOR THE BASIN'S NEXT CHAPTER

Watermaster introduces forecasting and regulatory updates to guide the next generation of Basin management.

RENEWAL OF PEACE AGREEMENTS AND THE WATER RIGHTS & REPLENISHMENT FORECASTING (WRRF) TOOL

LAYING THE FOUNDATION FOR THE NEXT PHASE OF BASIN MANAGEMENT

The Peace (2000) and Peace II (2007) Agreements marked major milestones in Chino Basin history, establishing Watermaster's governance framework and enabling broad regional cooperation.

Peace II also delivered major benefits, including construction of the desalters, creation of 400,000 acre-feet of increased storage capacity in the Basin, and water supply and quality savings worth hundreds of millions of dollars.

In late FY 2023–24, Watermaster reminded the Parties that they must meet by December 31, 2025, to consider continuing or modifying the Peace Agreements. Either the Agricultural or the Appropriative Pool may also choose to unilaterally extend the agreements by up to 30 years.

WRRF TOOL BRINGS A NEW ERA OF DATA-DRIVEN WATER MANAGEMENT

The WRRF tool is a new analytical platform supporting negotiations for the renewal of the Peace Agreements. The WRRF models water rights transfers, managed storage, and replenishment obligations between Parties. Users can adjust variables such as desalter pumping, land use changes, and voluntary agreements while visualizing impacts on production rights and storage balances.

In October 2024, Watermaster hosted hands-on stakeholder workshops to demonstrate the tool and gather feedback. That feedback was used to further refine the tool's interface and ensure that its logic reflects real-world operations.

The WRRF tool provides a fact-based, transparent framework to evaluate potential rule changes and supports informed negotiation under the evolving Peace Agreements. The WRRF tool is expected to play a vital role in shaping future water allocation strategies and enhancing transparency in basin-wide planning.



The Prado Basin.

PROGRESS ON THE BASIN PLAN AMENDMENT TO REVISE THE MAXIMUM BENEFIT SNMP

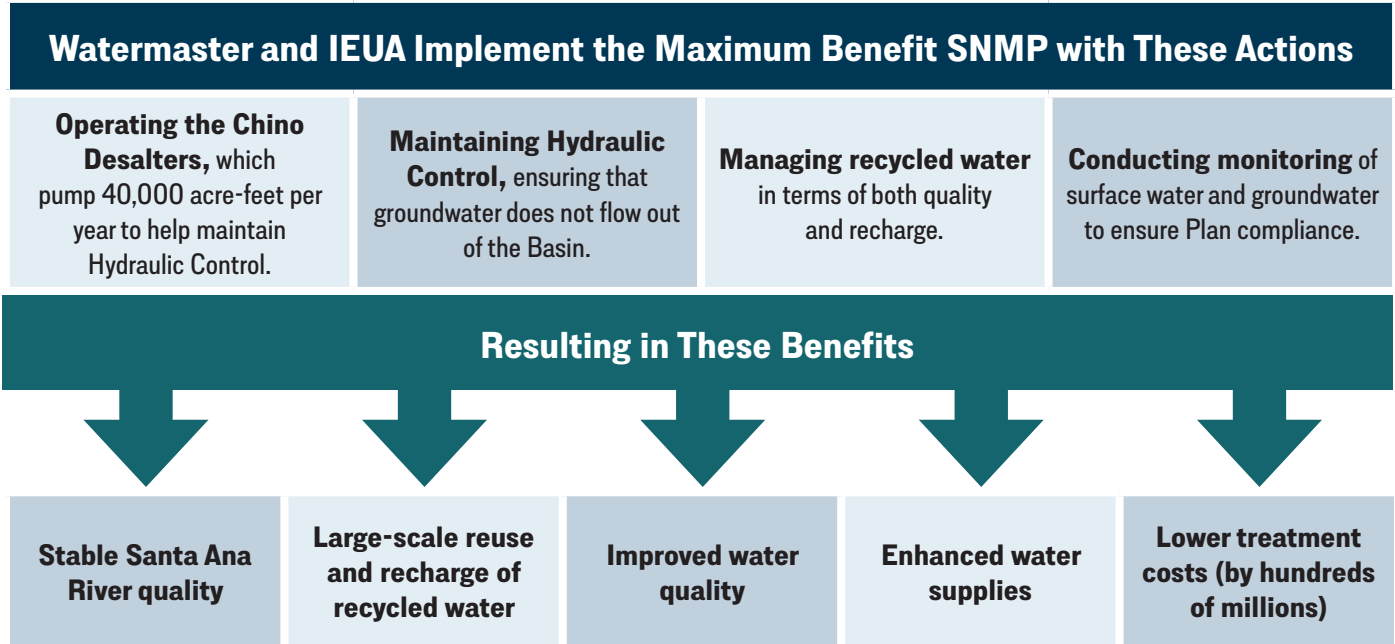
A multi-year partnership to protect the Santa Ana River and sustain Chino Basin water quality for the future.

The Chino Basin Watermaster and Inland Empire Utilities Agency (IEUA), in coordination with the Santa Ana Water Board, are leading a multi-year effort to amend the Basin Plan and update the Maximum Benefit Salt and Nutrient Management Plan (SNMP), first adopted in 2004.

The SNMP allows the use of recycled water for recharge and reuse while maintaining Hydraulic Control and protecting Santa Ana River water quality. The amendment modernizes salt management by revising IEUA's recycled water salinity compliance metric from a one-year to a 10-year volume-weighted average, which avoids unnecessarily triggering mitigations during droughts. It also incorporates planned recycled water use by the Jurupa Community Services District (JCSD), extending program benefits while maintaining water quality safeguards.

In FY 2024-25, the Maximum Benefit Agencies—Watermaster, IEUA, and JCSD—supported Santa Ana Water Board staff in preparing a fully accessible amendment package. The package is under final review, with peer review expected by November 2025. Once approved and adopted, the Basin Plan Amendment will support long-term Basin water quality and reliability.

THE BASIN PLAN AMENDMENT IS MOVING TOWARD ADOPTION, ENSURING THE BASIN'S WATER QUALITY AND RELIABILITY FOR DECADES TO COME.



CONTINUED RECHARGE AND STORAGE IMPROVEMENTS

Thanks to proactive management and planning, productive partnerships, and sustained investments, the Basin's extensive system of recharge basins continues to grow, along with storage capacity.

SUSTAINED INVESTMENTS IMPROVE THE BASIN'S RECHARGE THROUGH 2013 AND 2023 RMPUs

Watermaster has made substantial, long-term investments in the Basin's Recharge Program since the first Recharge Master Plan was adopted in 2003. Notable improvements to basins owned by the San Bernardino County Flood Control District include automated gates, inflatable dams, retention berms, new pump and conveyance systems, and expanded monitoring equipment.

The Recharge Investigation and Projects Committee (RIPComm) met four times during FY 2024–25 to review progress on the RMPU and related projects, maintaining oversight and coordination among agencies.

RECORD RECHARGE FROM COORDINATED OVERSIGHT AND WET-YEAR CONDITIONS

RIPComm oversight, the launch of the Storage and Recovery Master Plan, and favorable wet-year conditions together produced exceptional results. The 2024–25 water year was among the top ten years for recharge in the last half century. Because of the strong recharge rates, Watermaster expects to meet recycled water dilution requirements through approximately 2033 even if no imported water is available for dilution.



Lower Day Basin.

THREE MAJOR BASIN PROJECTS COMPLETED OR MOVING TOWARD COMPLETION

The newly completed Lower Day Basin expanded Chino Basin's stormwater recharge network in August 2024. This increased recharge capacity reflects years of work under the RMPU and demonstrates the value of Basin-wide collaboration.

Montclair Basins project was delayed, but gained additional funding. The project was delayed due to permitting and coordination for Dry Year Yield operations. In June 2025, IEUA received notice of \$1.3 million in anticipated Bureau of Reclamation funding, with construction now projected for December 2026.

Wineville/Jurupa/RP3 stormwater capture improvements are substantially complete and remain on track for completion in Spring 2026. The \$29 million project connects the three basins with new pump stations and pipelines, enabling the low-percolation Wineville Basin to temporarily store stormwater before pumping it to the higher-percolation basin RP3. This will speed infiltration, increase stormwater capture, and reduce bypass flows when individual basins reach capacity.

PARTNERSHIPS STRENGTHEN RECHARGE PROGRAM

Coordination with the County on Turner Basin site continues. With the Turner site being contemplated for future development, Watermaster partnered with the County of San Bernardino to assess nearby basins and lands for retrofit options. The Board also approved an engineering study to identify alternative recharge concepts, laying the groundwork for future multi-agency capital projects.

Watermaster and IEUA also advanced projects beyond the 2013 RMPU, including monitoring upgrades and habitat initiatives that support long-term recharge and environmental performance.

DRY YEAR YIELD (DYY) PROGRAM CONTINUES TO BENEFIT THE BASIN

The Metropolitan Water District of Southern California recharged about 14,163 acre-feet of imported water into the Basin through the DYY Program in 2024-25.

DESPITE EXTREME HYDROLOGIC SWINGS FROM DROUGHT TO HEAVY RAINFALL, WATERMASTER AND IEUA HAVE RECHARGED OVER 1.1 MILLION ACRE-FEET SINCE 1978.



Managed storage has risen consistently over the last quarter century.

DATA-DRIVEN MANAGEMENT & INNOVATION

Watermaster is expanding its use of data and analytical tools to guide science-based decisions across the Basin. From enhanced monitoring networks to advanced modeling for Safe Yield, salinity, and replenishment forecasting, these efforts build a real-time understanding of Basin conditions and future scenarios.

Watermaster emphasizes data collection and analytical tools that support science-driven decision-making.

Examples include expansive monitoring networks (surface water and groundwater), sophisticated modeling for Safe Yield and salinity projections, and the WRRF forecasting tool.

Watermaster installed 38 new meters to improve production data accuracy.

DATA ARE KEY TO ADAPTIVE WATER MANAGEMENT

Watermaster is embracing cutting-edge technology to better understand and manage our vital groundwater resources.

30 LOCATIONS

for Surface Water Monitoring

1,240 WELLS

for Groundwater Level Monitoring

190 SITES

for Ground-Level Monitoring

420 WELLS

for Groundwater Production Monitoring

1,100 WELLS

for Groundwater Quality Monitoring

250 SAMPLES

for Groundwater Recharge Monitoring

40+ YEARS

of Vegetation Monitoring Data from Satellites.

PRADO BASIN HABITAT REMAINS STABLE

Watermaster works through the Prado Basin Habitat Sustainability Program (PBHSP) to protect natural streamside habitats while managing Prado Basin water. The program tracks groundwater, surface water, and plant health to make sure water projects don't harm the environment.

Extensive monitoring showed that overall habitat conditions remain mostly stable in the Prado Basin through 2024-25. However, some areas, especially along Mill Creek, showed slight vegetation declines that will be checked in upcoming field surveys. Groundwater levels in northern Mill Creek have slightly declined over the monitoring period but have rebounded about 50 percent. No special actions are needed at this time.

The PBHSP committee met twice this year to review results and plan next year's work and budget.

South Prado Basin.

CHINO CREEK MONITORING PROGRAM LAUNCHES WITH COLLABORATIVE, COST-EFFECTIVE APPROACH

Rapid action delivers high-quality data to cost-effectively protect a potentially impaired creek.

RESPONDING QUICKLY TO A WATER QUALITY CONCERN

In 2024, the State and the Santa Ana Water Board identified Chino Creek Reach 1B as lacking sufficient data and could be designated as impaired. This reach, which overlies the Chino Basin and receives recycled water discharges, is critical to maintaining compliance with the Maximum Benefit SNMP. To avoid costly new regulatory actions, Watermaster and IEUA acted quickly to collect data to prevent future restrictions on recycled water use in the Basin.

Working with the Santa Ana Water Board staff, Watermaster and IEUA developed the Chino Creek Monitoring Program Work Plan and Quality Assurance Project Plans. Finalized in July 2024, the Plans set clear objectives and strict data standards to ensure credible, regulator-ready results.

The Monitoring Program launched in August 2024, with monthly sampling at eight sites along San Antonio Creek and Chino Creek. It tracks a variety of constituents with established regulatory water quality objectives and evaluates sources of dissolved minerals.

This year, Watermaster uploaded data to the California Environmental Data Exchange Network (CEDEN). Monitoring will continue through FY 2026–27, with annual reviews to refine methods. After three years, Watermaster and IEUA will release a comprehensive trend report to guide future monitoring and focus resources where they provide the greatest value.

MZ-1 PROGRAM: KEEPING THE GROUND STABLE THROUGH PROACTIVE MANAGEMENT

Watermaster's MZ-1 Program continues to successfully manage land subsidence through comprehensive monitoring and adaptive management. Since 2007, subsidence in the MZ-1 Managed Area has been largely stabilized, though localized movement persists in Northwest MZ-1. To address this, Watermaster expanded its Ground-Level Monitoring Program and implemented an updated Subsidence Management Plan. Ongoing efforts include high-resolution water-level monitoring, Interferometric Synthetic Aperture Radar (InSAR) analyses, extensometer maintenance, and elevation surveys, ensuring early detection and effective response to ground movement.

QUICK COORDINATION AND HIGH-QUALITY DATA COLLECTION POSITIONED THE BASIN TO PROTECT COMPLIANCE AND SAVE COSTS.



Testing groundwater quality.

WORKING TOGETHER FOR A STRONGER BASIN

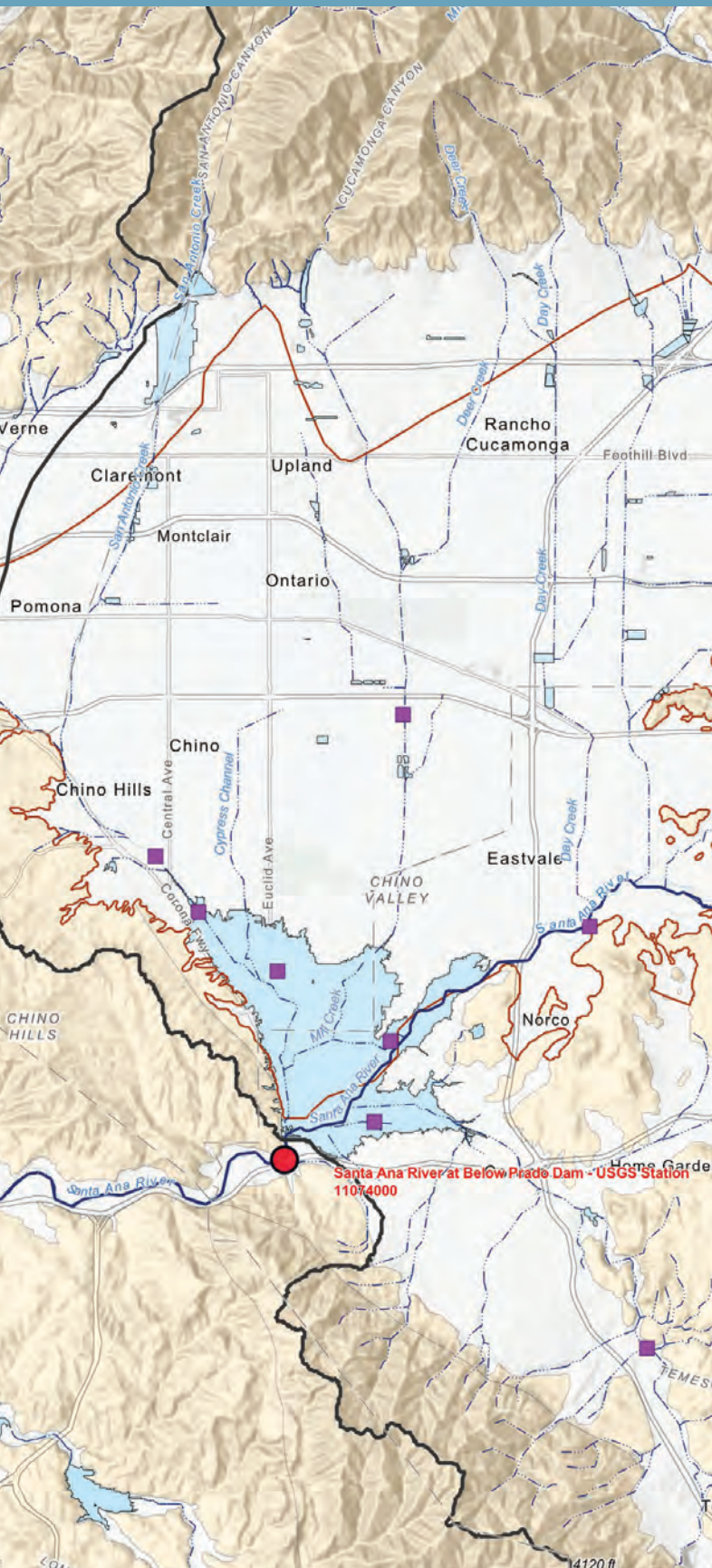


Image from the new interactive StoryMap format of the State of the Basin Report.

COLLABORATION, COMMUNICATION & STAKEHOLDER ENGAGEMENT

BUILDING PARTNERSHIPS THAT STRENGTHEN BASIN MANAGEMENT

Watermaster continues to focus on supporting strong collaboration between stakeholders, including IEUA, retail agencies, and regulatory partners. Joint work—for example, on the Chino Creek Monitoring Program, Safe Yield Reevaluation workshops, and the Basin Plan Amendment for the SNMP—showcased how shared science and transparent discussions move Basin management forward.

Through regular pool and committee meetings, workshops, and joint technical studies, Watermaster fostered open communication and built consensus around complex issues. This cooperative model continues to build trust among all Parties—a key ingredient as Watermaster prepares for upcoming negotiations on agreements that will shape the Basin's long-term future.

MAKING WATER MANAGEMENT CLEAR AND ACCESSIBLE

Watermaster continued to expand outreach and education to make its technical work easier to understand and its public value more visible to regulators, pool members, and the public. Staff-led field tours and workshops helped connect daily operations to long-term Basin goals. Visual dashboards and the WRRF tool workshops simplified complex water-accounting concepts, assisting Parties to see how decisions affect Basin outcomes.

STATE OF THE BASIN REPORT

Modernizing how we share basin information. In June 2025, Watermaster released a draft of the 2024 State of the Basin Report in a new, interactive StoryMap format. The online platform integrates maps, graphics, and narratives to communicate Basin conditions. This dynamic, web-based format makes information easier to explore and share, and includes a downloadable PDF for reference. By combining data and storytelling, Watermaster is helping both technical users and the public better understand how Basin management sustains regional water reliability.

STRENGTHENING ADMINISTRATIVE POLICIES AND PRACTICES

Watermaster is committed to rigorous financial planning and efficiency, supporting sound fiscal policies that define effective Basin management.

STRENGTHENING FINANCIAL POLICIES AND FISCAL OVERSIGHT

This year, Watermaster advanced its financial management with key policy updates. The Board adopted an updated Investment Policy and revised the Excess Cash Reserve Policy, refining the calculation of reserve balances and establishing an annual Board adoption process. Following recommendations from the Pools and the Advisory Committee, the Board also retained the \$1.374 million excess cash reserve in case it is needed for an ongoing recharge project, pending completion of the FY 2025–26 budget process.

ADVANCING OPERATIONAL EFFICIENCIES THROUGH TECHNOLOGY

Watermaster implemented technology upgrades by improving the agency's online payroll software, an upgrade projected to save approximately \$5,000 annually, while transitioning the office phone system to Microsoft Teams. This change replaced legacy VOIP phones, improved system reliability, flexibility, and strengthened day-to-day communication with stakeholders.

CELEBRATING PARTNERSHIPS AND SERVICE MILESTONES

Watermaster marked several important milestones by adopting proclamations honoring the 70th anniversary of the Cucamonga Valley Water District and the 75th anniversary of the IEUA—commending both agencies for their enduring collaboration and significant contributions to the Chino Basin.

Watermaster also recognized two of its longest-serving team members, Justin Nakano and Frank Yoo, for 20 years of dedicated service. Their deep institutional knowledge and long-standing commitment are indispensable to Watermaster's daily operations and the effective management of the Basin.

STAFF FIELD TOURS OFFER INVALUABLE FIRSTHAND INSIGHTS

Watermaster staff participated in field tours across Chino Basin facilities—including recharge basins, treatment plants, and monitoring sites—to strengthen understanding, collaboration, and professional development. These hands-on visits provided firsthand exposure to groundwater replenishment, water treatment, and subsidence monitoring, bridging the gap between office-based analyses and real-world operations.



WATERMASTER GOVERNANCE AND MEMBERSHIP – CALENDAR YEAR 2025

Watermaster Board

Agricultural Pool Representatives

REPRESENTATIVE	MEMBER ENTITY
Jeff Pierson , Vice-Chair	Crops
Alternate: Bob Feenstra	Dairy
Jimmy Medrano	State of CA
Alternate: Lewis Callahan	State of CA

Non-Agricultural Pool Representatives

Bob Bowcock , Secretary/Treasurer	CalMat Co.
Alternate: Brian Geye	California Speedway Corporation

Appropriative Pool Representatives

James Curatalo , Chair	Cucamonga Valley Water District
Alternate: Jimmie Moffatt	
Marty Zvirbulis	Fontana Water Company
Alternate: Josh Swift	
Bill Velto	City of Upland
Alternate: Kati Parker	

Municipal Water District Representatives

Steve Elie	Inland Empire Utilities Agency
Alternate: Marco Tule	
Bob Kuhn	Three Valleys Municipal Water District
Alternate: David De Jesus	
Mike Gardner	Western Municipal Water District
Alternate: Laura Roughton	

Staff

Todd Corbin	General Manager
Edgar Tellez Foster , PhD	Water Resources Management & Planning Director
Anna Nelson , CAP, OM, TA	Director of Administration
Justin Nakano , MPA	Water Resources Technical Manager
Frank Yoo	Data Services & Judgment Reporting Manager
Alonso Jurado	Water Resource Associate
Ruby Favela Quintero , CAP	Executive Assistant
Daniela Uriarte	Sr. Accountant
Kirk Richard Dolar	Administrative Analyst
Jordan Garcia	Senior Field Operation Specialist
Erik Vides	Field Operation Specialist

The representatives and their alternates shown on this page reflect the governance and membership in December 2025. Changes made during the calendar year are tracked by Watermaster and are available upon request.

Advisory Committee

Agricultural Pool Representatives

REPRESENTATIVE	MEMBER ENTITY
Jeff Pierson , Second Vice-Chair	Crops
Ruben Llamas , Paul Hofer	Crops
Nathan deBoom , Henry DeHaan , Robert Feenstra , John Huitsing	Dairy
Alternates to any Crops or Dairy Seat:	
Gino Filippi , Ron LaBrucherie , Jr.	Crops
Geoffrey Vanden Heuvel	Dairy
Tariq Awan , Imelda Cadigal , Jimmy Medrano	State of California
Alternates to any State of California Seat: Carol Boyd , Lewis Callahan , Noah Golden-Krasner , Michael Maeda	

Non-Agricultural Pool Representatives

Brian Geye , Vice-Chair	California Speedway Corporation
Alternate: Bob Bowcock	CalMat Co.
Kathleen Brundage	California Steel Industries, Inc.
Alternate: Erick Jimenez	
Chad Nishida	City of Ontario (Non-Ag)
Alternate: Alexis Mascarinas	

Appropriative Pool Representatives

John Bosler	Cucamonga Valley Water District
Alternates: Eduardo Espinoza , Chair	
Amanda Coker	
Hye Jin Lee	City of Chino
Alternates: Keith Lemieux , Ben Orosco	
Ron Craig	City of Chino Hills
Alternate: Mark Wiley	
Josh Swift	Fontana Union Water Company
Alternates: Justin Castruita , Megan Sims , Eric Tarango	
Cris Fealy	Fontana Water Company
Alternates: Justin Castruita , Megan Sims	
Chris Berch	Jurupa Community Services District
Alternates: Jesse Pompa , Bryan Smith	
Justin Scott-Coe	Monte Vista Water District
Alternate: Stephanie Reimer	
Courtney Jones	City of Ontario
Alternates: Chad Nishida , Scott Burton , Alexis Mascarinas	
Chris Diggs	City of Pomona
Alternates: Melissa Cansino , Nichole Horton	
Brian Lee	San Antonio Water Company
Alternate: Teri Layton	
John Lopez	Santa Ana River Water Company
Alternate: Alyssa Coronado	
Nicole deMoet	City of Upland
Alternate: Norberto Ferreira	

Municipal Representatives (Non-Voting)

Matt Lichfield	Three Valleys Municipal Water District
Alternate: Sylvie Lee	
Laura Roughton	Western Municipal Water District
Alternate: Bryan Shaw	

Agricultural Pool Committee

REPRESENTATIVE

Bob Feenstra, Chair

Jeff Pierson, Vice-Chair

Paul Hofer

Ruben Llamas

Alternates to any Crop Seat:

Gino Filippi, Ron LaBrucherie, Jr.

Nathan deBoom

Henry DeHaan

John Huitsing, Treasurer

Alternate to any Dairy Seat:

Geoffrey Vanden Heuvel

Christen Miller

Alternate: **Trevor Leja**

Tariq Awan, Imelda Cadigal,

Jimmy Medrano

Alternate to any State of California Seat:

Lewis Callahan, Michael Maeda

Carol Boyd, Noah Golden-Krasner

MEMBER ENTITY

Dairy

Crops

Crops

Crops

Crops

Dairy

Dairy

Dairy

Dairy

County of San Bernardino

State of California-CDCR

State of California-CDCR

State of California-DOJ

Non-Agricultural Pool Committee

Brian Geye, Chair

California Speedway Corporation

Bob Bowcock, Vice-Chair

CalMat Co.

Alternate: **Kevin Sage**

William Urena

9W Halo Western OpCo L.P.

Alternate: **Adrian Gomez**

Sam Rubenstein

ANG II (Multi) LLC

Erick Jimenez

California Steel Industries, Inc.

Alternate: **Anna Mauser**

Tyson Chave

CCG Ontario, LLC

Alternate: **Sharon Pangan**

Dawn Varacchi-Ives

General Electric Company

Natalie Costaglio

Hamner Park Associates

Alternate: **Michael Adler**

A California Limited Partnership

Jose Galindo

Linde, Inc.

Alternate: **Jose Ventura**

Justin Scott-Coe

Monte Vista Water District (Non-Ag)

Alternate: **Stephanie Reimer**

Alexis Mascarinas

City of Ontario (Non-Ag)

Alternates: **Chad Nishida**

Steve Riboli

Riboli Family and San Antonio Winery, Inc.

Greg Zarco

County of San Bernardino (Non-Ag)

Alternate: **Maureen Snelgrove**

Hakim Hviaanca

Space Center Mira Loma, Inc.

Ashley Zapp

TAMCO

Alternates: **Brad Bredesen, Alberto Mendoza**

—

West Venture Development Company

Appropriative Pool Committee

REPRESENTATIVE

Chris Diggs, Chair

Alternates: **Melissa Cansino, Nichole Horton**

Chris Berch, Vice-Chair

Jurupa Community Services District

Alternates: **Bryan Smith, Jesse Pompa**

Kevin Sage

Blue Triton Brands, Inc., NCL. Co. LLC

Alternate: **Bob Bowcock**

Kevin Sage

CalMat Co.*

Alternate: **Bob Bowcock**

Hye Jin Lee

City of Chino

Alternates: **Ben Orosco, Keith Lemieux**

Ron Craig

City of Chino Hills

Alternate: **Mark Wiley**

Amanda Coker

Cucamonga Valley Water District

Alternates: **John Bosler, Eduardo Espinoza**

Gia Kim

City of Fontana*

Alternate: **Armando Martinez**

Josh Swift

Fontana Union Water Company

Alternates: **Justin Castruita**

Megan Sims, Eric Tarango

Cris Fealy

Fontana Water Company

Alternates: **Justin Castruita**

Megan Sims, Eric Tarango

Toby Moore

Golden State Water Company*

Alternate: **Nabil Saba**

Steven Andrews

Marygold Mutual Water Company*

Alternate: **Justin Brokaw**

Justin Scott-Coe

Monte Vista Irrigation Company*

Alternate: **Stephanie Reimer**

Justin Scott-Coe

Monte Vista Water District*

Alternate: **Stephanie Reimer**

Geoffrey Kamansky

Niagara Bottling, LLC*

Alternate: **Cassandra Hooks**

Cris Fealy

Nicholson Family Trust*

Alternates: **Justin Castruita**

Megan Sims, Eric Tarango

Bryan Smith

City of Norco*

Alternate: **Chris Berch**

Chad Nishida

City of Ontario

Alternate: **Scott Burton,**

Courtney Jones, Alexis Mascarinas

Brian Lee

San Antonio Water Company*

Alternate: **Teri Layton**

Greg Zarco

County of San Bernardino*

Alternate: **Maureen Snelgrove**

John Lopez

Santa Ana River Water Company*

Alternate: **Alyssa Coronado**

Nicole deMoet

City of Upland

Alternates: **Norberto Ferreira**

Nicole deMoet

West End Consolidated Water Co.*

Alternate: **Norberto Ferreira**

John Thiel

West Valley Water District*

Alternate: **Joanne Chan**

* Minor Representatives

2025 BOARD OF DIRECTORS



James Curatalo, Chair



Jeff Pierson, Vice-Chair



Bob Bowcock, Secretary/Treasurer



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Mike Gardner, Member



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2024-25 Annual Report

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COURT HEARINGS AND ORDERS FISCAL YEAR 2024-25

During the fiscal year 2024-25, several hearings were held relating to administration of the Judgment and implementation of the Optimum Basin Management Program (OBMP). Hearings and orders were as follows:

Hearing/Order Date	Primary Subject Matter
April 4, 2025 Hearing	<ul style="list-style-type: none">Order Granting the Filing of the 47th Annual Report
April 4, 2025	<ul style="list-style-type: none">Chino Basin Watermaster Motion For Court To Receive And File 47th Annual Report
January 10, 2025 Hearing	<ul style="list-style-type: none">Order Granting Motion to Increase the Safe Storage Capacity of the Chino Basin
January 10, 2025 Hearing	<ul style="list-style-type: none">Order Granting Motion for Authorization to File Suit
January 10, 2025 Hearing	<ul style="list-style-type: none">Order Granting Motion for Court to Receive and File the 2023/2024 Annual Report for the Ground-Level Monitoring Program
November 15, 2024 Hearing	<ul style="list-style-type: none">Order Granting Chino Basin Watermaster's Motion and Motion for Court To Receive And File Watermaster Semi-Annual OBMP Status Report 2024-1
November 8, 2024	<ul style="list-style-type: none">Motion for Court to Receive and File Watermaster Semi-Annual OBMP Status Report 2024-1

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RESOLUTIONS FISCAL YEAR 2024-2025

Resolution	Adopted	Summary of Resolution
2025-02	September 25, 2025	<p><i>Resolution Recognizing Water Professionals' Appreciation Week</i></p> <ul style="list-style-type: none"> The Chino Basin Watermaster hereby declares October 4-12, 2025, Water Professionals Appreciation Week and extends its sincere gratitude and appreciation to the Watermaster staff and to the water and wastewater professionals who work tirelessly to provide excellent essential services to our community every day.
2025-01	January 23, 2025	<p><i>Establishing A Watermaster Investment Policy</i></p> <ul style="list-style-type: none"> The authority to invest and reinvest funds of Watermaster is hereby delegated to the Watermaster General Manager (and his/her designees) subject to the provisions of said Investment Policy and the ongoing review and control of Watermaster and the Watermaster Advisory Committee. This resolution shall take effect from and after its date of adoption and Resolution 2024-01 is rescinded in its entirety.
2024-05	November 21, 2024	<p><i>Resolution to Levying Administrative, Replenishment, and Special Project Assessments for Fiscal Year 2024/25</i></p> <ul style="list-style-type: none"> Chino Basin Watermaster levies the respective assessments for each pool effective November 21, 2024 as shown on Exhibit "A". That pursuant to the Judgment, each party has thirty (30) days from the date of invoice to remit the amount of payment for assessments due. After that date, interest will accrue on that portion which was due as provided for in Section 55 (c) of the Restated Judgment.
2024-04	October 24, 2024	<p><i>Resolution Requesting the Increase of the Safe Storage Capacity</i></p> <ul style="list-style-type: none"> Watermaster manage all quantities of water held in storage in amounts from 700,001 AF up to a maximum of 900,000 AF through 2040, consistent with all provisions of the Peace Agreement and the Peace II Agreement applicable to the Local Storage of water within the Basin be extended, without limitation, subject to further order of this Court; Watermaster conform the Watermaster Rules and Regulations consistent with such order. Watermaster implement the OBMP in conformance with such Order, the IEUA FRSEIR certified February 21, 2024, and the Court's April 28, 2017, March 15, 2019, and July 31, 2020 orders establishing a Safe Yield Reset process; All of the parties' rights and remedies, whatever they may be, are expressly reserved, preserved and protected and made applicable to the quantities of stored water greater than 700,001 AF; and The Court reserves jurisdiction to consider future proposals of Watermaster or the parties with regard to storage management.
2024-03	September 26, 2024	<p><i>Resolution Recognizing Water Professionals' Appreciation Week</i></p> <ul style="list-style-type: none"> The Chino Basin Watermaster hereby declares Oct. 5-13, 2024 Water Professionals Appreciation Week and extends its sincere gratitude and appreciation to the Watermaster staff and to the water and wastewater professionals who work tirelessly to provide excellent essential services to our community every day.

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INTERVENTIONS AFTER JUDGMENT PRODUCTION YEAR 2024-25¹

Appropriative Pool ²	Non-Agricultural Pool	Agricultural Pool
None	None	None

A complete list of interventions after judgment may be found in Watermaster's History of Interventions After Judgment at the following link: www.cbwm.org/docs/legaldocs/WatermastersHistoryofInterventionsAfterJudgment.pdf

¹ Production Year is July 1 to June 30.

² Dates in parentheses are the dates of Court orders or notices of ruling relating to interventions. Reference is made to the order or notice of ruling for further information. The intervening party may have received a transfer of water rights on a date other than the date of the order or notice of ruling.

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**WATERMASTER'S "NOTICE OF INTENT" TO
CHANGE THE OPERATING SAFE YIELD OF THE
CHINO GROUNDWATER BASIN**

PLEASE TAKE NOTICE that on this 23rd day of January 2025, the Chino Basin Watermaster hereby adopts this **"Notice of Intent"** to change the Operating Safe Yield of the Chino Groundwater Basin pursuant to the Judgment entered in Chino Basin Municipal Water District v. City of Chino, et al., San Bernardino Superior Court, Case No. RCVRS 51010 (formerly Case No. 164327) as Restated (Exhibit "I", Paragraph 3.(b), Page 73).

Approved by:

**CHINO BASIN WATERMASTER
BOARD OF DIRECTORS – CHAIR**

Signature: /s/ James V. Curatalo

Attest:

**CHINO BASIN WATERMASTER
BOARD OF DIRECTORS – SECRETARY/TREASURER**

Signature: /s/ Robert Bowcock

APPROPRIATIVE RIGHTS

As shown on Exhibit E of Judgment entered January 27, 1978

<u>Party</u>	<u>Appropriative Right (Acre-Feet)</u>	<u>Share of Operating Safe Yield (Percent)</u>	<u>Share of Operating Safe Yield (Acre-Feet)</u>
City of Chino	5,271.7	6.693	3,670.067
City of Norco	289.5	0.368	201.545
City of Ontario	16,337.4	20.742	11,373.816
City of Pomona	16,110.5	20.454	11,215.852
City of Upland	4,097.2	5.202	2,852.401
Cucamonga County Water District	4,431.0	5.626	3,084.786
Jurupa Community Services District	1,104.1	1.402	768.655
Monte Vista County Water District	5,958.7	7.565	4,148.344
West San Bernardino County Water District	925.5	1.175	644.317
Etiwanda Water Company	768.0	0.975	534.668
Feldspar Gardens Mutual Water Company	68.3	0.087	47.549
Fontana Union Water Company	9,188.3	11.666	6,396.736
Marygold Mutual Water Company	941.3	1.195	655.317
Mira Loma Water Company	1,116.0	1.417	776.940
Monte Vista Irrigation Company	972.1	1.234	676.759
Mutual Water Company of Glen Avon Heights	672.2	0.853	467.974
Park Water Company	236.1	0.300	164.369
Pomona Valley Water Company	3,106.3	3.944	2,162.553
San Antonio Water Company	2,164.5	2.748	1,506.888
Santa Ana River Water Company	1,869.3	2.373	1,301.374
Southern California Water Company	1,774.5	2.253	1,235.376
West End Consolidated Water Company	1,361.3	1.728	947.714
Total	78,763.8	100.000	54,834.000

As of June 30, 2025

City of Chino	5,794.25	7.357	3,004.157
City of Chino Hills	3,032.86	3.851	1,572.517
City of Norco	289.50	0.368	150.269
City of Ontario	16,337.40	20.742	8,469.788
City of Pomona	16,110.50	20.454	8,352.186
City of Upland	4,097.20	5.202	2,124.185
Cucamonga Valley Water District	5,199.00	6.601	2,695.452
Jurupa Community Services District	2,960.60	3.759	1,534.950
Monte Vista Water District	6,929.15	8.797	3,592.167
West Valley Water District	925.50	1.175	479.800
Fontana Union Water Company	9,181.12	11.657	4,760.019
Fontana Water Company	1.44	0.002	0.817
Marygold Mutual Water Company	941.30	1.195	487.966
Monte Vista Irrigation Company	972.10	1.234	503.892
Niagara Bottling, LLC	0	0	0
Nicholson Family Trust	5.75	0.007	2.858
San Antonio Water Company	2,164.50	2.748	1,122.118
Santa Ana River Water Company	1,869.30	2.373	968.991
Golden State Water Company	591.05	0.750	306.255
West End Consolidated Water Company	1,361.30	1.728	705.612
San Bernardino County (Shooting Park)	0	0	0
BlueTriton Brands, Inc.	0	0	0
City of Fontana	0	0	0
Calmat Co.	0	0	0
NCL Co., LLC	0	0	0
Total	78,763.82	100.000	40,834.000

DISPOSITION OF ORIGINAL APPROPRIATIVE RIGHTS¹

Original Party and Quantities	Current Party(s) as of June 30, 2025 and Original Quantities ³
City of Chino (3,670.067 AF)	City of Chino (3,670.067 AF)
City of Norco (201.545 AF)	City of Norco (201.545 AF)
City of Ontario (11,373.816 AF)	City of Ontario (11,373.816 AF)
City of Pomona (11,215.852 AF)	City of Pomona (11,215.852 AF)
City of Upland (2,852.401 AF)	City of Upland (2,852.401 AF)
Cucamonga County Water District (3,084.786 AF)	Cucamonga Valley Water District (3,084.786 AF)
Jurupa Community Services District (768.655 AF)	Jurupa Community Services District (768.655 AF)
Monte Vista County Water District (4,148.344 AF)	Monte Vista Water District (4,148.344 AF)
West San Bernardino County Water District (644.317 AF)	West Valley Water District (644.317 AF)
Etiwanda Water Company (534.668 AF)	Cucamonga Valley Water District (534.668 AF)
Feldspar Gardens Mutual Water Company (47.549 AF)	Jurupa Community Services District (47.549 AF)
Fontana Union Water Company (6,396.736 AF)	Fontana Union Water Company (6,391.736 AF); Fontana Water Company (1.000 AF); Nicholson Family Trust (4.00 AF)
Marygold Mutual Water Company (655.317 AF)	Marygold Mutual Water Company (655.317 AF)
Mira Loma Water Company (776.940 AF)	Jurupa Community Services District (776.940 AF)
Monte Vista Irrigation Company (676.759 AF)	Monte Vista Irrigation Company (676.759 AF)
Mutual Water Company of Glen Avon Heights (467.974 AF)	Jurupa Community Services District (467.974 AF)
Park Water Company (164.369 AF)	City of Chino/City of Chino Hills/Monte Vista Water District (164.369 AF) ²
Pomona Valley Water Company (2,162.553 AF)	City of Chino/City of Chino Hills/Monte Vista Water District (2,162.553 AF) ²
San Antonio Water Company (1,506.888 AF)	San Antonio Water Company (1,506.888 AF)
Santa Ana River Water Company (1,301.374 AF)	Santa Ana River Water Company (1,301.374 AF)
Southern California Water Company (1,235.376 AF)	Golden State Water Company (411.476 AF); City of Chino/City of Chino Hills/Monte Vista Water District (823.900 AF) ²
West End Consolidated Water Company (947.714 AF)	West End Consolidated Water Company (947.714 AF)

¹ A detailed history of the transactions/assignments that led to the current allocation of Appropriative Rights under the Judgment is contained in the History of Appropriative Rights at the following link: www.cbwm.org/docs/legaldocs/HistoryofAppropriativeRights.pdf

² The joint listing of parties separated by a "/" does not indicate any joint interest in the right indicated but indicates that these parties each have succeeded to a portion of the original right decreed in the 1978 Judgment. For additional information, see the History of Appropriative Rights.

³ The amounts shown in this column are reflective of the original shares in the Operating Safe Yield (OSY) that was apportioned under the 1978 Judgment and do not include the 5,000 acre-foot decrease in OSY that occurred in FY 2017-18 after the exhaustion of the 200,000 AF controlled overdraft. For information as to each Party's current rights in OSY, see Appendix E-1 Appropriative Rights.

**NON-AGRICULTURAL RIGHTS
(AS SHOWN ON EXHIBIT D OF JUDGMENT ENTERED JANUARY 27, 1978)**

<u>Party</u>	<u>Total Overlying Non-Agricultural Rights (Acre-Feet)</u>	<u>Share of Safe Yield (Acre-Feet)</u>
Ameron Steel Producers, Inc.	125	97.858
Carlsberg Mobile Home Properties, Ltd '73	593	464.240
Conrock Company	406	317.844
County of San Bernardino	171	133.870
Kaiser Steel Corporation	3,743	2,930.274
Quaker Chemical Co.	0	0
Red Star Fertilizer	20	15.657
Southern California Edison Co.	1,255	982.499
Southern Service Co. dba Blue Seal Linen	24	18.789
Space Center, Mira Loma	133	104.121
Sunkist Growers, Inc.	2,393	1,873.402
Union Carbide Corporation	546	427.446
Total	9,409	7,366.000

**NON-AGRICULTURAL RIGHTS¹
(AS OF JUNE 30, 2024)**

9W Halo Western OpCo L.P.	18.789
ANG II (Multi) LLC	0 ²
California Speedway Corporation	1,000.000
California Steel Industries, Inc.	1,615.137
CalMat Co.	0
CCG Ontario, LLC	0
City of Ontario (Non-Ag)	3,920.567
County of San Bernardino (Non-Ag)	133.870
General Electric Company	0
Hamner Park Associates, a California Limited Partnership	464.240
Linde Inc.	1.000
Monte Vista Water District (Non-Ag)	50.000
Riboli Family and San Antonio Winery, Inc.	0
Space Center Mira Loma, Inc.	104.121
TAMCO	42.619
West Venture Development Company (Pending Court Disposition)	15.657
Total	7,366.000

¹This list identifies the names of the members of the Non-Agricultural Pool according to the records of the Non-Agricultural Pool Committee. This list is not reflective of all "Active Parties" of the Non-Agricultural Pool, as that term is used in Paragraph 58 of the Restated Judgment.

² Per notice from ANG II (Multi) LLC to Watermaster staff dated January 2, 2020, 9W Halo Western OpCo L.P. holds its rights under a temporary lease between ANG II (Multi) LLC, as lessor, and 9W Halo Western OpCo L.P., as lessee, expiring on January 31, 2030.

DISPOSITION OF ORIGINAL NON-AGRICULTURAL RIGHTS¹

Original Party and Quantities	Current Party(s) and Quantities as of June 30, 2025
Ameron Steel Producers (97.858 AF)	TAMCO (42.619 AF), City of Ontario (Non-Ag) (55.239 AF)
Carlsberg Mobile Home Properties, Ltd '73 (464.240 AF)	Hamner Park Associates, a California Limited Partnership (464.240 AF)
Conrock Company (317.844 AF)	City of Ontario (Non-Ag) (317.844 AF)
County of San Bernardino (133.870 AF)	County of San Bernardino (Non-Ag) (133.870 AF)
Kaiser Steel Corporation (2930.274 AF)	California Speedway Corporation (1000.000 AF), California Steel Industries, Inc. (1615.137 AF), City of Ontario (Non-Ag) (265.137 AF), Monte Vista Water District (Non-Ag) (50.000 AF)
Red Star Fertilizer (15.657 AF)	West Venture Development Company (Pending Court Disposition) (15.657 AF)
Southern California Edison Co. (982.499 AF)	City of Ontario (Non-Ag) (982.499 AF)
Southern Service Co. dba Blue Seal Linen (18.789 AF)	9W Halo Western OpCo L.P. (18.789 AF)
Space Center, Mira Loma (104.121 AF)	Space Center Mira Loma, Inc. (104.121 AF)
Sunkist Growers, Inc. (1,873.402 AF)	City of Ontario (Non-Ag) (1,873.402 AF)
Union Carbide Corporation (427.446 AF)	City of Ontario (Non-Ag) (426.446 AF), Linde Inc. (1.000 AF)

¹ A detailed history of the transactions/assignments that led to the current allocation of Non-Agricultural Rights under the Judgment is contained in the History of Non-Agricultural Rights website link: www.cbwm.org/docs/legaldocs/HistoryofNonAgriculturalRights.pdf

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HISTORY OF REALLOCATION OF UNPRODUCED AG POOL SAFE YIELD¹ (ACRE-FEET)

Production Year	Calculation of Water Rights Available for Reallocation due to Ag Pool Underproduction of Safe Yield ⁵		Claims to Underproduced Ag Pool Safe Yield			Rights Available for Reallocation less Claimed Rights ^{9,11}	Total Reallocation of Unproduced Ag Pool Safe Yield ¹⁰
	Assessable Ag Pool Production	Water Rights Available for Reallocation	Claims Resulting from Land Use Conversions ⁶	Early Transfer Claims ^{5,8,11}	Total Claims <i>E = C + D</i>		
	<i>A</i>	<i>B</i>	<i>C</i>	<i>D</i>	<i>E = C + D</i>	<i>F = B - E</i>	<i>G = B</i>
83-84 ²	59,033	n/a ⁵	593	n/a	593	n/a	26,355
84-85	55,543	n/a	593	n/a	593	n/a	19,136
85-86	52,061	n/a	811	n/a	811	n/a	21,902
86-87	59,847	n/a	811	n/a	811	n/a	37,159
87-88	57,865	n/a	4,056	n/a	4,056	n/a	78,489
88-89 ³	46,762	24,935	811	n/a	811	24,124	24,935
89-90	48,420	36,038	811	n/a	811	35,227	36,038
90-91	48,085	34,380	811	n/a	811	33,569	34,380
91-92	44,682	34,715	811	n/a	811	33,904	34,715
92-93	44,092	38,118	811	n/a	811	37,307	38,118
93-94	44,298	38,708	811	n/a	811	37,897	38,708
94-95	55,022	38,502	3,652	n/a	3,652	34,850	38,502
95-96	43,639	27,778	11,711	n/a	11,711	16,067	27,778
96-97	44,809	39,161	12,620	n/a	12,620	26,541	39,161
97-98	43,345	37,991	14,426	n/a	14,426	23,565	37,991
98-99	47,538	39,455	17,022	n/a	17,022	22,433	39,455
99-00 ⁴	44,401	38,399	10,471	32,800	43,271	-4,872	38,399
00-01	39,954	42,846	13,920	32,800	46,720	-3,874	42,846
01-02	39,495	43,306	14,133	32,800	46,933	-3,627	43,306
02-03	37,457	45,343	16,480	32,800	49,280	-3,937	45,343
03-04	41,978	40,822	17,510	32,800	50,310	-9,488	40,822
04-05	34,450	48,350	19,013	32,800	51,813	-3,464	48,350
05-06	33,900	48,900	20,370	32,800	53,170	-4,270	48,900
06-07	37,295	45,505	22,158	32,800	54,958	-9,454	45,505
07-08	30,910	51,890	22,461	32,800	55,261	-3,371	51,890
08-09	32,143	50,657	22,730	32,800	55,530	-4,873	50,657
09-10	31,855	50,945	22,943	32,800	55,743	-4,798	50,945
10-11	31,342	51,458	23,033	32,800	55,833	-4,375	51,458
11-12	34,353	48,447	23,237	32,800	56,037	-7,590	48,447
12-13	34,458	48,342	23,773	32,800	56,573	-8,231	48,342
13-14	33,639	49,161	26,162	32,800	58,962	-9,801	49,161
14-15	28,521	54,279	26,768	22,511	49,279	5,000	54,279
15-16	26,167	56,633	27,450	24,183	51,633	5,000	56,633
16-17	26,863	55,937	28,296	22,642	50,937	5,000	55,937
17-18	28,461	54,339	29,031	20,308	49,339	5,000	54,339
18-19	21,786	61,014	29,972	26,042	56,014	5,000	61,014
19-20	21,841	60,959	30,997	24,962	55,959	5,000	60,959
20-21	21,485	61,315	31,717	20,599	52,315	9,000	61,315
21-22	21,304	61,496	32,898	19,598	52,496	9,000	61,496
22-23	17,082	65,718	33,726	22,992	56,718	9,000	65,718
23-24	17,717	65,083	34,596	21,487	56,083	9,000	65,083
24-25	18,184	64,616	36,092	19,524	55,616	9,000	64,616

¹ Source: Watermaster Annual Reports and Assessment Packages.

² Fiscal year 83-84 was the first-year that reallocation occurred under the Judgment.

³ During fiscal year 87-88 the Appropriators agree to pay Ag Pool assessments and the reallocation procedure changed by agreement. Effective FY 88-89, the Ag Pool's unused water rights from the prior year are made available for reallocation to the Appropriative Pool in the following year (i.e. 82,800 AF less the total assessable production).

⁴ During fiscal year 99-00 the Peace Agreement is signed. The Appropriators agree to pay the Ag Pool assessments for the life of the Peace Agreement and the reallocation procedure is changed by agreement. The Ag Pool's unused water rights (i.e. 82,800 AF less the total assessable production) are made available for reallocation to the Appropriative Pool in the current year.

⁵ n/a indicates the information is not applicable for the given year.

⁶ When land is converted from agricultural to urban uses, water rights are permanently transferred to the appropriative pool. This column represents the sum of the cumulative transfers that have resulted from land use changes over time. For example, in 85-86 land use conversions resulted in 218 acre-feet of conversions. Thus the total claims for 85-86 were 811: the sum of the conversions from prior years plus the new conversions for 85-86 (811 = 593 + 218).

⁷ After a duplication of conversion areas was identified, Jurupa's Pre-Peace Agreement acres were adjusted to 337.6 acres and the Post-Peace Agreement acres were adjusted to 846.4 acres.

⁸ During fiscal year 99-00 the Peace Agreement is signed and establishes that each year 32,800 acre-feet of Ag Pool rights will be pre-emptively transferred to the Appropriative Pool and the transfer will be distributed proportional to each member's share of the Operating Safe Yield.

⁹ If the total claims to underproduced Ag Pool Safe Yield (C + D) are greater than the water rights available for reallocation (B) then the reallocation is limited to the amount of rights available. The reduction is distributed among the Parties in proportion to their share of the Operating Safe Yield.

¹⁰ For production years 83-84 through 87-88, the allocation was computed in a different manner and so the generalized formula does not apply for these years.

¹¹ For production years 14-15 through 17-18, the Early Transfer Claims and Rights Available for Reallocation less Claimed Rights have been revised in accordance to the March 15, 2019 Court Order.

HISTORY OF TOTAL ANNUAL GROUNDWATER PRODUCTION FROM THE CHINO BASIN (ACRE-FEET)*

Production Year	Appropriative Pool ¹³	Agricultural Pool ¹³	Non-Agricultural Pool ¹³	Chino Basin Desalters ¹⁴	Department of Toxic Substances Control ¹⁵	Total Production ¹⁶
77-78	62,408	91,714	10,102 ¹	-	-	164,224
78-79	61,372	81,479	7,263	-	-	150,114
79-80	65,371	70,050	7,541	-	-	142,961
80-81	71,443	67,726	5,777	-	-	144,945
81-82	66,844	64,032	5,801	-	-	136,676
82-83	63,557	56,858	2,448	-	-	122,864
83-84	70,544	60,076	3,258	-	-	133,877
84-85	76,903	54,248	2,446	-	-	133,598
85-86	80,885	50,611	3,255	-	-	134,751
86-87	84,662	57,964	2,696	-	-	145,322
87-88	91,579 ²	55,949	3,018	-	-	150,545
88-89	93,617 ³	45,683	3,692	-	-	142,992
89-90	101,344 ⁴	47,358	4,927	-	-	153,629
90-91	86,513 ⁵	47,011	5,479	-	-	139,003
91-92	91,736 ⁶	43,456	4,900	-	-	140,092
92-93	86,584 ⁷	44,300	5,226	-	-	136,110
93-94	80,934 ⁸	44,492	4,322	-	45	129,793
94-95	93,608 ⁹	55,415	4,091	-	45	153,159
95-96	103,729 ¹⁰	43,639	3,240	-	60	150,668
96-97	112,205	44,923	3,779	-	76	160,983
97-98	99,810 ¹¹	43,370	3,274 ¹²	-	83	146,537
98-99	111,048	47,792	3,734	-	81	162,655
99-00	128,892	44,242	5,605	-	82	178,821
00-01	116,204	39,285	5,991	7,989	100	169,570
01-02	123,531	38,196	4,150	9,458	81	175,416
02-03	121,748	35,168	3,979	10,439	79	171,413
03-04	125,320	38,192	2,057	10,605	79	176,253
04-05	118,030	31,505	2,246	9,854	81	161,715
05-06	107,249	30,253	2,641	16,542	80	156,765
06-07	119,438	29,653	3,251	27,077	79	179,498
07-08	120,650	23,539	3,421	30,121	81	177,813
08-09	134,119	23,277	2,420	29,012	83	188,910
09-10	117,299	21,043	2,039	28,857	85	169,323
10-11	99,172	21,030	1,986	29,043	87	151,319
11-12	93,615	22,319 ¹⁷	3,162	28,411	89	147,595
12-13	109,294	23,718 ¹⁷	3,686	27,098	87	163,883
13-14	113,976	21,796 ¹⁷	3,834	29,282	85	168,973
14-15	97,842	17,118 ¹⁷	3,371	30,022	84	148,436
15-16	100,297	17,109 ¹⁷	2,670	28,191	85	148,352
16-17	93,699	17,715 ¹⁷	3,636	28,284	104	143,438
17-18	88,740	18,827	2,919	30,088	83	140,656
18-19	83,280	15,478	3,204	31,233	80	133,275
19-20	95,418	15,722	2,350	35,630	72	149,190
20-21	105,040	14,929	2,795	40,156	77	162,998
21-22	107,529	14,077	1,767	40,566	82	164,021
22-23	74,412	11,190	2,168	39,844	72	127,686
23-24	63,444	11,020	2,493	40,337	66	117,360
24-25	80,352	10,704	2,413	40,682	58	134,209

* Total Production adjusted from prior annual reports to include previously omitted production from wells that have become non-active over time.

¹ Includes 3,945 AF of mined water pumped by Edison as agent for IEUA.

² Does not include 7,674.3 AF exchanged with MWDSC.

³ Does not include 6,423.6 AF exchanged with MWDSC.

⁴ Does not include 16,377.1 AF exchanged with MWDSC.

⁵ Does not include 14,929.1 AF exchanged with MWDSC.

⁶ Does not include 12,202.4 AF exchanged with MWDSC.

⁷ Does not include 13,657.3 AF exchanged with MWDSC.

⁸ Does not include 20,194.7 AF exchanged with MWDSC.

⁹ Does not include 4,221.9 AF exchanged with MWDSC.

¹⁰ Does not include 6,167.2 AF exchanged with MWDSC.

¹¹ Does not include 4,275.4 AF exchanged with MWDSC.

¹² Does not include 216.5 AF exchanged with MWDSC.

¹³ Represents total physical production by Pools, not assessed production.

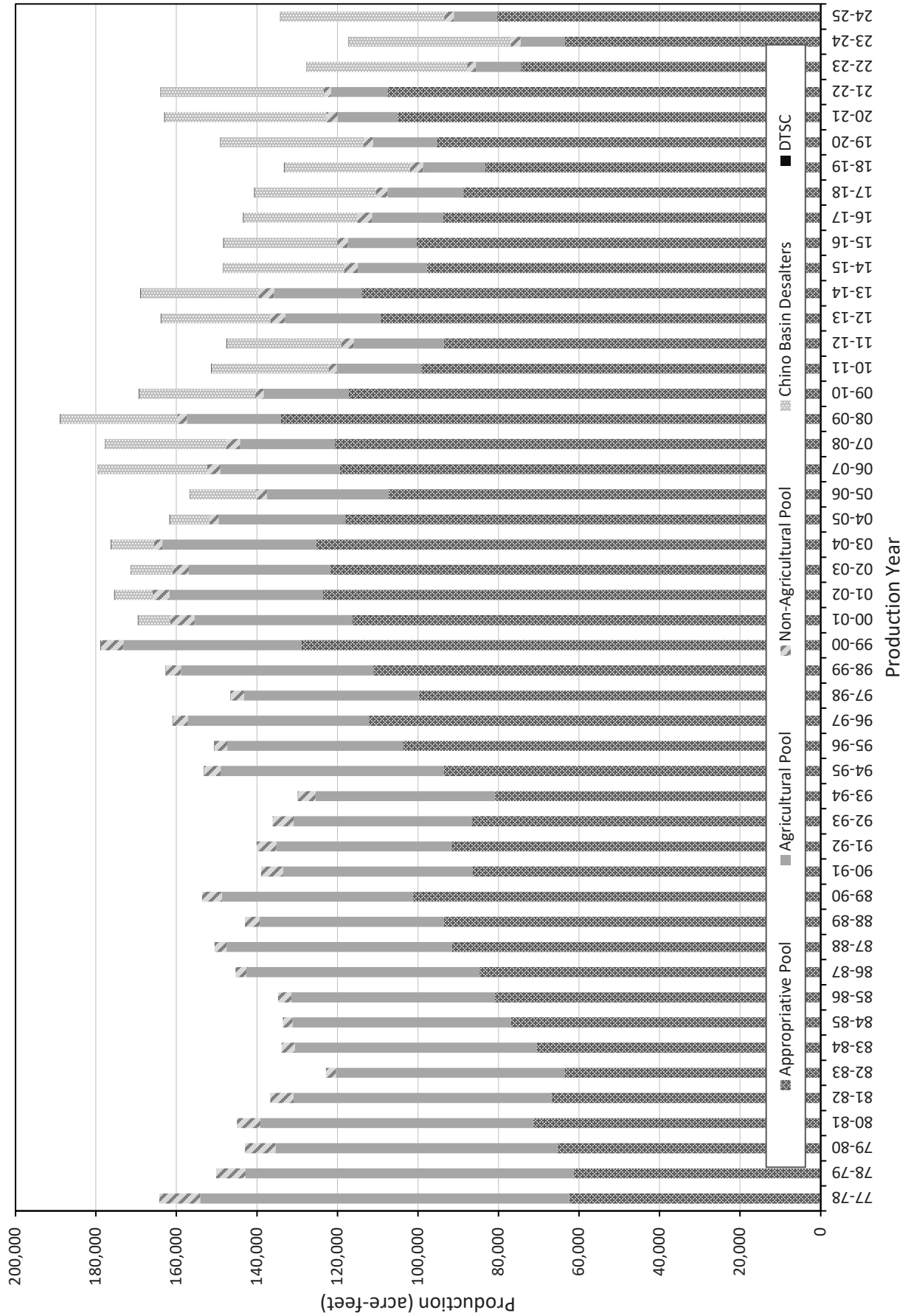
¹⁴ Production by the Chino Basin Desalters is not considered assessable production; Desalter replenishment obligation accounting is shown in the Assessment Package.

¹⁵ Production by DTSC is accounted separately, by agreement, such that the production is not assessed by Watermaster.

¹⁶ Total reflects physical production by pumpers and does not account for any adjustments or exchanges that are made in the Assessment Packages.

¹⁷ Total Agricultural Pool production revised due to incorrect multiplier used on an irrigation well meter.

HISTORY OF TOTAL ANNUAL GROUNDWATER PRODUCTION FROM THE CHINO BASIN (ACRE-FEET)



**SUMMARY OF SUPPLEMENTAL SUPPLIES
USED BY THE CHINO BASIN PARTIES¹
FISCAL YEAR 2024-25
(ACRE-FEET)**

Parties	Other Groundwater Basins	Surface Diversions	Imported Water Deliveries				Recycled Water ²	Total
			SBVMWD	MWDSC				
				IEUA	TVMWD	WMWD		
Chino, City of	-	-	-	4,052	-	-	3,506	7,558
Chino Hills, City of	-	-	-	1,500	-	-	1,449	2,949
Cucamonga Valley Water District ³	7,834	4,709	-	15,958	-	-	1,258	29,758
Inland Empire Utilities Agency	-	-	-	-	-	-	152	152
Fontana Water Company ⁴	15,539	11,467	-	65	-	-	477	27,548
Golden State Water Company ⁵	3,317	-	-	-	4,650	-	-	7,966
Jurupa Community Services District ⁶	720	-	-	-	-	-	-	720
Marygold Mutual Water Company ⁷	-	-	311	-	-	-	-	311
Monte Vista Water District	-	-	-	8,862	-	-	350	9,212
Norco, City of ⁸	5,248	-	-	-	-	-	-	5,248
Ontario, City of	-	-	-	5,839	-	-	11,406	17,245
Pomona, City of ⁹	3,651	1,683	-	-	3,027	-	1,798	10,158
San Antonio Water Company ¹⁰	3,254	6,001	-	-	-	-	-	9,255
San Bernardino, County of	-	-	-	-	-	-	174	174
Santa Ana River Water Company ¹¹	0	-	-	-	-	-	-	-
State of California, CIM ¹²	-	-	-	-	-	-	7	7
Upland, City of ¹³	6,047	1,669	-	2,582	-	-	647	10,944
West End Consolidated Water Company ¹⁴	2,628	-	-	-	-	-	-	2,628
West Valley Water District ¹⁵	9,606	5,966	3,562	-	-	-	-	19,134
Total	57,842	31,495	3,873	38,857	7,676	-	21,223	160,967

¹ The values reported herein represent the total supplemental water supply used by each Party within its entire service area. Some Parties have service area boundaries which extend outside the adjudicated Chino Basin boundary.

² Recycled water is supplied by IEUA unless stated otherwise.

³ Other groundwater is produced from Cucamonga Basin. Surface water diversions are from Lloyd Michaels, Royer-Nesbit, and Arthur H. Bridge WTPs, and Deer Canyon.

⁴ Other groundwater is produced from Colton/Rialto, Lytle, and "unnamed" Basins. Surface water diversions are from Lytle Creek.

⁵ Other groundwater is produced from Six Basins.

⁶ Other groundwater is produced from Riverside Basins.

⁷ Treated water is purchased from San Bernardino Valley Municipal Water District (SBVMWD) and then treated and delivered by West Valley Water District (WVWD).

⁸ Other groundwater is produced from Arlington and Temescal Basins and a portion of the hydrologic Chino Basin that is outside the adjudicated boundary.

⁹ Other groundwater is produced from Six Basins and Spadra Basin. Surface water diversions are from San Antonio Creek. Recycled water is served from the Pomona Water Reclamation Plant.

¹⁰ Other groundwater is produced from Six Basins and Cucamonga Basin. Surface water diversions are from San Antonio Creek. Supplemental supplies shown herein do not include sales to the City of Upland - these supplies are shown as part of Upland's supply within this table.

¹¹ Other groundwater is produced from the portion of the hydrologic Chino Basin that is outside the adjudicated boundary.

¹² Recycled water includes water treated by CIM and discharged to ponds then reused on location for irrigation purposes.

¹³ Other groundwater is produced from Six Basins and Cucamonga Basin. Supplemental supplies shown herein do not include sales to Golden State Water Company (GSWC) - these supplies are shown as part of GSWC's supply within this table.

¹⁴ Other groundwater is produced from Six Basins and Cucamonga Basin.

¹⁵ Other groundwater is produced from Rialto and Riverside Basins. Surface water diversions are from Lytle Creek.

**SUMMARY OF IMPORTED WATER DELIVERIES FROM
THE METROPOLITAN WATER DISTRICT OF SOUTHERN CALIFORNIA
TO THE CHINO BASIN PARTIES FOR FISCAL YEAR 2024-25
(ACRE-FEET)¹**

Month	Water Facilities Authority - CB-12						Reliant
	Upland	MVWD	Ontario	Chino	Chino Hills ²	Sub-Total	CB-01
July	374	1,080	1,063	378	200	3,095	-
August	295	1,322	909	417	200	3,143	-
September	153	1,233	814	478	120	2,798	-
October	226	1,146	758	400	100	2,630	-
November	167	996	456	346	90	2,054	-
December	233	677	424	342	90	1,766	-
January	228	424	369	318	100	1,439	-
February	74	57	59	97	100	386	-
March	178	249	238	196	100	962	-
April	188	441	188	266	100	1,183	-
May	216	689	228	331	100	1,564	-
June	251	548	333	483	200	1,815	-
Total	2,582	8,862	5,839	4,052	1,500	22,835	-

Month	Fontana Water Co.	Cucamonga Valley Water District			Three Valleys MWD to Pomona	Three Valleys MWD to GSWC	Western MWD to Norco	Total
	CB-19	CB-07	CB-16	Sub-Total				
July	-	-	1,600	1,600	327	605	-	5,627
August	-	-	1,599	1,599	376	600	-	5,718
September	-	-	1,376	1,376	323	582	-	5,078
October	-	-	1,369	1,369	283	501	-	4,783
November	-	-	1,196	1,196	294	297	-	3,841
December	-	-	602	602	209	292	-	2,868
January	29	-	1,000	1,000	248	241	-	2,957
February	18	-	504	504	2	176	-	1,086
March	1	-	1,414	1,414	16	213	-	2,606
April	17	-	1,666	1,666	152	284	-	3,301
May	0	-	1,845	1,845	258	360	-	4,027
June	0	-	1,788	1,788	539	499	-	4,640
Total	65	-	15,958	15,958	3,027	4,650	-	46,533

¹ Does not include Dry Year Yield activity ("puts" or "takes").

² Total includes water delivered directly from WFA and from WFA through MVWD by agreement.

TOTAL WATER CONSUMPTION BY THE CHINO BASIN PARTIES¹ (ACRE-FEET)

Year	Chino Basin Extractions ²	Supplemental Supplies ³	Total
77-78	164,224	61,567	225,791
78-79	150,114	75,864	225,978
79-80	142,961	70,727	213,688
80-81	144,945	77,765	222,710
81-82	136,676	67,491	204,167
82-83	122,864	76,000	198,864
83-84	133,877	99,257	233,134
84-85	133,598	92,952	226,550
85-86	134,751	114,624	249,375
86-87	145,322	126,493	271,815
87-88	150,545	116,175	266,720
88-89	142,992	128,167	271,159
89-90	153,629	139,004	292,633
90-91	139,003	116,493	255,496
91-92	140,092	104,480	244,572
92-93	136,110	117,205	253,315
93-94	129,793	136,038	265,831
94-95	153,159	116,797	269,956
95-96	150,668	130,494	281,162
96-97	160,983	115,031	276,014
97-98	146,537	106,360	252,897
98-99	162,655	113,040	275,695
99-00	178,821	129,208	308,029
00-01	169,570	128,596	298,166
01-02	175,416	140,907	316,323
02-03	171,413	134,154	305,567
03-04	176,253	143,989	320,242
04-05	161,715	145,644	307,359
05-06	156,765	171,896	328,661
06-07	179,498	176,807	356,305
07-08	177,813	162,465	340,278
08-09	188,910	131,819	320,729
09-10	169,323	144,354	313,677
10-11	151,319	154,760	306,079
11-12	147,595	171,808	319,403
12-13	163,883	154,870	318,753
13-14	168,973	183,699	352,672
14-15	148,436	162,477 ¹	310,913
15-16	148,352	114,780 ¹	263,132
16-17	143,438	147,767 ¹	291,205
17-18	140,656	185,964 ¹	326,620
18-19	133,275	153,828 ¹	287,103
19-20	149,190	130,142 ¹	279,332
20-21	162,998	156,808 ¹	319,806
21-22	164,021	145,733 ¹	309,754
22-23	127,766	143,308 ¹	271,074
23-24	117,370	153,800 ¹	271,170
24-25		160,967 ¹	160,967

¹ The values reported herein are intended to represent the supplemental water supply used by each Party within its entire service area. Some Parties have service area boundaries which extend outside the adjudicated Chino Basin boundary. During the preparation of the FY14/15 Annual Report, it was determined that the collection and reporting of supplemental water supplies has been inconsistent over time, such that some parties reported estimates of water used within the boundary of Chino Basin and others provided the entire service area use, and some agencies varied their reporting methods over time. In many years, the reported data also excluded some Watermaster Parties. And, in some cases, the supplemental supplies included recharge water volumes. The values reported for the noted years are representative of total water consumption by the Chino Basin parties and are not directly comparable to values reported for prior years. Watermaster staff will be working with the Parties to update the historical information for consistency in future annual reports.

² Represents the total groundwater extraction values reported in Appendix H-1.

³ Total does not include cyclic deliveries, water delivered by exchange, or water from direct spreading that was used for replenishment.

SUMMARY OF CONJUNCTIVE USE, REPLENISHMENT, AND CYCLIC ACTIVITIES FISCAL YEAR 2024-25 (ACRE-FEET)

Conjunctive Use Resulting from Storage and Recovery Programs in the Chino Basin											
DYY Holding Account Summary:											
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Loss (32.1)	Ending Bal. 45,908.2
Direct											
Monte Vista Water District	-	-	-	-	-	-	-	-	-	-	Put 17,932.6
In-Lieu	-	-	-	-	-	-	-	-	-	-	Take 0.0
Chino Basin Watermaster	-	-	-	-	-	-	-	-	-	-	Ending Bal. 63,808.6
Chino, City of	-	-	-	-	-	-	-	-	-	-	
Chino Hills, City of	-	-	-	-	-	-	-	-	-	-	
Cucamonga Valley Water District	-	-	-	-	-	-	-	-	-	-	
Fontana Water Company	-	-	-	-	-	-	-	-	-	-	
Jurupa Community Services District	-	-	-	-	-	-	-	-	-	-	
Monte Vista Water District	-	1,397.2	668.2	623.0	762.5	318.5	-	-	-	-	3,769.4
Ontario, City of	-	-	-	-	-	-	-	-	-	-	
Pomona, City of	-	-	-	-	-	-	-	-	-	-	
Upland, City of	-	-	-	-	-	-	-	-	-	-	
Total Storage / (Withdrawals)	-	1,397.2	668.2	623.0	762.5	318.5	-	-	-	-	3,769.4
	-	1,397.2	668.2	623.0	762.5	318.5	-	-	-	-	3,769.4

Replenishment (and Preemptive Replenishment) Deliveries											
Watermaster's Replenishment Obligations:											
Cumulative Unmet Replenishment Obligation (CURO)											
Desalter Replenishment Obligation (DRO)											
Fiscal Year 2023/24 Overproduction											
	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May
Direct*											
ASR (Monte Vista Water District)	-	-	-	-	-	-	-	-	-	-	-
CB-11 (Deer Creek)	-	-	-	-	-	-	-	-	-	-	-
CB-13 (San Sevaine)	-	-	-	-	-	-	-	-	-	-	-
CB-14 (Etiwanda)	-	-	-	-	-	-	-	-	-	-	-
CB-15 (Day Creek)	-	-	-	-	-	-	-	-	-	-	-
CB-18 (Etiwanda Inter-lie)	-	-	-	-	-	-	-	-	-	-	-
CB-20 (West Cucamonga)	-	-	-	-	-	-	-	-	-	-	-
OC-59 (San Antonio)	-	-	-	-	-	-	-	-	-	-	-
In-Lieu	-	-	-	-	-	-	-	-	-	-	-
Service Connections	-	-	-	-	-	-	-	-	-	-	-
CB-12	-	-	-	-	-	-	-	-	-	-	-
CB-16	-	-	-	-	-	-	-	-	-	-	-
Purchased from Parties	-	-	-	-	-	-	-	-	-	-	-
Purchased from Cyclic Account	-	-	-	-	-	-	-	-	-	-	-
Pre-Purchased Previous Year(s)	-	-	-	-	-	-	-	-	-	-	-
Total Replenishment	-	-	-	-	-	-	-	-	-	-	-

STORM AND SUPPLEMENTAL WATER RECHARGE BY BASIN FISCAL YEAR 2024-25 (ACRE-FEET)

	JULY			AUGUST			SEPTEMBER			OCTOBER			NOVEMBER			DECEMBER		
	ST	IMP	RC	ST	IMP	RC	ST	IMP	RC	ST	IMP	RC	ST	IMP	RC	ST	IMP	RC
MZ 1																		
Aquifer Storage & Recovery (ASR)																		
MVWD	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chino Hills	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
San Antonio Channel																		
Upland	0	411	0	0	179	0	0	231	0	6	125	0	17	0	0	0	10	0
College Heights	0	0	0	0	248	0	0	300	0	1	401	0	1	20	0	0	0	0
Montclair 1, 2 3 & 4	0	2,738	0	0	2,288	0	0	2,138	0	15	1,543	0	21	899	0	0	43	0
Brooks	3	0	126	1	0	78	1	0	42	5	0	57	5	0	152	3	0	109
West Cucamonga Channel																		
15th Street	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8th Street	5	0	0	10	0	0	17	0	0	48	0	179	76	0	319	3	0	392
7th Street	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	7	3,149	126	11	2,715	78	18	2,669	42	75	2,069	236	119	919	471	6	54	501
MZ 2																		
Cucamonga /Deer Creek Channels																		
Turner 1 & 2	0	1	72	5	0	112	7	0	54	7	0	56	6	0	82	1	0	158
Turner 3 & 4	12	0	0	9	0	0	7	0	56	32	0	181	72	0	118	20	0	211
Day Creek Channel																		
Lower Day	1	0	0	2	0	0	1	0	0	2	1	0	4	514	0	1	47	0
Etiwanda Channel																		
Etiwanda Debris Basin	0	283	0	0	296	0	0	345	0	0	301	0	0	159	0	0	0	0
Victoria	2	0	225	2	0	164	1	0	62	4	0	113	2	0	146	1	0	111
Managed Aquifer Recharge (MAR)																		
Intex Property	0	20	0	0	63	0	0	0	0	0	8	0	0	26	0	0	9	0
Minor Drainage																		
Grove	6	0	0	1	0	0	3	0	0	3	0	0	0	0	0	1	0	0
San Sevaine Channel																		
San Sevaine 1, 2, 3 & 4	0	454	108	0	437	58	0	451	73	3	449	101	7	329	131	0	39	248
San Sevaine 5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
West Cucamonga Channel																		
Ely 1, 2 & 3	8	0	10	1	0	57	4	0	15	31	0	108	17	0	247	4	0	288
West Fontana Channel																		
Hickory	0	0	260	0	15	159	0	0	81	1	0	148	19	0	29	0	0	78
	29	757	676	20	811	550	21	796	341	82	758	707	127	1,027	752	27	94	1,093
MZ 3																		
Day Creek Channel																		
Wineville	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Riverside	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DeClez Channel																		
DeClez	2	0	0	2	0	0	8	0	162	29	0	166	7	0	181	3	0	233
RP3 Cell 1, 3, & 4	0	0	440	0	0	445	0	28	981	0	23	601	0	14	204	0	0	148
RP3 Cell 2	7	0	1	8	0	42	3	0	21	0	0	0	0	0	10	0	0	0
Etiwanda Channel																		
Etiwanda Conservation	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
San Sevaine Channel																		
Jurupa	0	24	0	0	36	0	0	14	0	21	21	0	66	0	0	15	0	0
West Fontana Channel																		
Banana	0	0	29	0	0	18	0	0	9	6	0	17	31	0	17	0	0	78
	9	24	469	10	36	505	10	43	1,173	56	45	784	104	14	412	17	0	459
Total																		
	45	3,930	1,272	40	3,562	1,133	50	3,507	1,555	212	2,871	1,726	351	1,959	1,635	50	148	2,053

Evaporative losses are applied to Imported and Recycled Water (1.5% November - March, 4.2% April - October).

ST = stormwater
IMP = imported water
RC = recycled water

JANUARY			FEBRUARY			MARCH			APRIL			MAY			JUNE			TOTAL			
ST	IMP	RC	ST	IMP	RC	ST	IMP	RC	ST	IMP	RC	ST	IMP	RC	ST	IMP	RC	ST	IMP	RC	ALL
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10	0	0	142	0	0	58	0	0	3	0	0	3	0	0	0	0	0	240	956	0	1,195
0	0	0	2	0	0	1	0	0	0	0	0	0	0	0	0	0	0	5	969	0	974
22	0	0	361	43	0	160	0	0	13	0	0	10	0	0	5	0	0	606	9,691	0	10,297
11	0	92	86	0	38	63	0	54	9	0	78	7	0	115	2	0	77	194	0	1,016	1,211
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
53	0	328	257	0	202	256	0	208	12	0	217	11	0	281	5	0	244	751	0	2,372	3,123
0	0	0	36	0	0	2	0	0	0	0	0	0	0	0	0	0	0	38	0	0	38
96	0	421	884	43	240	538	0	262	37	0	295	31	0	396	11	0	321	1,834	11,616	3,389	16,839
35	0	82	110	0	16	151	0	40	113	0	57	11	0	108	14	0	153	459	1	988	1,448
54	0	189	162	0	56	149	0	37	47	0	101	37	0	114	16	0	143	617	0	1,205	1,822
16	0	0	172	6	0	73	0	0	6	0	0	10	0	0	10	0	0	297	568	0	865
0	0	0	130	0	0	54	0	0	4	0	0	8	0	0	0	0	0	196	1,383	0	1,579
13	0	92	96	0	35	85	0	50	8	0	98	24	0	109	4	0	127	240	0	1,332	1,572
0	0	0	0	8	0	0	11	0	0	0	0	0	0	0	0	0	0	0	146	0	146
1	0	0	113	0	0	48	0	0	8	0	0	3	0	0	2	0	0	189	0	0	189
19	0	301	101	0	120	103	0	114	5	0	168	20	0	113	0	0	131	258	2,158	1,667	4,083
19	0	0	228	0	0	97	0	0	2	0	0	13	0	0	5	0	0	364	0	0	364
51	0	179	411	0	85	110	0	134	24	0	173	29	0	196	18	0	14	706	0	1,505	2,211
8	0	38	66	0	0	54	0	25	13	0	75	15	0	72	6	0	77	181	15	1,042	1,238
216	0	881	1,590	15	313	923	11	400	229	0	672	170	0	711	74	0	644	3,508	4,271	7,739	15,518
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
57	0	159	156	0	31	159	0	55	17	0	151	74	0	108	57	0	121	571	0	1,367	1,937
2	0	153	88	0	56	88	0	33	0	0	151	31	0	113	0	0	0	210	65	3,325	3,599
19	0	31	55	0	33	35	0	47	0	0	101	0	0	72	0	0	81	125	0	438	564
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
79	0	0	231	0	0	216	0	0	55	0	0	57	0	0	67	0	0	806	95	0	902
21	0	38	21	0	52	20	0	25	1	0	75	3	0	72	1	0	77	103	0	505	608
178	0	380	551	0	173	517	0	160	73	0	478	166	0	365	125	0	279	1,815	160	5,635	7,610
490	0	1,681	3,025	57	725	1,979	11	823	339	0	1,445	367	0	1,471	211	0	1,244	7,157	16,047	16,762	39,966

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**APPENDIX N WILL BE INSERTED AND FILED WITH THE COURT
WHEN THE FY 2025/26 ASSESSMENT PACKAGE IS APPROVED.**

**APPENDIX O WILL BE INSERTED AND FILED WITH THE COURT
WHEN THE FY 2025/26 ASSESSMENT PACKAGE IS APPROVED.**

SUMMARY BUDGET FISCAL YEAR 2024-25

	Approved Budget	Approved Budget	Approved vs. Amended
4000 Mutual Agency Revenue	\$186,412	\$191,070	\$4,658
4110 Appropriative Pool Assessments	8,886,164	9,521,030	634,866
4120 Non-Agricultural Pool Assessments	428,750	312,750	(116,000)
4730 Prorated Interest Income	312,500	478,500	166,000
Total Income	9,813,827	10,503,350	689,523
Judgment Administration Expenses			
5900 Judgment Administration Costs	728,726	721,010	(7,716)
6010 Administration Salary Costs	1,413,610	1,032,120	(381,490)
6020 Office Building Expense	208,510	234,470	25,960
6030 Office Supplies & Equip.	46,950	56,390	9,440
6040 Postage & Printing Costs	33,806	32,950	(856)
6050 Information Services	199,818	232,530	32,712
6060 WM Special Contract Services	60,200	111,460	51,260
6070 Watermaster Legal Services	565,964	414,060	(151,904)
6080 Insurance Expense	50,468	50,950	482
6110 Dues and Subscriptions	40,027	25,900	(14,127)
6150 Field Supplies & Equipment	3,200	3,200	0
6170 Travel & Transportation	29,570	104,960	75,390
6190 Conferences & Seminars	50,400	49,370	(1,030)
6200 Advisory Committee Expenses	105,823	134,130	28,307
6300 Watermaster Board Expenses	256,601	288,290	31,689
8300 Appropriative Pool Administration	112,173	125,500	13,327
8400 Agricultural Pool Administration	108,700	124,220	15,520
8500 Non-Agricultural Pool Administration	108,194	120,940	12,746
9500 Allocated Administration Expenses	(440,828)	(540,830)	(100,002)
Total Judgment Administration Expenses	3,681,911	3,321,620	(360,291)
OBMP Expenses & Program Elements 1-9			
6900 Optimum Basin Mgmt Program	1,066,497	1,437,940	371,443
7104 Groundwater Level Monitoring	456,925	585,050	128,125
7200 OBMP Pgm Element 2 - Comp Recharge	1,414,773	1,774,300	359,527
7300 OBMP Pgm Element 3 & 5 - Water Supply Plan-Desalter	84,677	122,010	37,333
7400 OBMP Pgm Element 4 - Mgmt Zone Strategies	512,434	412,400	(100,034)
7500 OBMP Pgm Element 6 & 7 - Coop Efforts/Salt Mgmt	673,924	669,380	(4,544)
7600 OBMP Pgm Element 8 & 9 Storage Mgmt/Conj Use	633,092	867,050	233,958
7690 Recharge Improvement Debt & Projects	848,765	772,770	(75,995)
9501 Allocated Administration Expenses - OBMP	222,160	232,750	10,590
9502 Allocated Administration Expenses - PE 1-9	218,669	308,080	89,411
Total OBMP Expenses & Program Elements 1-9	6,131,916	7,181,730	1,049,814
Total Expenses	9,813,827	10,503,350	689,523
Net Ordinary Income	0	0	(0)
Other Income			
4225 Interest Income	0	0	0
4210 Approp Pool-Replenishment	0	0	0
4220 Non-Ag Pool-Replenishment	0	0	0
4600 Groundwater Sales	0	0	0
4700 Other Income	0	0	0
Total Other Income	0	0	0
Other Expense			
5010 Groundwater Recharge	0	0	0
9990 Excess Reserve Refunds	0	0	0
Total Other Expense	0	0	0
9900 To / (From) Reserves	0	0	0
Net Other Income	0	0	0
Net Income	\$0	\$0	(\$0)

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Chino Basin Watermaster

Annual Financial Report

For the Fiscal Years Ended June 30, 2025 and 2024

Our Mission Statement

“To manage the Chino Groundwater Basin in the most beneficial manner and to equitably administer and enforce the provisions of the Chino Basin Watermaster Judgment”

Chino Basin Watermaster

Watermaster Board as of June 30, 2025

<u>Represents</u>	<u>Name</u>	<u>Title</u>
Appropriative	James Curatalo	Chair
Agricultural	Jeff Pierson	Vice-Chair
Non-Agricultural	Bob Bowcock	Secretary/Treasurer
Appropriative	Bill Velto	Member
Appropriative	Marty Zvirbulis	Member
Agricultural	Jimmy Medrano	Member
Municipal	Steve Elie	Member
Municipal	Mike Gardner	Member
Municipal	Bob Kuhn	Member

**Chino Basin Watermaster
9641 San Bernardino Road
Rancho Cucamonga, California 91730
(909) 484-3888
www.cbwm.org**

Chino Basin Watermaster
Annual Financial Report
For the Fiscal Years Ended June 30, 2025 and 2024

**Chino Basin Watermaster
Annual Financial Report
For the Fiscal Years Ended June 30, 2025 and 2024**

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Introductory Section



October 23, 2025

Chino Basin Watermaster Board

Introduction

It is our pleasure to submit the Annual Financial Report for the Chino Basin Watermaster (Watermaster) for the fiscal years ended June 30, 2025 and 2024, following guidelines set forth by the Governmental Accounting Standards Board. The Watermaster is ultimately responsible for both the accuracy of the data and the completeness and the fairness of presentation, including all disclosures in this financial report. We believe that the data presented is accurate in all material respects. This report is designed in a manner that we believe necessary to enhance your understanding of the Watermaster's financial position and activities.

This report is organized into four sections: (1) Introductory, (2) Financial, (3) Required Supplementary Information and (4) Supplemental. The Introductory section offers general information about the Watermaster's organization and current Watermaster activities and reports on a summary of significant financial results. The Financial section includes the Independent Auditor's Report, Management's Discussion and Analysis of the Watermaster's basic financial statements, and the Watermaster's audited basic financial statements with accompanying Notes. The Required Supplementary Information section includes the schedules of changes in Other Post Employment Benefits (OPEB) liabilities and CalPERS Pension contributions. The Supplemental section includes combining net position and revenue and expense schedules.

Generally Accepted Accounting Principles (GAAP) requires that management provide a narrative introduction, overview and analysis to accompany the financial statements in the form of the Management's Discussion and Analysis (MD&A) section. This letter of transmittal is designed to complement the MD&A and should be read in conjunction with it. The Watermaster's MD&A can be found immediately after the Independent Auditor's Report.

Watermaster Structure and Leadership

The Chino Basin Watermaster ("Watermaster") was established under a judgment entered in Superior Court of the State of California for the County of San Bernardino as a result of Case No. RCVRS 51010 (formerly Case No. SCV 164327) entitled "Chino Basin Municipal Water District v. City of Chino, et al.", signed by the Honorable Judge Howard B. Weiner on January 27, 1978. The effective date of this Judgment for accounting and operations was July 1, 1977. Under the Judgment, three Pool committees were formed: (1) Overlying (Agricultural) Pool which includes the State of California and all producers of water for overlying uses other than industrial or commercial purposes; (2) Overlying (Non-Agricultural) Pool which represents producers of water for overlying industrial or commercial purposes; and (3) Appropriative Pool which represents cities, special districts, other public or private entities and utilities. The three Pools act together to form the "Advisory Committee". Pursuant to the Judgment, the Chino Basin Municipal Water District (CBMWD) five-member Watermaster Board Members was initially appointed as "Watermaster". Pursuant to a recommendation of the Advisory Committee, the Honorable J. Michael Gunn appointed a nine-member board as Watermaster on February 19, 1998 thereby creating an independent Watermaster separate from the CBMWD.

Watermaster Structure and Leadership, continued

The General Manager administers the day-to-day operations of the Watermaster in accordance with policies and procedures established by the Board. The Watermaster staff includes eleven regular, full-time employees. Each of the Watermaster's three Pools Committees, the Advisory Committee, and the Board meet monthly to hear various reports and offer advice, assistance, or approval, relating to the matters of the Watermaster.

Watermaster Mission and Services

Chino Basin Watermaster's mission is "To manage the Chino Groundwater Basin in the most beneficial manner and to equitably administer and enforce the provisions of the Chino Basin Watermaster Judgment", Case No. RCVRS 51010 (formerly Case No. SCV 164327). The Watermaster is charged with managing the 1978 Chino Basin Judgment and subsequent orders of the Court concerning the Groundwater Basin service area including accounting for water appropriations by acre footage of water produced, stored, exchanged, or replenished, by parties to the Judgment, purchasing of replenishment water, groundwater monitoring and implementation of special projects. The Watermaster is progressively and actively implementing the Basin's Optimum Basin Management Program Update (OBMPU) which includes extensive monitoring, partnering with Judgment parties to develop additional groundwater and stormwater recharge capabilities, storage and recovery programs, managing salt loads, evaluating the safe yield of the basin and protecting and enhancing this significant natural resource. In 2019, Watermaster began the work to update the OBMP which was originally adopted in 2000. The updated OBMP will provide the necessary basin management framework over the next 20 years to enhance Basin water supplies, protect and enhance water quality, and enhance Basin management overall. After an intensive stakeholder engagement process, the Watermaster Board adopted the 2020 OBMP on October 22, 2020. The Subsequent Environmental Impact Report (SEIR) needed for the OBMPU for which, the Inland Empire Utilities Agency (IEUA), Watermaster's partner in basin management, is the lead agency, and was completed in February of 2024.

Watermaster costs are allocated to the Pools based on various formulas using the prior year's production volume and the party's share of operating safe yield, and the percentage of water reallocated to the Appropriative Pool from the Overlying (Agricultural) Pool. Pursuant to the agreements in place and as prescribed in the Judgment, the Overlying (Agricultural) Pool does not pay assessments as those are covered by the Appropriative Pool.

Economic Condition and Outlook

The Watermaster's office is located in the City of Rancho Cucamonga in San Bernardino County which has experienced tempered economic growth within the region. The economic outlook for the Southern California region is one of cautious growth.

Internal Control Structure

Watermaster management is responsible for the establishment and maintenance of the internal control structure that ensures the assets of the Watermaster are protected from loss, theft or misuse. The internal control structure also ensures adequate accounting data that is compiled to allow for the preparation of financial statements in conformity with generally accepted accounting principles. The Watermaster's internal control structure is designed to provide reasonable assurance that these objectives are met. The concept of reasonable assurance recognizes that (1) the cost of a control should not exceed the benefits likely to be derived, and (2) the valuation of costs and benefits requires estimates and judgments by management.

Budgetary Control

The Advisory Committee annually approves, and the Board annually adopts an operating budget prior to the new fiscal year per the terms of the Judgment. The budget authorizes and provides the basis for reporting and controlling financial operations and accountability for the Watermaster's enterprise operations. The budgeting and reporting treatment applied to the Watermaster is consistent with the accrual basis of accounting and the financial statement basis.

Investment Policy

The Board has adopted an investment policy that conforms to state law, Watermaster's ordinance and resolutions, prudent money management, and the "prudent person" standards. The objectives of the Investment Policy are safety, liquidity and yield. Watermaster funds are invested in the State Treasurer's Local Agency Investment Fund (LAIF), with California Cooperative Liquid Assets Securities System (CLASS), and financial institutions that offer safety, daily and next-day liquidity, and optimized returns catered to California public agencies.

Water Rates and Watermaster Revenues

The Judgment prescribes Watermaster's authority and specifies classes of water production assessments to be used to fund certain activities. Those assessment categories are: Administration, Optimum Basin Management Program, Special Projects, and Replenishment. Each class of assessment has a prescribed purpose and is based on a percentage of water produced. Assessment revenue is Watermaster's principal source of income.

Audit and Financial Reporting

State Law requires the Watermaster to obtain an annual audit of its financial statements by an independent certified public accountant. The accounting firm of C.J. Brown & Company, CPAs – An Accountancy Corporation, has conducted the audit of the Watermaster's financial statements. Their unmodified Independent Auditor's Report appears in the Financial Section.

Other References

More information is contained in the Management's Discussion and Analysis and the Notes to the Basic Financial Statements found in the Financial Section of the report.

Acknowledgements

Preparation of this report was accomplished by the combined efforts of the Watermaster staff. We appreciate the dedicated efforts of Ms. Daniela Uriarte, Senior Accountant, and staff members who contributed to the annual audit processes and to the Watermaster overall. We would also like to thank the members of the Board for their continued support in planning and ensuring sound implementation of the Chino Basin Watermaster's fiscal policies.

Respectfully submitted,

Todd M. Corbin
General Manager

Anna T. Nelson
Director of Administration

Financial Section

Independent Auditor's Report

Watermaster Board Members
Chino Basin Watermaster
Rancho Cucamonga, California

Report on the Financial Statements

Opinion

We have audited the accompanying financial statements of the Chino Basin Watermaster (Watermaster) as of and for the years ended June 30, 2025 and 2024, and the related notes to the financial statements, which collectively comprise the Watermaster's basic financial statements as listed in the table of contents.

In our opinion, the financial statements referred to above present fairly, in all material respects, the respective financial position of the Watermaster, as of June 30, 2025 and 2024, and the respective changes in financial position and, where applicable, cash flows thereof for the years then ended in accordance with accounting principles generally accepted in the United States of America.

Basis for Opinion

We conducted our audits in accordance with auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in Government Auditing Standards, issued by the Comptroller General of the United States. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free from material misstatement. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Responsibility of Management for the Financial Statements

Management is responsible for the preparation and fair presentation of these financial statements in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about the Watermaster's ability to continue as a going concern for twelve months beyond the financial statement date, including any currently known information that may raise substantial doubt shortly thereafter.

Independent Auditor's Report, continued

Auditor's Responsibilities for the Audits of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with GAAS and *Government Auditing Standards* will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.

In performing an audit in accordance with GAAS and *Government Auditing Standards*, we

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Watermaster's internal control. Accordingly, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about the Watermaster's ability to continue as a going concern for a reasonable period of time.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control–related matters that we identified during the audit.

Emphasis-of-Matter

As discussed in Note 10 to the financial statements, the Watermaster has adopted the provisions of *GASB Statement No. 101 – Compensated Absences*. As a result, Watermaster has restated its net position to reflect the effects of the change in accounting policy. Our opinion is not modified with respect to this matter.

Independent Auditor's Report, continued

Other Matters

Required Supplementary Information

Accounting principles generally accepted in the United States of America require that the management's discussion and analysis on pages 8 through 12 and the required supplementary information on pages 42 through 45 be presented to supplement the basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with auditing standards generally accepted in the United States of America, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audits of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Supplemental Information

Our audits were conducted for the purpose of forming an opinion on the financial statements that collectively comprise the Watermaster's basic financial statements. The combining schedules of net position and combining schedules of revenue, expenses, and changes in net position on pages 46 through 49, are presented for purposes of additional analysis and are not a required part of the basic financial statements.

Such information is the responsibility of management and was derived from and relate directly to the underlying accounting and other records used to prepare the basic financial statements. The information has been subjected to the auditing procedures applied in the audits of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with auditing standards generally accepted in the United States of America. In our opinion, the combining schedules of revenue, expenses, and changes in net position are fairly stated in all material respects in relation to the basic financial statements as a whole.

Other Information

Management is responsible for the other information included in the annual report. The other information comprises the introductory section on pages 1 through 3 but does not include the basic financial statements and our auditor's report thereon. Our opinions on the basic financial statements do not cover the other information, and we do not express an opinion or any form of assurance thereon.

In connection with our audit of the basic financial statements, our responsibility is to read the other information and consider whether a material inconsistency exists between the other information and the basic financial statements, or the other information otherwise appears to be materially misstated. If, based on the work performed, we conclude that an uncorrected material misstatement of the other information exists, we are required to describe it in our report.

Independent Auditor's Report, continued

Other Reporting Required by *Government Auditing Standards*

In accordance with *Government Auditing Standards*, we have also issued our report dated October 23, 2025, on our consideration of the Watermaster's internal control over financial reporting and on our tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements and other matters. The purpose of that report is to describe the scope of our testing of internal control over financial reporting and compliance and the results of that testing, and not to provide an opinion on internal control over financial reporting or on compliance. That report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the Watermaster's internal control over financial reporting and compliance. This report can be found on pages 50 and 51.

C.J. Brown & Company, CPAs

C.J. Brown & Company, CPAs

Cypress, California

October 23, 2025

Chino Basin Watermaster
Management's Discussion and Analysis
For the Fiscal Years Ended June 30, 2025 and 2024

The following Management's Discussion and Analysis (MD&A) of activities and financial performance of the Chino Basin Watermaster (Watermaster) provides an introduction to the financial statements of the Watermaster for the fiscal years ended June 30, 2025 and 2024. We encourage readers to consider the information presented here with additional information that we have furnished in conjunction with the transmittal letter in the Introductory Section and with the accompanying basic financial statements and related notes, which follow this section.

Financial Highlights

- In 2025, the Watermaster's net position increased by 1.45% or \$154,907 to \$10,807,477 as a result of ongoing operations. In 2024, the Watermaster's net position decreased by 18.21% or \$2,371,914 to \$10,652,570 as a result of ongoing operations. Please see Note 10 for further discussion.
- In 2025, the Watermaster's operating revenues decreased by 1.46% or \$151,501 to \$10,249,753. The Watermaster's operating revenues decreased by 3.08% or \$330,749 to \$10,401,254 in 2024.
- In 2025, the Watermaster's non-operating revenues decreased by 23.11% or \$168,229 to \$559,637. The Watermaster's non-operating revenues increased by 113.47% or \$386,897 to \$727,866 in 2024.
- In 2025, the Watermaster's operating expenses decreased by 11.31% or \$1,329,606 to \$10,424,955. The Watermaster's operating expenses increased by 40% or \$3,357,992 to \$11,754,561 in 2024.
- In 2025, the Watermaster's non-operating expenses decreased 98.75% or \$1,544,809 to \$19,571. The Watermaster's non-operating expenses increased 778.87% or \$1,386,380 to \$1,564,380 in 2024.

Required Financial Statements

This annual report consists of a series of financial statements. The Statement of Net Position, Statement of Revenues, Expenses, and Changes in Net Position and Statement of Cash Flows provide information about the activities and performance of the Watermaster using accounting methods similar to those used by private sector companies.

The Statement of Net Position includes all of the Watermaster's investments in resources (assets), deferred outflows of resources, obligations to creditors (liabilities), and deferred inflows of resources. It also provides the basis for computing a rate of return, evaluating the capital structure of the Watermaster and assessing the liquidity and financial flexibility of the Watermaster. All of the current year's revenues and expenses are accounted for in the Statement of Revenues, Expenses, and Changes in Net Position. This statement measures the outcome of the Watermaster's operations over the past year and can be used to determine if the Watermaster has successfully recovered all of its costs through its rates and other charges. This statement can also be used to evaluate profitability and credit worthiness. The final required financial statement is the Statement of Cash Flows, which provides information about the Watermaster's cash receipts and cash payments during the reporting period. The Statement of Cash Flows reports cash receipts, cash payments, and net changes in cash resulting from operations, investing, non-capital financing, and capital and related financing activities and provides answers to such questions as where did cash come from, what was cash used for, and what was the change in cash balance during the reporting period.

Financial Analysis of the Watermaster

One of the most important questions asked about the Watermaster's finances is, "Is the Watermaster better off or worse off as a result of this year's activities?" The Statement of Net Position and the Statement of Revenues, Expenses, and Changes in Net Position report information about the Watermaster in a way that helps answer this question.

Chino Basin Watermaster
Management's Discussion and Analysis, continued
For the Fiscal Years Ended June 30, 2025 and 2024

Financial Analysis of the Watermaster, continued

These statements include all assets, deferred outflows of resources, liabilities, and deferred inflows of resources using the *accrual basis of accounting*, which is similar to the accounting method used by most private sector companies. All of the current year's revenues and expenses are taken into account regardless of when the cash is received or paid.

These two statements report the Watermaster's *net position* and changes in it. You can think of the Watermaster's net position – assets and deferred outflow of resources, less liabilities and deferred inflows of resources – as one way to measure the Watermaster's financial health, or *financial position*. Over time, *increases or decreases* in an organization's net position is one indicator of whether its *financial health* is improving or deteriorating. However, one will need to consider other non-financial factors such as changes in economic conditions, population growth, zoning, and new or changed government legislation, such as changes in federal and state water quality standards. The Watermaster is funded on an annual basis through a court-mandated process.

Notes to the Basic Financial Statements

The notes provide additional information that is essential to a full understanding of the data provided in the basic financial statements. The notes to the basic financial statements can be found on pages 17 through 41.

Statements of Net Position

Condensed Statements of Net Position					
	2025	2024	Change	2023	Change
Assets:					
Current assets	\$ 13,470,007	13,091,179	378,828	15,417,627	(2,326,448)
Capital assets, net	1,144,851	983,347	161,504	196,878	786,469
Total assets	14,614,858	14,074,526	540,332	15,614,505	(1,539,979)
Deferred outflows of resources	746,464	902,988	(156,524)	863,919	39,069
Liabilities:					
Current liabilities	1,666,043	1,317,887	348,156	718,737	599,150
Non-current liabilities	2,739,205	2,867,140	(127,935)	2,600,947	266,193
Total liabilities	4,405,248	4,185,027	220,221	3,319,684	865,343
Deferred inflows of resources	148,597	139,917	8,680	9,861	130,056
Net position:					
Net investment in capital assets	433,913	167,003	266,910	145,069	21,934
Unrestricted	10,373,564	10,485,567	(112,003)	12,879,415	(2,393,848)
Total net position	\$ 10,807,477	10,652,570	154,907	13,024,484	(2,371,914)

As noted earlier, net position may serve over time as a useful indicator of an organization's financial position. In the case of the Watermaster, assets and deferred outflows of resources exceeded liabilities and deferred inflows of resources by \$10,807,477 and \$10,652,570 as of June 30, 2025 and 2024, respectively.

Chino Basin Watermaster
Management's Discussion and Analysis, continued
For the Fiscal Years Ended June 30, 2025 and 2024

Statements of Net Position, continued

Compared to prior year, net position of the Watermaster increased by 1.45% or \$154,907. The Watermaster's total net position is made up of three components: (1) net investment in capital assets, (2) restricted, and (3) unrestricted.

A portion of the Watermaster's net position, 4.01% and 1.57%, as of June 30, 2025 and 2024, respectively, reflects the Watermaster's investment in capital assets (net of accumulated depreciation) less any related debt (where applicable) used to acquire those assets that is still outstanding. The Watermaster uses these capital assets to provide services to customers within the Watermaster's service area; consequently, these assets are not available for future spending.

At the end of fiscal years 2025 and 2024, the Watermaster reflected a positive balance in its unrestricted net position of \$10,373,564 and \$10,485,567, respectively, that may be utilized in future years. See note 11 for further discussion.

Statements of Revenues, Expenses, and Changes in Net Position

Condensed Statements of Revenues, Expenses, and Changes in Net Position

	<u>2025</u>	<u>2024</u>	<u>Change</u>	<u>2023</u>	<u>Change</u>
Revenues:					
Operating revenues	\$ 10,249,753	10,401,254	(151,501)	10,732,003	(330,749)
Non-operating revenues	<u>559,637</u>	<u>727,866</u>	<u>(168,229)</u>	<u>340,969</u>	<u>386,897</u>
Total revenues	<u>10,809,390</u>	<u>11,129,120</u>	<u>(319,730)</u>	<u>11,072,972</u>	<u>56,148</u>
Expenses:					
Operating expense	10,424,955	11,754,561	(1,329,606)	8,396,569	3,357,992
Depreciation	209,957	182,093	27,864	143,842	38,251
Non-operating expense	<u>19,571</u>	<u>1,564,380</u>	<u>(1,544,809)</u>	<u>178,000</u>	<u>1,386,380</u>
Total expenses	<u>10,654,483</u>	<u>13,501,034</u>	<u>(2,846,551)</u>	<u>8,718,411</u>	<u>4,782,623</u>
Changes in net position	154,907	(2,371,914)	2,526,821	2,354,561	(4,726,475)
Net position, beginning of period, as restated (Note 10)	<u>10,652,570</u>	<u>13,024,484</u>	<u>(2,371,914)</u>	<u>10,669,923</u>	<u>2,354,561</u>
Net position, end of period	<u>\$ 10,807,477</u>	<u>10,652,570</u>	<u>154,907</u>	<u>13,024,484</u>	<u>(2,371,914)</u>

The statements of revenues, expenses, and changes of net position show how the Watermaster's net position changed during the fiscal years. In the case of the Watermaster, net position increased by 1.45% or \$154,907 to \$10,807,477 as a result of ongoing operations for the year ended June 30, 2025; and net position decreased by 18.21% or \$2,371,914 to \$10,652,570 as a result of ongoing operations for the year ended June 30, 2024.

A closer examination of the sources of changes in net position reveals that:

In 2025, the Watermaster's total revenues decreased 2.87% or \$319,730 to \$10,809,390. The Watermaster's operating revenues decreased by 1.46% or \$151,501 to \$10,249,753, due primarily to a decrease of \$256,967 in replenishment water revenue, which was offset by an increase of \$99,369 in administrative assessments. The Watermaster's non-operating revenues decreased by 23.11% or \$168,229 to \$559,637, due to a decrease in investment earnings, net of a year-end fair value adjustment for LAIF.

Chino Basin Watermaster
Management's Discussion and Analysis, continued
For the Fiscal Years Ended June 30, 2025 and 2024

Statements of Revenues, Expenses, and Changes in Net Position, continued

In 2024, the Watermaster's total revenues increased 0.51% or \$56,148 to \$11,129,120. The Watermaster's operating revenues decreased by 3.08% or \$330,749 to \$10,401,254, due primarily to a decrease of \$359,646 in administrative assessments, which was offset by an increase of \$32,349 in replenishment water revenue. The Watermaster's non-operating revenues increased by 113.47% or \$386,897 to \$727,866, due to an increase in investment earnings, net of a year-end fair value adjustment for LAIF.

In 2025, the Watermaster's total expenses decreased 21.08% or \$2,846,551 to \$10,654,483. The Watermaster's operating expenses decreased by 11.31% or \$1,329,606 to \$10,424,955, due primarily to decreases of \$1,686,132 in groundwater replenishment and other water purchases, and \$825,709 in Watermaster administration; which were offset by an increase of \$1,267,642 in optimum basin management plan. The Watermaster's non-operating expenses decreased 98.75% or \$1,544,809 to \$19,571, primarily due to a decrease of \$1,542,183 in reserve distribution expenses.

In 2024, the Watermaster's total expenses increased 54.86% or \$4,782,623 to \$13,501,034. The Watermaster's operating expenses increased by 40% or \$3,357,992 to \$11,754,561, due primarily to increases of \$1,606,779 in groundwater replenishment and other water purchases, \$931,282 in optimum basin management plan, and \$821,319 in Watermaster administration. The Watermaster's non-operating expenses increased 778.87% or \$1,386,380 to \$1,564,380, primarily due to an increase of \$1,364,804 in reserve distribution expenses.

Capital Asset Administration

At the end of fiscal years 2025 and 2024, the Watermaster's investment in capital assets amounted to \$1,144,851 and \$983,347 (net of accumulated depreciation and amortization), respectively. This investment in capital assets includes leasehold improvements, office equipment, vehicles, leased building, and leased equipment. The capital assets of the Watermaster are more fully analyzed in note 4 to the basic financial statements.

Changes in capital assets in 2025 were as follows:

	Balance 2024	Additions	Disposals/ Transfers	Balance 2025
Capital assets:				
Depreciable assets	\$ 1,474,274	374,326	(105,951)	1,742,649
Accumulated depreciation	(490,927)	(209,957)	103,086	(597,798)
Total capital assets	\$ 983,347	164,369	(2,865)	1,144,851

Changes in capital assets in 2024 were as follows:

	Balance 2023	Additions	Disposals/ Transfers	Balance 2024
Capital assets:				
Depreciable assets	\$ 861,191	968,562	(355,479)	1,474,274
Accumulated depreciation	(664,313)	(182,093)	355,479	(490,927)
Total capital assets	\$ 196,878	786,469	-	983,347

Chino Basin Watermaster
Management's Discussion and Analysis, continued
For the Fiscal Years Ended June 30, 2025 and 2024

Conditions Affecting Current Financial Position

Management is unaware of any conditions, which could have a significant impact on the Watermaster's current financial position, net position, or operating results in terms of past, present, and future.

Requests for Information

This financial report is designed to provide the Watermaster's present users, including funding sources, customers, stakeholders, and other interested parties with a general overview of the Watermaster's finances and to demonstrate Watermaster's accountability with an overview of Watermaster's financial operations and financial condition. Should the reader have questions regarding the information included in this report or wish to request additional financial information, please contact the Watermaster's Director of Administration, Anna Nelson, at Chino Basin Watermaster, 9641 San Bernardino Road, Rancho Cucamonga, CA 91730 or (909) 484-3888.

Basic Financial Statements

Chino Basin Watermaster
Statements of Net Position
June 30, 2025 and 2024

	<u>2025</u>	<u>As restated 2024</u>
Current assets:		
Cash and cash equivalents (note 2)	\$ 12,352,799	11,693,858
Accounts receivable	1,052,150	1,303,493
Accrued interest receivable	7,295	7,171
Other receivable	-	50,000
Prepaid expenses and other current assets	<u>57,763</u>	<u>36,657</u>
Total current assets	<u>13,470,007</u>	<u>13,091,179</u>
Non-current assets:		
Capital assets, net (note 4)	<u>1,144,851</u>	<u>983,347</u>
Total non-current assets	<u>1,144,851</u>	<u>983,347</u>
Total assets	<u>14,614,858</u>	<u>14,074,526</u>
Deferred outflows of resources:		
Deferred OPEB outflows (note 7)	79,011	91,055
Deferred pension outflows (note 8)	<u>667,453</u>	<u>811,933</u>
Total deferred outflows of resources	<u>746,464</u>	<u>902,988</u>
Current liabilities:		
Accounts payable and accrued expenses	1,310,996	962,078
Accrued salaries and benefits	46,249	36,023
Long-term liabilities – due within one year:		
Compensated absences (note 5)	173,011	181,839
Leases payable (note 6)	<u>135,787</u>	<u>137,947</u>
Total current liabilities	<u>1,666,043</u>	<u>1,317,887</u>
Non-current liabilities:		
Long-term liabilities – due in more than one year:		
Compensated absences (note 5)	12,998	-
Leases payable (note 6)	575,151	678,397
Net OPEB liability (note 7)	253,540	275,478
Net pension liability (note 8)	<u>1,897,516</u>	<u>1,913,265</u>
Total non-current liabilities	<u>2,739,205</u>	<u>2,867,140</u>
Total liabilities	<u>4,405,248</u>	<u>4,185,027</u>
Deferred inflows of resources:		
Deferred OPEB inflows (note 7)	<u>148,597</u>	<u>139,917</u>
Total deferred inflows of resources	<u>148,597</u>	<u>139,917</u>
Net position: (note 11)		
Net investment in capital assets	433,913	167,003
Unrestricted	<u>10,373,564</u>	<u>10,485,567</u>
Total net position	<u>\$ 10,807,477</u>	<u>10,652,570</u>

See accompanying notes to the basic financial statements

Chino Basin Watermaster
Statements of Revenues, Expenses, and Changes in Net Position
For the Fiscal Years Ended June 30, 2025 and 2024

	<u>2025</u>	<u>as restated 2024</u>
Operating revenues:		
Administrative assessments	\$ 9,964,355	9,864,986
Replenishment water revenue	92,858	349,825
Other revenue	192,540	186,443
Total operating revenue	<u>10,249,753</u>	<u>10,401,254</u>
Operating expenses:		
Groundwater replenishment and other water purchases	234,659	1,920,791
Optimum basin management plan	6,241,855	4,974,213
Watermaster administration	3,086,166	3,911,875
Pool, advisory, and board administration	862,275	947,682
Total operating expense	<u>10,424,955</u>	<u>11,754,561</u>
Operating loss before depreciation	(175,202)	(1,353,307)
Depreciation and amortization expense	<u>(209,957)</u>	<u>(182,093)</u>
Operating loss	<u>(385,159)</u>	<u>(1,535,400)</u>
Non-operating revenue (expense):		
Reserve distribution	-	(1,542,183)
Interest expense	(19,571)	(22,197)
Investment returns	559,637	727,866
Total non-operating revenue (expense), net	<u>540,066</u>	<u>(836,514)</u>
Changes in net position	154,907	(2,371,914)
Net position, beginning of period, as restated (note 10)	<u>10,652,570</u>	<u>13,024,484</u>
Net position, end of period	<u>\$ 10,807,477</u>	<u>10,652,570</u>

See accompanying notes to the basic financial statements

Chino Basin Watermaster
Statements of Cash Flows
For the Fiscal Years Ended June 30, 2025 and 2024

	<u>2025</u>	<u>2024</u>
Cash flows from operating activities:		
Receipts from stakeholders	\$ 10,501,096	10,671,517
Payments to employees for salaries and wages	(1,623,182)	(3,351,075)
Payments to vendors for materials and services	<u>(8,282,048)</u>	<u>(8,370,959)</u>
Net cash provided by (used in) operating activities	<u>595,866</u>	<u>(1,050,517)</u>
Cash flows from non-capital financing activities:		
Payments for non-operating expenses	<u>-</u>	<u>(1,542,183)</u>
Net cash used in non-capital financing activities	<u>-</u>	<u>(1,542,183)</u>
Cash flows from capital financing activities:		
Acquisition of capital assets	(336,130)	(77,024)
Principal paid on capital lease payables	(140,737)	(127,003)
Interest paid on capital lease payables	<u>(19,571)</u>	<u>(22,197)</u>
Net cash used in capital financing activities	<u>(496,438)</u>	<u>(226,224)</u>
Cash flows from investing activities:		
Investment returns	<u>559,513</u>	<u>795,095</u>
Net cash provided by investing activities	<u>559,513</u>	<u>795,095</u>
Net increase (decrease) in cash and cash equivalents	658,941	(2,023,829)
Cash and cash equivalents, beginning of year	<u>11,693,858</u>	<u>13,717,687</u>
Cash and cash equivalents, end of year	<u>\$ 12,352,799</u>	<u>11,693,858</u>

Continued on next page

See accompanying notes to the basic financial statements

Chino Basin Watermaster
Statements of Cash Flows, continued
For the Fiscal Years Ended June 30, 2025 and 2024

	<u>2025</u>	<u>2024</u>
Reconciliation of operating loss to net cash provided by (used in) operating activities:		
Operating income	\$ <u>(385,159)</u>	<u>(1,535,400)</u>
Adjustments to reconcile operating loss to net cash provided by (used in) operating activities:		
Depreciation	209,957	182,093
Changes in assets, deferred outflows of resources, liabilities and deferred inflows of resources:		
(Increase) decrease in assets and deferred outflows of resources:		
Accounts receivable	251,343	270,263
Other receivable	50,000	(50,000)
Prepaid expenses and other current assets	(21,106)	15,127
Deferred outflows of resources	156,524	(39,069)
Increase (decrease) in liabilities and deferred inflows of resources:		
Accounts payable and accrued expense	348,918	417,742
Accrued salaries and benefits	10,226	3,020
Compensated absences	4,170	(129,275)
Total OPEB liability	(21,938)	5,727
Net pension liability	(15,749)	193,069
Employee compensation plan	-	(389,475)
Deferred inflows of resources	<u>8,680</u>	<u>5,661</u>
Total adjustments	<u>981,025</u>	<u>484,883</u>
Net cash provided by (used in) operating activities	\$ <u>595,866</u>	<u>(1,050,517)</u>

See accompanying notes to the basic financial statements

Chino Basin Watermaster
Notes to the Financial Statements
For the Fiscal Years Ended June 30, 2025 and 2024

(1) Reporting Entity and Summary of Significant Accounting Policies

A. Organization and Operations of the Reporting Entity

The Chino Basin Watermaster (“Watermaster”) was established under a judgment entered in the Superior Court of the State of California for the County of San Bernardino as a result of Case No. RCV 51010 (formerly Case No. SCV 164327) entitled “Chino Basin Municipal Water District v. City of Chino, et al.”, signed by the Honorable Judge Howard B. Weiner on January 27, 1978. The effective date of this Judgment for accounting and operations was July 1, 1977.

Pursuant to the Judgment, the Chino Basin Municipal Water District (CBMWD) five-member Board of Directors was initially appointed as “Watermaster”. Their term of appointment as Watermaster was for five years, and the Court, by subsequent orders, provided for successive terms, or for a successor Watermaster. Pursuant to a recommendation of the Advisory Committee, the Honorable J. Michael Gunn appointed a nine-member board as Watermaster on September 28, 2000. Under the Judgment, three Pool committees were formed: (1) Overlying (Agricultural) Pool which includes the State of California and all producers of water for overlying uses other than industrial or commercial purposes; (2) Overlying (Non-Agricultural) Pool which represents producers of water for overlying industrial or commercial purposes; and (3) Appropriative Pool which represents cities, districts, other public or private entities, and utilities. The three Pool committees act together to form the “Advisory Committee.” The Watermaster provides the Chino Groundwater Basin service area with services which primarily include: Accounting for water appropriations and components of acre-footage of stored water by agency, purchase of replenishment water, groundwater monitoring, and implementation of special projects.

Watermaster expenditures are allocated to the pools based on the prior year’s production volume (or the same percentage used to set the annual assessments). Allocations for fiscal year 2024-2025 expenses are based on the 2023-2024 production volume.

Production volume	Fiscal Year 2025		Fiscal Year 2024	
	Acre Feet	Percentage	Acre Feet	Percentage
Appropriative Pool	74,795	77.72%	54,722	72.65%
Agricultural Pool	18,184	18.89%	17,717	23.52%
Non-agricultural Pool	3,259	3.39%	2,879	3.82%
Total production volume	96,238	100.00%	75,318	100.00%

The Agricultural Pool members ratified an agreement with the Appropriative Pool at their meeting of June 16, 1988, wherein the Appropriative Pool assumes Agricultural Pool administrative expenses and special project cost allocations in exchange for an accelerated transfer of un-pumped agricultural water to the Appropriative Pool. In addition, the Agricultural Pool transferred all pool administrative reserves at June 30, 1988, to the Appropriative Pool effective July 1, 1988.

In July of 2000, the principal parties in the Basin signed an agreement, known as the Peace Agreement, which formalized the Basin parties' commitment to implement an Optimum Basin Management Program (OBMP). The OBMP was developed in a collaborative public process that identified the needs and wants of all stakeholders; described the physical state of the groundwater basin; developed a set of management goals; identified impediments to those goals; described a series of actions that could be taken to remove those impediments and achieve the management goals; developed and executed agreements to implement the OBMP; and certified a programmatic Environmental Impact Report (PEIR) pursuant to CEQA with IEUA as the lead Agency. The Peace Agreement was signed by all the parties, and the Court approved the agreement and ordered the Watermaster to proceed in accordance with the terms of the agreement.

Chino Basin Watermaster
Notes to the Financial Statements
For the Fiscal Years Ended June 30, 2025 and 2024

(1) Reporting Entity and Summary of Significant Accounting Policies, continued

A. Organization and Operations of the Reporting Entity, continued

In 2019, with a nearly two-decade-old “2000 OBMP,” the “2020 OBMP Update (2020 OBMPU)” was begun. This entailed a multi-stakeholder collaborative process wherein Watermaster hosted many Listening Sessions to bring the 20-year old planning document up to date. The process acknowledged the new challenges and opportunities that the region faced and provided solutions through collaboration. The multi-stakeholder effort concluded in the finalization of the 2020 OBMPU Report in October of 2020 setting the framework of basin management into the foreseeable future. A Subsequent Environmental Impact Report (SEIR) in support of the 2020 OBMPU was certified pursuant to Section 15088.5 of CEQA guidelines by IEUA as the lead agency.

B. Basis of Accounting and Measurement Focus

The Watermaster reports its activities as an enterprise fund, which is used to account for operations that are financed and operated in a manner similar to a private business enterprise, where the intent of the Watermaster is that the costs of providing water to its service area on a continuing basis be financed or recovered primarily through user charges (water sales), capital grants, and similar funding. Revenues and expenses are recognized on the full accrual basis of accounting. Revenues are recognized in the accounting period in which they are earned, and expenses are recognized in the period incurred, regardless of when the related cash flows take place.

Operating revenues and expenses, such as replenishment water revenues and groundwater replenishment, result from exchange transactions associated with the principal activity of the Watermaster. Exchange transactions are those in which each party receives and gives up essentially equal values. Management, administration, and depreciation expenses are also considered operating expenses. Other revenues and expenses not included in the above categories are reported as non-operating revenues and expenses.

C. Financial Reporting

The Watermaster’s basic financial statements have been prepared in conformity with accounting principles generally accepted in the United States of America (GAAP), as applied to enterprise funds. The Governmental Accounting Standards Board (GASB) is the accepted standard-setting body for establishing governmental accounting and financial reporting principles. The Watermaster solely operates as a special-purpose government which means it is only engaged in business-type activities; accordingly, activities are reported in the Watermaster’s proprietary fund.

The Watermaster has adopted the following GASB pronouncements in the current year:

In June 2022, the GASB issued Statement No. 101 – *Compensated Absences*. The objective of this Statement is to better meet the information needs of financial statement users by updating the recognition and measurement guidance for compensated absences. That objective is achieved by aligning the recognition and measurement guidance under a unified model and by amending certain previously required disclosures. This Statement requires that liabilities for compensated absences be recognized for (1) leave that has not been used and (2) leave that has been used but not yet paid in cash or settled through noncash means. A liability should be recognized for leave that has not been used if (a) the leave is attributable to services already rendered, (b) the leave accumulates, and (c) the leave is more likely than not to be used for time off or otherwise paid in cash or settled through noncash means. Leave is attributable to services already rendered when an employee has performed the services required to earn the leave.

Chino Basin Watermaster
Notes to the Financial Statements, continued
For the Fiscal Years Ended June 30, 2025 and 2024

(1) Reporting Entity and Summary of Significant Accounting Policies, continued

C. Financial Reporting, continued

Leave that accumulates is carried forward from the reporting period in which it is earned to a future reporting period during which it may be used for time off or otherwise paid or settled. In estimating the leave that is more likely than not to be used or otherwise paid or settled, a government should consider relevant factors such as employment policies related to compensated absences and historical information about the use or payment of compensated absences. However, leave that is more likely than not to be settled through conversion to defined benefit postemployment benefits should not be included in a liability for compensated absences.

In December 2023, the GASB issued Statement No. 102 – *Certain Risk Disclosures*. The primary objective of this Statement requires a government to assess whether a concentration or constraint makes the primary government reporting unit or other reporting units that report a liability for revenue debt vulnerable to the risk of a substantial impact. Additionally, this Statement requires a government to assess whether an event or events associated with a concentration or constraint that could cause the substantial impact to have occurred, have begun to occur, or are more likely than not to begin to occur within 12 months of the date the financial statements are issued.

D. Assets, Deferred Outflows, Liabilities, Deferred Inflows, and Net Position

1. Use of Estimates

The preparation of the basic financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets, deferred outflows, liabilities, and deferred inflows, and disclosures of contingent assets, deferred outflows, liabilities, and deferred inflows at the date of the financial statements and the reported changes in net position during the reporting period. Actual results could differ from those estimates.

2. Cash and Cash Equivalents

Substantially all the Watermaster's cash is invested in interest-bearing accounts. The Watermaster considers all highly liquid investments with a maturity of three months or less to be cash equivalents.

3. Investments

The Watermaster has adopted an investment policy directing the General Manager to invest and reinvest funds subject to the provisions of the Watermaster's Investment Policy and the ongoing review and control of the Watermaster and the Watermaster Advisory Committee in accordance with California Government Code section 53600.

Changes in fair value that occur during a fiscal year are recognized as investment income reported for that fiscal year. Investment income includes interest earnings, changes in fair value, and any gains or losses realized upon the liquidation or sale of investments.

4. Accounts Receivable and Allowance for Uncollectible Accounts

The Watermaster extends credit to customers in the normal course of operations. Management has determined that all amounts are considered collectable. As a result, the Watermaster has not recorded an allowance for doubtful accounts as of June 30, 2025 and 2024, respectively.

5. Prepaid Expenses

Certain payments to vendors reflect costs or deposits applicable to future accounting periods and are recorded as prepaid items in the basic financial statements.

Chino Basin Watermaster
Notes to the Financial Statements, continued
For the Fiscal Years Ended June 30, 2025 and 2024

(1) Reporting Entity and Summary of Significant Accounting Policies, continued

D. Assets, Deferred Outflows, Liabilities, Deferred Inflows, and Net Position, continued

6. Capital Assets

Capital assets acquired and/or constructed are capitalized at historical cost. Donated assets are recorded at estimated fair market value at the date of donation. Upon retirement or other disposition of capital assets, the cost and related accumulated depreciation are removed from the respective balances and any gains or losses are recognized.

Depreciation is recorded on a straight-line basis over the estimated useful lives of the assets as follows:

Computer equipment and software	5 years
Office furniture and fixtures	7 years
Leasehold improvements	10 years
Automotive equipment	7 years

Leased assets are amortized on a straight-line basis over the life of the lease term.

7. Deferred Outflows of Resources

The statements of net position will sometimes report a separate section for deferred outflows of resources. This separate financial statement element, deferred outflows of resources, represents the consumption of net assets applicable to future periods and, therefore, will not be recognized as an outflow of resources (expenditure) until that time. The Watermaster has the following items that qualify for reporting in this category:

Post-Employment Benefits Other Than Pensions (OPEB)

- Deferred outflow for the net change in assumptions which will be amortized over a closed period equal to the average of the expected remaining service lives of all employees that are provided with post-employment benefits through the Plan.
- Deferred outflow which is equal to the employer contributions made after the measurement date of the total OPEB liability. This amount will be amortized-in-full against the total OPEB liability in the next fiscal year.

Pensions

- Deferred outflow which is equal to the employer contributions made after the measurement date of the net pension liability. This amount will be amortized-in-full against the net pension liability in the next fiscal year.
- Deferred outflow for the net difference between the actual and expected experience which will be amortized over a closed period equal to the average of the expected remaining service lives of all employees that are provided with pensions through the Plan.
- Deferred outflow for the net difference in actual and proportionate share of employer contribution which will be amortized over a closed period equal to the average of the expected remaining service lives of all employees that are provided with pensions through the Plan.
- Deferred outflow for the net adjustment due to the changes in proportions of the net pension liability which will be amortized over a closed period equal to the average of the expected remaining service lives of all employees that are provided with pensions through the Plan.

Chino Basin Watermaster
Notes to the Financial Statements, continued
For the Fiscal Years Ended June 30, 2025 and 2024

(1) Reporting Entity and Summary of Significant Accounting Policies, continued

D. Assets, Deferred Outflows, Liabilities, Deferred Inflows, and Net Position, continued

8. Compensated Absences

The Watermaster's policy is to permit eligible employees to accumulate earned vacation up to a total of 320 hours. Employees may receive pay in lieu of using vacation for up to one-half of their annual vacation accrual if: (1) within the prior twelve months, the employee has used vacation in an amount equal to at least half of their annual vacation accrual rate; and (2) the employee has a minimum remaining accrued vacation balance of at least 40 hours. Eligible employees accrue and accumulate sick leave based on Watermaster policy. Twice a year, employees may buy-back accrued sick leave at 50% of their current pay provided that at least 480 hours of accrued sick leave remain after the cash-out. Upon termination of employment, employees are paid all unused vacation. Unused sick time is paid out based on Watermaster policy.

9. Pensions

For purposes of measuring the net pension liability and deferred outflows/inflows of resources related to pensions, and pension expense, information about the fiduciary net position of the Watermaster's California Public Employees' Retirement System (CalPERS) plans (Plans) and addition to/deduction from the Plans' fiduciary net position have been determined on the same basis as they are reported by CalPERS. For this purpose, benefit payments (including refunds of employee contributions) are recognized when due and payable in accordance with the benefit terms. Investments are reported at fair value.

GASB 68 requires that the reported results must pertain to liability and asset information within certain defined timeframes. For this report, the following timeframes are used:

- Valuation Dates: June 30, 2023 and 2022
- Measurement Dates: June 30, 2024 and 2023
- Measurement Periods: July 1, 2023 to June 30, 2024 and July 1, 2022 to June 30, 2023

10. Deferred Inflows of Resources

The statements of net position will sometimes report a separate section for deferred inflows of resources. This financial statement element, deferred inflows of resources, represents an acquisition of net assets applicable to future periods and, therefore, will not be recognized as an inflow of resources (revenue) until that time. The Watermaster has the following items that qualify for reporting in this category:

Post-Employment Benefits Other Than Pensions (OPEB)

- Deferred inflow for the net difference between the actual and expected experience which will be amortized over a closed period equal to the average of the expected remaining service lives of all employees that are provided with post-employment benefits through the Plan.
- Deferred inflow for the net difference in projected and actual earnings on investments of the pension plan fiduciary net position. This amount is amortized over a 5-year period.

11. Lease payable

The Watermaster's lease obligation is measured at the present value of payments expected to be paid during the lease term.

Chino Basin Watermaster
Notes to the Financial Statements, continued
For the Fiscal Years Ended June 30, 2025 and 2024

(1) Reporting Entity and Summary of Significant Accounting Policies, continued

D. Assets, Deferred Outflows, Liabilities, Deferred Inflows, and Net Position, continued

12. Water Production Assessments

Water Production Assessment categories include Administration, Optimum Basin Management Program, Special Projects, and Water Replenishment. Assessments are billed on a yearly basis.

13. Budgetary Policies

The Watermaster adopts an annual operational budget for planning, control, and evaluation purposes. Budgetary control and evaluation are affected by comparisons of actual revenues and expenses with planned revenues and expenses for the period. Encumbrance accounting is not used to account for commitments related to unperformed contracts for construction and services.

14. Net Position

The financial statements utilize a net position presentation. Net position is categorized as follows:

- **Net investment in capital assets** – This component of net position consists of capital assets, net of accumulated depreciation and amortization, and reduced by outstanding balances of any debt, or other long-term borrowings that are attributable to the acquisition, construction, or improvement of those assets.
- **Restricted** – This component of net position consists of assets that have restrictions placed upon their use by external constraints imposed either by creditors (debt covenants), grantors, contributors, or laws and regulations of other governments or constraints imposed by law through enabling legislation.
- **Unrestricted** – This component of net position consists of the net amount of assets, deferred outflows of resources, liabilities, and deferred inflows of resources that are not included in the determination of the net *investment in capital assets* or *restricted* components of net position.

(2) Cash and Investments

Cash and investments as of June 30 are classified in the accompanying financial statements as follows:

	<u>2025</u>	<u>2024</u>
Cash and investments	\$ 12,352,799	11,693,858
Total cash and investments	\$ <u>12,352,799</u>	<u>11,693,858</u>

Cash and investments as of June 30 consist of the following:

	<u>2025</u>	<u>2024</u>
Cash on hand	\$ 500	302
Deposits with financial institutions	-	610,770
California CLASS Investment Pool		
Designated	1,461,922	-
Undesignated	10,223,747	10,448,927
Local Agency Investment Fund (LAIF)	<u>666,630</u>	<u>633,859</u>
Total cash and investments	\$ <u>12,352,799</u>	<u>11,693,858</u>

Chino Basin Watermaster
Notes to the Financial Statements, continued
For the Fiscal Years Ended June 30, 2025 and 2024

(2) Cash and Investments, continued

As of June 30, Watermaster's authorized deposits had the following maturities:

	<u>2025</u>	<u>2024</u>
Deposits in California CLASS Investment Pool	<u>75 days</u>	<u>75 days</u>
Deposits in California Local Agency Investment Fund (LAIF)	<u>248 days</u>	<u>217 days</u>

Investments Authorized by the California Government Code and the Watermaster's Investment Policy

The table below identifies the investment types that are authorized by the Watermaster in accordance with the California Government Code (or the Watermaster's investment policy, where more restrictive). The table also identifies certain provisions of the California Government Code (or the Watermaster's investment policy, where more restrictive) that address interest rate risk, credit risk, and concentration of credit risk.

<u>Authorized Investment Type</u>	<u>Maximum Maturity</u>	<u>Maximum Percentage of Portfolio</u>	<u>Maximum Investment in One Issuer</u>
Local Agency Bonds	5 years	None	None
U.S. Treasury Obligations	5 years	None	None
State Obligations - CA and Others	5 years	None	None
CA Local Agency Obligations	5 years	None	None
U.S. Agency Obligations	5 years	None	None
Negotiable Certificates of Deposit	5 years	30%	None
Collateralize Bank Deposits	5 years	None	None
Corporate debt - Short and Long Term	5 years	None	None
Commercial Paper - Pooled Funds	270 days	40%	10%
Commercial Paper - Non Pooled Funds	270 days	40%	10%
Repurchase agreements	1 year	None	None
Local Agency Investment Fund (LAIF)	N/A	None	None

Investment in California State Investment Pool

The Watermaster is a voluntary participant in the Local Agency Investment Fund (LAIF) that is regulated by the California Government Code Section 16429 and is under the management of the Treasurer of the State of California with oversight provided by the Local Agency Investment Advisory Board. The fair value of the Watermaster's investment in this pool is reported in the accompanying financial statements at amounts based upon the Watermaster's pro-rata share of the fair value provided by LAIF for the entire LAIF portfolio (in relation to the amortized cost of that portfolio). The balance available for withdrawal is based on the accounting records maintained by LAIF, which are recorded on an amortized cost basis.

Bank balances are secured by the pledging of a pool of eligible securities to collateralize the Watermaster's deposits with the bank in accordance with the Code.

The pool portfolio is invested in a manner that meets the maturity, quality, diversification, and liquidity requirements set forth by GASB 79 for external investment pools that elect to measure, for financial reporting purposes, investments at amortized cost. LAIF does not have any legally binding guarantees of share values. LAIF does not impose liquidity fees or redemption gates on participant withdrawals.

Chino Basin Watermaster
Notes to the Financial Statements, continued
For the Fiscal Years Ended June 30, 2025 and 2024

(2) Cash and Investments, continued

Investment in California CLASS

The Watermaster is a voluntary participant in the California CLASS (CLASS) that is regulated by the California Government Code Section 16429 and is a Joint Powers Authority investment pool that provides the opportunity to invest funds on a cooperative basis in rated pools that are managed in accordance with state law with the primary objectives of offering Participants safety, daily, and next day liquidity, and optimized returns.

The fair value of the Watermaster's investment in this pool is reported in the accompanying financial statements at amounts based upon the Watermaster's pro-rata share of the fair value provided by CLASS for the entire CLASS portfolio (in relation to the amortized cost of that portfolio). The balance available for withdrawal is based on the accounting records maintained by the CLASS, which are recorded on an amortized cost basis. Bank balances are secured by the pledging of a pool of eligible securities to collateralize the Watermaster's deposits with the bank in accordance with the Code.

Custodial Credit Risk

The custodial credit risk for *deposits* is the risk that, in the event of failure of a depository financial institution, a government will not be able to recover its deposits or will not be able to recover collateral securities that are in the possession of an outside party.

The custodial credit risk for *investments* is the risk that, in the event of failure of the counterparty (e.g., broker-dealer) to a transaction, a government will not be able to recover the value of its investment or collateral securities that are in the possession of another party. With respect to investments, custodial credit risk generally applies only to direct investments in marketable securities. Custodial credit risk does not apply to a local government's indirect investment in securities through the use of mutual funds or government investment pools (such as LAIF). The California Government Code and the Watermaster's investment policy do not contain legal or policy requirements that would limit the exposure to custodial credit risk for deposits or investments, other than the following provision for deposits: The California Government Code requires that a financial institution secure deposits made by state or local governmental units by pledging securities in an undivided collateral pool held by a depository regulated under state law (unless so waived by the governmental unit). The market value of the pledged securities in the collateral pool must equal at least 110% of the total amount deposited by public agencies. California law also allows financial institutions to secure Watermaster deposits by pledging first trust deed mortgage notes having a value of 150% of the secured public deposits. As of June 30, 2025 and 2024, bank balances are federally insured up to \$250,000 and the remaining balance is collateralized in accordance with the Code.

Interest Rate Risk

Interest rate risk is the risk that changes in market interest rates will adversely affect the fair value of an investment. Generally, the longer the maturity of an investment the greater the sensitivity of its fair value to changes in market interest rates. One of the ways that the Watermaster manages its exposure to interest rate risk is by purchasing a combination of shorter term and longer term investments and by timing cash flows from maturities so that a portion of the portfolio matures or comes close to maturity evenly over time as necessary to provide for cash flow requirements and liquidity needed for operations.

Credit Risk

Credit risk is the risk that an issuer of an investment will not fulfill its obligation to the holder of the investment. This is measured by the assignment of a rating by a nationally recognized statistical rating organization.

Chino Basin Watermaster
Notes to the Financial Statements, continued
For the Fiscal Years Ended June 30, 2025 and 2024

(2) Cash and Investments, continued

Credit Risk, continued

Presented below is the minimum rating required by the California Government Code (where applicable), the Watermaster's investment policy, or debt agreements, and the actual rating as of year-end for each investment type.

Credit ratings as of June 30, 2025, were as follows:

Investment Type	Total	Minimum Legal Rating	Ratings as of year-end	
			S&P Global Ratings AAAm	Not Rated
California CLASS	\$ 11,685,669	AAAm	11,685,669	-
Local Agency Investment Fund (LAIF)	666,630	N/A	-	666,630
	<u>\$ 12,352,299</u>		<u>11,685,669</u>	<u>666,630</u>

Credit ratings as of June 30, 2024, were as follows:

Investment Type	Total	Minimum Legal Rating	Ratings as of year-end	
			S&P Global Ratings AAAm	Not Rated
California CLASS	\$ 10,448,927	AAAm	10,448,927	-
Local Agency Investment Fund (LAIF)	633,859	N/A	-	633,859
	<u>\$ 11,082,786</u>		<u>10,448,927</u>	<u>633,859</u>

Concentration of Credit Risk

The Watermaster's investment policy contains no limitations on the amounts that can be invested in any one issuer as beyond that stipulated by the California Government Code. There were no investments in any one issuer (other than external investment pools) that represented 5% or more of total Watermaster's investment at June 30, 2025 and 2024.

(3) Deferred Compensation Savings Plan

For the benefit of its employees, the Watermaster participates in a 457 and 401(a) Deferred Compensation Program (Program). The purpose of this Program is to provide deferred compensation for public employees that elect to participate in the Program. Generally, eligible employees may defer receipt of a portion of their salary until termination, retirement, death or unforeseeable emergency. Until the funds are paid or otherwise made available to the employee, the employee is not obligated to report the deferred salary for income tax purposes. Federal law requires deferred compensation assets to be held in trust for the exclusive benefit of the participants. Accordingly, the Watermaster is in compliance with this legislation. Therefore, these assets are not the legal property of the Watermaster, and are not subject to claims of the Watermaster's general creditors. Fair value of all plan assets held in trust for the 457 Plan at June 30, 2025 and 2024 was \$2,418,371 and \$2,065,835, respectively. Fair value of all plan assets held in trust by the Watermaster's 401(a) Plan at June 30, 2025 and 2024, amounted to \$902,450, and 631,429, respectively.

The Watermaster has implemented GASB Statement No. 32, Accounting and Financial Reporting for Internal Revenue Code Section 457 Deferred Compensation Plans. Since the Watermaster has little administrative involvement and does not perform the investing function for this plan, the assets and related liabilities are not shown on the statement of net position.

Chino Basin Watermaster
Notes to the Financial Statements, continued
For the Fiscal Years Ended June 30, 2025 and 2024

(4) Capital Assets

Changes in capital assets for 2025 were as follows:

	<u>Balance 2024</u>	<u>Additions</u>	<u>Disposals/ Transfers</u>	<u>Balance 2025</u>
Depreciable and leased assets:				
Computer equipment	\$ 37,703	-	-	37,703
Furniture and fixtures	251,887	-	-	251,887
Leasehold improvements	23,443	-	-	23,443
Vehicles and equipment	163,755	338,994	-	502,749
Leased building	891,538	-	-	891,538
Leased equipment	105,948	35,332	(105,951)	35,329
Total depreciable and leased assets	<u>1,474,274</u>	<u>374,326</u>	<u>(105,951)</u>	<u>1,742,649</u>
Accumulated depreciation and amortization:				
Computer equipment	(37,704)	-	-	(37,704)
Furniture and fixtures	(134,627)	(33,120)	-	(167,747)
Leasehold improvements	(23,443)	-	-	(23,443)
Vehicles and equipment	(103,113)	(31,312)	-	(134,425)
Leased building	(106,135)	(127,363)	-	(233,498)
Leased equipment	(85,905)	(18,162)	103,086	(981)
Total accumulated depreciation and amortization	<u>(490,927)</u>	<u>(209,957)</u>	<u>103,086</u>	<u>(597,798)</u>
Total capital assets, net	<u>\$ 983,347</u>			<u>1,144,851</u>

Chino Basin Watermaster
Notes to the Financial Statements, continued
For the Fiscal Years Ended June 30, 2025 and 2024

(4) Capital Assets, continued

Changes in capital assets for 2024 were as follows:

	<u>Balance 2023</u>	<u>Additions</u>	<u>Disposals/ Transfers</u>	<u>Balance 2024</u>
Depreciable and leased assets:				
Computer equipment	\$ 37,703	-	-	37,703
Furniture and fixtures	223,950	27,937	-	251,887
Leasehold improvements	23,443	-	-	23,443
Vehicles and equipment	114,668	49,087	-	163,755
Leased building	355,479	891,538	(355,479)	891,538
Leased equipment	105,948	-	-	105,948
Total depreciable and leased assets	<u>861,191</u>	<u>968,562</u>	<u>(355,479)</u>	<u>1,474,274</u>
Accumulated depreciation and amortization:				
Computer equipment	(37,704)	-	-	(37,704)
Furniture and fixtures	(101,506)	(33,121)	-	(134,627)
Leasehold improvements	(23,443)	-	-	(23,443)
Vehicles and equipment	(91,676)	(11,437)	-	(103,113)
Leased building	(341,260)	(120,354)	355,479	(106,135)
Leased equipment	(68,724)	(17,181)	-	(85,905)
Total accumulated depreciation and amortization	<u>(664,313)</u>	<u>(182,093)</u>	<u>355,479</u>	<u>(490,927)</u>
Total capital assets, net	\$ <u>196,878</u>			<u>983,347</u>

(5) Compensated Absences

The Watermaster recognizes liability for compensated absences in accordance with GASB Statement No. 101, "Compensated Absences". Compensated absences include unpaid vacation leave, sick leave and compensating time off which is accrued as earned, which are expected to be settled through paid time off or cash payments upon termination or retirement.

As of June 30, 2025 and 2024, the liability for compensated absences was calculated based on employees' pay rates at the fiscal year-end and historical usage data, considering employment policies. The liability represents amounts that are more likely than not to be used or paid out.

Compensated absences as of June 30 are classified in the accompanying financial statements as follows:

	<u>2025</u>	<u>2024</u>
Current	\$ 173,011	181,839
Non-current	12,998	-
Total	<u>\$ 186,009</u>	<u>181,839</u>

The total liability for compensated absences amounted to \$186,009 and \$181,839, respectively.

The net change in the compensated absences liability for the fiscal year ended June 30, 2025 and 2024 was \$4,170 and \$(129,275), respectively, reflecting a net increase (decrease) due to changes in employee leave balances, pay rates, and usage patterns. The liability is reported in government-wide financial statements and business type fund financial statements.

Chino Basin Watermaster
Notes to the Financial Statements, continued
For the Fiscal Years Ended June 30, 2025 and 2024

(6) Leases Payable

The change in leases payable for 2025 was as follows:

	<u>Balance 2024</u>	<u>Additions</u>	<u>Payments</u>	<u>Balance 2025</u>	<u>Current Portion</u>	<u>Long Term Portion</u>
Leases payable:						
Cucamonga Valley Water District – Office Building	797,043	-	(121,436)	675,607	124,374	551,233
Advanced Office – Ricoh Copiers	19,301	35,331	(19,301)	35,331	11,413	23,918
Total leases payable	<u>816,344</u>	<u>35,331</u>	<u>(140,737)</u>	<u>710,938</u>	<u>135,787</u>	<u>575,151</u>

The change in leases payable for 2024 was as follows:

	<u>Balance 2023</u>	<u>Additions</u>	<u>Payments</u>	<u>Balance 2024</u>	<u>Current Portion</u>	<u>Long Term Portion</u>
Leases payable:						
Cucamonga Valley Water District – Office Building	16,388	891,538	(110,883)	797,043	121,436	675,607
Advanced Office – Ricoh Copiers	35,421	-	(16,120)	19,301	16,511	2,790
Total leases payable	<u>51,809</u>	<u>891,538</u>	<u>(127,003)</u>	<u>816,344</u>	<u>137,947</u>	<u>678,397</u>

Cucamonga Valley Water District – Office Building

In September 2003, the Watermaster entered into an agreement with Cucamonga Valley Water District (District) to rent office building space for the purpose of providing an administrative headquarters location for the Watermaster. Terms of the agreement commenced on September 1, 2003 with an initial 10 year term with automatic extension for 3 periods of 5 years through August 30, 2023. Terms of the agreement include base rent is due monthly at \$4,900 per month due on the 1st of each month. Base rent is adjusted annually based on the Consumer Price Index for Riverside and San Bernardino County.

In August 2023, the Watermaster amended its agreement with the District. Terms of the agreement commenced on September 1, 2023 and continue through August 31, 2030. Terms of the agreement include base rent is due monthly at \$11,727 per month due on the 1st of each month. Commencing with the first day of the thirteenth month of the lease term, the monthly rent payable under this agreement shall be adjusted on an annual basis thereafter in accordance with the applicable Consumer Price Index of the Bureau of Labor Statistics of the Department of Labor for all Urban Consumers, Riverside-San Bernardino-Ontario (“CPI”).

As of June 30, 2025 and 2024, rental payments amounted to \$140,724 and \$132,407, respectively.

The Watermaster recorded a right-to-use asset and a lease payable at present value using an interest rate of 2.42%. The right-to-use asset is amortized on a straight-line basis over the term of the lease.

Chino Basin Watermaster
Notes to the Financial Statements, continued
For the Fiscal Years Ended June 30, 2025 and 2024

(6) Leases Payable, continued

Annual lease payments are as follows:

<u>Year</u>		<u>Principal</u>	<u>Interest</u>	<u>Total</u>
2026	\$	124,374	16,350	140,724
2027		127,384	13,340	140,724
2028		130,467	10,257	140,724
2029		133,624	7,100	140,724
2030		136,858	3,866	140,724
2031		<u>22,900</u>	<u>554</u>	<u>23,454</u>
Total		675,607	<u>51,467</u>	<u>727,074</u>
Current		<u>(124,374)</u>		
Long-term	\$	<u>551,233</u>		

Advanced Office – Ricoh Copiers

In October 2019, the Watermaster entered into an agreement with Advanced Office for the purpose of acquiring two Ricoh copy machines. Terms of the agreement commenced in July 2019 and matures in August 2025.

On May 22, 2025, the Watermaster entered into an amended agreement with Advanced Office to extend the lease through May 21, 2028.

As of June 30, 2025 and 2024, rental payments amounted to \$19,301 and \$17,338, respectively.

Following the guidelines of *GASB Statement No. 87*, the Watermaster recorded a right-to-use asset and a lease payable at present value using an interest rate of 2.40%. The right-to-use asset is amortized on a straight-line basis over the term of the lease.

Advanced Office – Ricoh Copiers

Annual lease payments are as follows:

<u>Year</u>		<u>Principal</u>	<u>Interest</u>	<u>Total</u>
2026	\$	11,413	1,116	12,529
2027		11,773	756	12,529
2028		<u>12,145</u>	<u>384</u>	<u>12,529</u>
Total		35,331	<u>2,256</u>	<u>37,587</u>
Current		<u>(11,413)</u>		
Long-term	\$	<u>23,918</u>		

Chino Basin Watermaster
Notes to the Financial Statements, continued
For the Fiscal Years Ended June 30, 2025 and 2024

(7) Other Post-Employment Benefits Payable

Plan Description

The Watermaster's defined benefit other post-employment benefit (OPEB) plan (Plan) provides OPEB for all permanent and vested full-time employees. The Plan is a single-employer defined benefit OPEB plan administered by the Watermaster. The Watermaster's Board has the authority to establish and amend the benefit terms and financing requirements of the Plan. Watermaster participates in a CalPERS Health Program, a community-rated program for its medical coverage. Watermaster does not have an OPEB trust established and no assets are accumulated in a trust that meets the criteria in paragraph 4 of Statement 75.

Benefits Provided

The Plan provides a contribution up to the CalPERS PEMCHA minimum employer contribution for eligible retirees and surviving spouses in receipt of a pension benefit from CalPERS. An employee is eligible for this employer contribution provided they are vested in their CalPERS pension benefit and commence payment of their pension benefit within 120 days of retirement from the Watermaster.

Vesting requires at least 5 years of CalPERS total service. The surviving spouse of an eligible retiree who elected spouse coverage under CalPERS is eligible for the employer contribution upon death of the retiree. Board members during or prior to 1994 are also eligible for Watermaster contribution at retirement.

Employee Covered by Benefit Terms

As of June 30, 2025 and 2024, the following employees were covered by the benefit terms:

	<u>2025</u>	<u>2024</u>
Active employees	9	9
Inactive employees or beneficiaries currently receiving benefit payments	<u>3</u>	<u>3</u>
Total plan membership	<u>12</u>	<u>12</u>

Total OPEB Liability

The Watermaster's total OPEB liability of \$253,540 and 275,478 was measured as of December 31, 2024 and 2022, respectively, and was determined by an actuarial valuation as of December 31, 2023 and 2021.

Chino Basin Watermaster
Notes to the Financial Statements, continued
For the Fiscal Years Ended June 30, 2025 and 2024

(7) Other Post-Employment Benefits Payable, continued

Actuarial Assumptions and Other Inputs

The total OPEB liability in the June 30, 2025 and 2024, actuarial valuation, which was measured at December 31, 2024 and 2022, respectively, was determined using the following actuarial assumptions, applied to all periods included in the measurement, unless otherwise specified:

Valuation dates	December 31, 2023 and December 31, 2021
Measurement dates	December 31, 2024 and December 31, 2022
Actuarial cost method	Entry Age Normal cost method in accordance with the requirements of GASB Statement No. 75
Inflation	2025: 2.50% per annum 2024: 2.50% per annum
Salary increases	2025: 2.75% per annum, in aggregate 2024: 2.75% per annum, in aggregate
Discount rate	2025: 4.08% per annum, in aggregate 2024: 3.26% per annum, in aggregate
Healthcare cost trend rates	2025: 4.00% 2024: 4.00%

Changes in the Total OPEB Liability

	<u>2025</u>	<u>2024</u>
Balance at beginning of year	\$ 275,478	269,751
Changes during the year:		
Service cost	14,391	15,731
Interest	8,977	10,086
Experience (gains)/losses	-	(34,649)
Changes in assumptions	(30,680)	27,521
Benefit payments	(14,626)	(12,962)
Net change	(21,938)	5,727
Balance at end of year	\$ 253,540	275,478

Sensitivity of the Total OPEB Liability to Changes in the Discount Rate

The following presents the total OPEB liability of the Watermaster as of June 30, 2025, as well as what the Watermaster's total OPEB liability would be if it were calculated using a discount rate that is 1-percentage-point lower or 1-percentage-point higher than the current discount rate:

	<u>Discount Rate - 1% 3.08%</u>	<u>Current Discount Rate 4.08%</u>	<u>Discount Rate + 1% 5.08%</u>
Net OPEB liability	\$ 291,417	253,540	224,460

Chino Basin Watermaster
Notes to the Financial Statements, continued
For the Fiscal Years Ended June 30, 2025 and 2024

(7) Other Post-Employment Benefits Payable, continued

Sensitivity of the Total OPEB Liability to Changes in the Discount Rate, continued

The following presents the total OPEB liability of the Watermaster as of June 30, 2024, as well as what the Watermaster's total OPEB liability would be if it were calculated using a discount rate that is 1-percentage-point lower or 1-percentage-point higher than the current discount rate:

	Discount Rate - 1% 2.26%	Current Discount Rate 3.26%	Discount Rate + 1% 4.26%
Net OPEB liability	\$ 316,652	275,478	241,946

Sensitivity of the Total OPEB Liability to Changes in the Healthcare Cost Trend Rates

The following presents the net OPEB liability of the Watermaster as of June 30, 2025, as well as what the Watermaster's net OPEB liability would be if it were calculated using healthcare cost trend rates that are 1-percentage-point lower or 1-percentage-point higher than the current healthcare cost trend rates:

	Healthcare cost trend rates		
	1% Decrease 3.00%	Current 4.00%	1% Increase 5.00%
Net OPEB liability	\$ 215,039	253,540	301,219

The following presents the net OPEB liability of the Watermaster as of June 30, 2024, as well as what the Watermaster's net OPEB liability would be if it were calculated using healthcare cost trend rates that are 1-percentage-point lower or 1-percentage-point higher than the current healthcare cost trend rates:

	Healthcare cost trend rates		
	1% Decrease 3.00%	Current 4.00%	1% Increase 5.00%
Net OPEB liability	\$ 235,911	275,478	326,844

OPEB Expense and Deferred Outflows and Inflows of Resources Related to OPEB

For the fiscal years ended June 30, 2025 and 2024, the Watermaster recognized OPEB expense of \$7,671 and \$15,969, respectively. As of June 30, the Watermaster reported deferred outflows of resources and deferred inflows of resources related to OPEB from the following sources:

		2025		2024	
Description		Deferred Outflows of Resources	Deferred Inflows of Resources	Deferred Outflows of Resources	Deferred Inflows of Resources
Change in assumptions	\$	14,807	(43,849)	73,897	(49,539)
Difference between actual and expected experience		64,204	(104,748)	17,158	(90,378)
Total	\$	79,011	(148,597)	91,055	(139,917)

Chino Basin Watermaster
Notes to the Financial Statements, continued
For the Fiscal Years Ended June 30, 2025 and 2024

(7) Other Post-Employment Benefits Payable, continued

At June 30, 2025, there were amounts reported as deferred outflows of resources and deferred inflows of resources related to OPEB which are required to be recognized in OPEB expense over future periods. OPEB related amounts will be recognized as OPEB expense as follows:

Fiscal Year Ending June 30	Deferred Net Outflows/(Inflow of Resources
2026	(7,446)
2027	(7,446)
2028	(7,446)
2029	(7,446)
2030	(7,442)
Thereafter	(32,360)

Schedule of Changes in the Watermaster's Total OPEB Liability and Related Ratios

See page 42 for the Required Supplementary Schedule.

(8) Defined Benefit Pension Plan

Plan Description

All qualified permanent and probationary employees are eligible to participate in the Watermaster's Miscellaneous Employee Pension Plan, cost-sharing multiple employer defined benefit pension plan administered by the California Public Employees' Retirement System (CalPERS). Benefit provisions under the Plan are established by State statute and Watermaster's resolution. CalPERS issues publicly available reports that include a full description of the pension plan regarding benefit provisions, assumptions, and membership information that can be found on the CalPERS website.

CalPERS provides service retirement and disability benefits, annual cost of living adjustments, and death benefits to plan members, who must be public employees and beneficiaries. Benefits are based on years of credited service, equal to one year of full time employment. Members with five years of total service are eligible to retire at age 50 with statutorily reduced benefits. All members are eligible for non-duty disability benefits after 10 years of service. The death benefit is one of the following: The Basic Death Benefit, the 1957 Survivor Benefit, or the Optional Settlement 2W Death Benefit. Cost of living adjustments for each plan are applied as specified by the Public Employees' Retirement Law.

On September 12, 2012, the California Governor signed the California Public Employees' Pension Reform Act of 2013 (PEPRA) into law. PEPRA took effect January 1, 2013. The new legislation closed the Watermaster's CalPERS 2.5% at 55 Risk Pool Retirement Plan to new employee entrants effective December 31, 2012. All employees hired after January 1, 2013 are eligible for the Watermaster's CalPERS 2.0% at 62 Retirement Plan under PEPRA.

Chino Basin Watermaster
Notes to the Financial Statements, continued
For the Fiscal Years Ended June 30, 2025 and 2024

(8) Defined Benefit Pension Plan, continued

Benefits Provided

The Watermaster participates in the Plan's miscellaneous risk pool. The provisions and benefits for the Plan's miscellaneous risk pool in effect at June 30, 2025 and 2024, are summarized as follows:

	Miscellaneous Plan	
	Classic	PEPRA
	Prior to January 1, 2013	On or after January 1, 2013
Hire date		
Benefit formula	2.5% @ 55	2.0% @ 62
Benefit vesting schedule	5 years of service	
Benefit payments	monthly for life	
Retirement age	50 - 55	52 - 67
Monthly benefits, as a percentage of eligible compensation	2.0% to 2.5%	1.0% to 2.5%
Required employee contribution rates		
2025	7.96%	7.75%
2024	7.96%	7.75%
Required employer contribution rates		
2025	14.13%	7.87%
2024	14.06%	7.68%

Contributions

Section 20814(c) of the California Public Employees' Retirement Law requires that the employer contribution rates, for all public employers, be determined on an annual basis by the actuary and shall be effective on July 1 following notice of the change in rate. Funding contributions for the Plan is determined annually on an actuarial basis as of June 30 by CalPERS. The actuarially determined rate is the estimated amount necessary to finance the costs of benefits earned by employees during the year, with an additional amount to finance any unfunded accrued liability. The Watermaster is required to contribute the difference between the actuarially determined rate and the contribution rate of employees.

For the years ended June 30, the contributions recognized as part of pension expense for the Plan were as follows:

	Miscellaneous	
	2025	2024
Contributions – employer	\$ 282,363	258,881

Net Pension Liability

As of June 30, the Watermaster reported net pension liabilities for its proportionate share of the net pension liability of the Plan as follows:

	2025	2024
Proportionate share of net pension liability	\$ 1,897,516	1,913,265

Chino Basin Watermaster
Notes to the Financial Statements, continued
For the Fiscal Years Ended June 30, 2025 and 2024

(8) Defined Benefit Pension Plan, continued

Net Pension Liability, continued

The Watermaster's net pension liability for the Plan is measured as the proportionate share of the net pension liability. The net pension liability of the Plan is measured as of June 30, 2024 and 2023 (the measurement dates), and the total pension liability for the Plan used to calculate the net pension liability was determined by an actuarial valuation as of June 30, 2023 and 2022 (the valuation dates), rolled forward to June 30, 2024 and 2023, using standard update procedures. The Watermaster's proportion of the net pension liability was based on a projection of the Watermaster's long-term share of contributions to the pension plan relative to the projected contributions of all participating employers, actuarially determined.

The Watermaster's proportionate share of the pension liability for the Plan's miscellaneous risk pool as of the measurement date June 30, 2024 was as follows:

	<u>Miscellaneous</u>
Proportion – June 30, 2022	0.01534%
Increase in proportion	<u>0.00031%</u>
Proportion – June 30, 2023	<u>0.01565%</u>

The Watermaster's proportionate share of the pension liability for the Plan's miscellaneous risk pool as of the measurement date June 30, 2023 was as follows:

	<u>Miscellaneous</u>
Proportion – June 30, 2021	0.01489%
Increase in proportion	<u>0.00044%</u>
Proportion – June 30, 2022	<u>0.01534%</u>

Actuarial assumptions

The total pension liabilities in the June 30, 2023 and 2022, actuarial valuations were determined using the following actuarial assumptions and methods:

Valuation dates	June 30, 2022 and 2023
Measurement dates	June 30, 2023 and 2024
Actuarial cost method	Entry Age Normal in accordance with the requirements of GASB Statement No. 68
Actuarial assumptions:	
Discount rate	6.90%
Inflation rate	2.30%
Salary increases	Varies by Entry Age and Service
Mortality Rate Table*	Derived using CalPERS' Membership Data for all Funds
Period Upon Which Actuarial Experience Survey Assumptions Were Based	1997-2015
Post Retirement Benefit Increase	Contract COLA up to 2.50% (2024) and 2.30% (2023) until Purchasing Power Protection Allowance Floor on Purchasing Power applies

Chino Basin Watermaster
Notes to the Financial Statements, continued
For the Fiscal Years Ended June 30, 2025 and 2024

(8) Defined Benefit Pension Plan, continued

* The mortality table used was developed based on CalPERS' specific data. The rates incorporate Generational Mortality to capture ongoing mortality improvements using 80% of Scale MP 2020, published by the Society of Actuaries. For more details on this table, please refer to the 2021 experience study that can be found on the CalPERS website.

Deferred Pension Outflows (Inflows) of Resources

For the fiscal years ended June 30, 2025 and 2024, the Watermaster recognized pension expense (credit) of \$157,717 and \$(106,211), respectively.

Deferred Pension Outflows (Inflows) of Resources, continued

At June 30, 2025, other amounts reported as deferred outflows and inflows of resources related to the pensions, which will be recognized as pension expense as follows:

Fiscal Year Ending June 30,	Deferred Net Outflows/(Inflows) of Resources
2026	\$ 127,470
2027	263,121
2028	5,154
2029	(37,435)

As of June 30, 2025 and 2024, employer pension contributions reported as deferred outflows of resources related to contributions subsequent to the measurement date of \$253,545 and \$282,363, respectively, and will be and were recognized as a reduction of the net pension liability in the fiscal years ended June 30, 2025 and 2024, respectively.

As of June 30, 2025 and 2024, the Watermaster reported deferred outflows of resources and deferred inflows of resources related to pensions from the following sources:

Description	2025		2024	
	Deferred Outflows of Resources	Deferred Inflows of Resources	Deferred Outflows of Resources	Deferred Inflows of Resources
Pension contributions subsequent to the measurement date	\$ 309,143	-	253,545	-
Differences between actual and expected experience	157,656	-	82,578	-
Changes in assumptions	48,770	-	115,512	-
Net difference between projected and actual earnings on plan investments	109,238	-	309,775	-
Differences between actual contribution and proportionate share of contribution	10,037	-	20,077	-
Net adjustment due to differences in proportions of net pension liability	32,609	-	30,446	-
Total	\$ 667,453	-	811,933	-

Chino Basin Watermaster
Notes to the Financial Statements, continued
For the Fiscal Years Ended June 30, 2025 and 2024

(8) Defined Benefit Pension Plan, continued

Pension Plan Fiduciary Net Position

Detailed information about the pension plan's fiduciary net position is available in separately issued CalPERS financial reports. See pages 43 through 45 for the Required Supplementary Information.

Discount Rate

The discount rate used to measure the total pension liability for PERF C was 6.90%. The projection of cash flows used to determine the discount rate assumed that contributions from plan members will be made at the current member contribution rates and that contributions from employers will be made at statutorily required rates, actuarially determined. Based on those assumptions, the Plan's fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on plan investments was applied to all periods of projected benefit payments to determine the total pension liability. This discount rate is not adjusted for administrative expenses.

In determining the long-term expected rate of return, CalPERS took into account long-term market return expectations as well as the expected pension fund cash flows. Projected returns for all asset classes are estimated and, combined with risk estimates, are used to project compound (geometric) returns over the long term. The discount rate used to discount liabilities was informed by the long-term projected portfolio return.

The table below reflects the expected real rates of return by asset class.

<u>Asset Class</u>	<u>Assumed Asset Classification</u>	<u>Real Return 1-10^{1,2}</u>
Global Equity - Cap-weighted	30.00%	4.54%
Global Equity Non-Cap-weighted	12.00%	3.84%
Private Equity	13.00%	7.28%
Treasury	5.00%	0.27%
Mortgage-backed Securities	5.00%	0.50%
Investment Grade Corporates	10.00%	1.56%
High Yield	5.00%	2.27%
Emerging Market Debt	5.00%	2.48%
Private Debt	5.00%	3.57%
Real Assets	15.00%	3.21%
Leverage	-5.00%	-0.59%

¹ An expected inflation of 2.30% used for this period.

² Figures are based on the 2021-22 Asset Liability Management Study.

Chino Basin Watermaster
Notes to the Financial Statements, continued
For the Fiscal Years Ended June 30, 2025 and 2024

(8) Defined Benefit Pension Plan, continued

Sensitivity of the Proportionate Share of Net Pension Liability to Changes in the Discount Rate

The following table presents the Watermaster's proportionate share of the net position liability for the Plan, calculated using the discount rate, as well as what the Watermaster's proportional share of the net pension liability would be if it were calculated using a discount rate that is one percentage point lower or one percentage point higher than the current rate.

As of June 30, 2025, the Watermaster's net pension liability at the current discount rate, using a discount rate that is one-percentage point lower, and using a discount rate that is one-percentage point higher, is as follows:

	Discount Rate - 1% 5.90%	Current Discount Rate 6.90%	Discount Rate + 1% 7.90%
Net pension liability	\$ 3,067,510	1,897,516	934,440

As of June 30, 2024, the Watermaster's net pension liability at the current discount rate, using a discount rate that is one-percentage point lower, and using a discount rate that is one-percentage point higher, is as follows:

	Discount Rate - 1% 5.90%	Current Discount Rate 6.90%	Discount Rate + 1% 7.90%
Net pension liability	\$ 2,968,140	1,913,265	1,045,012

(9) Nonqualified Employee Compensation Plan

Effective June 1, 2015, the Watermaster established a Nonqualified Deferred Compensation Plan (Plan). The purpose of this Plan is to provide deferred compensation for selected public employees to participate in the Plan. The Plan is intended to be an unfunded deferred compensation plan that complies with the requirements of Section 457(f) and 409A of the Internal Revenue Code of 1986. Each Plan Participant shall be entitled to elect and forego all or any portion, as either a dollar amount or a percentage, of the Participant's salary and/or bonus that may become payable by the Employer for a Plan year after all applicable deductions and withholdings. Such election shall be evidenced by a deferral agreement. During the fiscal years ended June 30, 2024, the Watermaster made an employer contributions of \$78,988, to the Plan for the benefit of its eligible employees. For each of Watermaster's regular payroll periods beginning on and after July 1, 2015 through the remainder of the employment term (from June 30, 2014 up to the expiration date of June 30, 2017), the Watermaster agreed to make an employer contributions to the Plan for the benefit of the eligible employee equal to 8% of the corresponding salary including any incentive compensation paid during that payroll period; provided that the eligible employee is still employed with Watermaster on the payday of that payroll period.

On June 22, 2017, Watermaster agreed to make an employer contribution to the Plan for the benefit of another eligible employee equal to 4% of the corresponding salary effective for payroll period following July 1, 2017; and shall continue to be provided on each paycheck date thereafter until the Board takes further action. The balance of the Watermaster's Employee Compensation Plan as of June 30, 2023 amounted to \$389,475, which was paid out as of June 30, 2024.

Chino Basin Watermaster
Notes to the Financial Statements, continued
For the Fiscal Years Ended June 30, 2025 and 2024

(10) Prior Period Adjustment

Compensated absences

In fiscal year 2025, the Watermaster implemented *GASB Statement No. 101, Compensated Absences*. The nature, justification, and an explanation of the change are included in note 1.C. As a result of the implementation, the Watermaster recorded a prior period adjustment of \$26,139, to restate beginning balances as of July 1, 2024.

The adjustment to net position is as follows:

The adjustment to net position is as follows:

Net position at June 30, 2024, as previously stated	\$ 13,024,484
Changes in net position, June 30, 2024, as previously stated	\$ (2,345,775)
Effect of adjustment to implement GASB 101:	
Compensated absences	<u>(26,139)</u>
Change in net position at June 30, 2024, as restated	<u>(2,371,914)</u>
Net position at July 1, 2024, as restated	<u>\$ 10,652,570</u>

(11) Net Position

Calculation of net position as of June 30, is as follows:

	<u>2025</u>	<u>2024</u>
Net investment in capital assets:		
Capital assets, net	\$ 1,144,851	983,347
Leases payable, current	(135,787)	(137,947)
Leases payable, non-current	<u>(575,151)</u>	<u>(678,397)</u>
Total net investment in capital assets	<u>433,913</u>	<u>167,003</u>
Unrestricted:		
Non-spendable net position:		
Designated net position reserve		
Restricted pool funds - CA Class Investment Pool	1,461,922	-
Prepaid expenses and deposits	<u>57,763</u>	<u>36,657</u>
Total non-spendable net position	<u>1,519,685</u>	<u>36,657</u>
Spendable net position:		
Undesignated net position reserve	<u>8,853,879</u>	<u>10,448,910</u>
Total spendable net position	<u>8,853,879</u>	<u>10,448,910</u>
Total unrestricted net position	<u>10,373,564</u>	<u>10,485,567</u>
Total net position	<u>\$ 10,807,477</u>	<u>10,652,570</u>

At June 30, 2025, management designated \$1,461,922 of unrestricted net position as restricted pool funds under unrestricted, non-spendable net position. These designations are not legally binding and may be modified by the board at its discretion.

Chino Basin Watermaster
Notes to the Financial Statements, continued
For the Fiscal Years Ended June 30, 2025 and 2024

(12) Risk Management

The Watermaster is exposed to various risks of loss related to torts, theft of, damage to and destruction of assets; errors and omissions; injuries to employees; and natural disasters. The Watermaster is insured for a variety of potential exposures. The following is a summary of the insurance policies carried by the Watermaster as of June 30, 2025:

- Commercial General Liability: \$2,000,000 General Aggregate Limit (Other than Products/Completed Operations); \$2,000,000 Products/Completed Operations Aggregate Limit (Any One Person or Organization); \$1,000,000 Personal and Advertising Injury Limit; \$1,000,000 Each Occurrence Limit; \$300,000 Rented To You Limit; \$15,000 Medical Expenses Limit (Any One Person).
- Commercial Excess Liability: Limits of Liability are \$10,000 Retained Limit, \$8,000,000 Each Occurrence, \$8,000,000 General Aggregate Limit, \$8,000,000 Products/Completed Operations to Aggregate.
- Automobile: \$1,000,000 Combined Bodily Injury and Property Damage Single Limit (Each Accident); \$1,000,000 Uninsured Motorists Single Limit. \$1,000 deductible for Comprehensive and \$1,000 deductible for Collision.
- Property: \$525,000 with liability limits varying by property type with a \$1,000 deductible.
- Crime coverage: \$50,000 per claim with a \$1,000 deductible.
- Director & Officers Liability: \$1,000,000 Liability Coverage; Employment Practices Liability: \$1,000,000 Liability Coverage. Director and Officer/Crisis Management: \$25,000 to \$100,000 with liability limits varying by type of coverage.
- Workers' compensation: Total annual premium is \$8,607.

(13) Governmental Accounting Standards Board Statements Issued, Not Yet Effective

The Governmental Accounting Standards Board (GASB) has issued several pronouncements prior to June 30, 2025, that have effective dates that may impact future financial presentations.

Governmental Accounting Standards Board Statement No. 103

In April 2024, the GASB issued Statement No. 103 – *Financial Reporting Model Improvements*. The primary objective of this Statement is to improve key components of the financial reporting model to enhance effectiveness in providing information that is essential for decision making and assessing a government's accountability. Also, this Statement: (1) continues the requirement that the basic financial statements be preceded by management's discussion and analysis (MD&A), which is presented as required supplementary information (RSI); (2) describes unusual or infrequent items as transactions and other events that are either unusual in nature or infrequent in occurrence; (3) requires that the proprietary fund statement of revenues, expenses, and changes in fund net position continue to distinguish between operating and nonoperating revenues and expenses; (4) requires governments to present each major component unit separately in the reporting entity's statement of net position and statement of activities if it does not reduce the readability of the statements; and (5) requires governments to present budgetary comparison information using a single method of communication—RSI.

The requirements of this Statement are effective for fiscal years beginning after June 15, 2025, and all reporting periods thereafter. Earlier application is encouraged.

Chino Basin Watermaster
Notes to the Financial Statements, continued
For the Fiscal Years Ended June 30, 2025 and 2024

(13) Governmental Accounting Standards Board Statements Issued, Not Yet Effective, continued

Governmental Accounting Standards Board Statement No. 104

In September 2024, the GASB issued Statement No. 104 – Disclosure of Certain Capital Assets. The primary objective of this Statement is to provide users of government financial statements with essential information about certain types of capital assets. This Statement establishes requirements for certain types of capital assets to be disclosed separately in the capital assets note disclosures required by Statement No. 34, Basic Financial Statements and Management Discussion and Analysis for State and Local Governments. Also, this Statement establishes requirements for capital assets held for sale, including additional disclosures for those capital assets. The requirements of this Statement apply to the financial statements of all state and local governments.

The requirements of this Statement are effective for fiscal years beginning after June 15, 2025, and all reporting periods thereafter. Earlier application is encouraged.

(14) Commitments and Contingencies

Grant Awards

Grant funds received by the Watermaster are subject to audit by grantor agencies. Such audit could lead to requests for reimbursements to grantor agencies for expenditures disallowed under terms of the grant. Management of the Watermaster believes that such disallowances, if any, would not be significant.

Litigation

In the ordinary course of operations, the Watermaster is subject to claims and litigation from outside parties. After consultation with legal counsel, the Watermaster believes the ultimate outcome of such matters, if any, will not materially affect its financial condition.

(15) Subsequent Events

Events occurring after June 30, 2025, have been evaluated for possible adjustment to the financial statements or disclosure as of October 23, 2025, which is the date the financial statements were available to be issued.

Required Supplementary Information

Chino Basin Watermaster
Schedules of Changes in the Watermaster's Total OPEB Liability and Related Ratios
As of June 30, 2025
Last Ten Years*

Total OPEB liability	6/30/2025	6/30/2024	6/30/2023	6/30/2022	6/30/2021	6/30/2020	6/30/2019	6/30/2018
Service cost	\$ 14,391	15,731	22,310	23,695	23,005	17,062	18,418	16,048
Interest	8,977	10,086	6,834	6,925	9,009	8,739	7,571	7,073
Change in assumptions	(30,680)	27,521	(73,528)	(40,381)	59,799	17,923	(17,582)	14,256
Experience (gains)/losses	-	(34,649)	-	24,211	(26,687)	-	-	-
Benefit payments	(14,626)	(12,962)	(12,962)	(4,332)	(2,932)	(3,722)	(2,423)	(2,308)
Net change in total OPEB liability	(21,938)	5,727	(57,346)	10,118	62,194	40,002	5,984	35,069
Total OPEB liability – beginning of year	275,478	269,751	327,097	316,979	254,785	214,783	208,799	173,730
Total OPEB liability – end of year	\$ 253,540	275,478	269,751	327,097	316,979	254,785	214,783	208,799
Covered payroll	1,551,813	1,498,233	1,311,262	1,246,404	1,198,184	1,091,719	1,031,755	860,266
Total OPEB liability as a percentage of covered payroll	16.34%	18.39%	20.57%	26.24%	26.45%	23.34%	20.82%	24.27%

Notes to schedule:

Changes in benefit terms: None noted.

Changes in assumptions: The changes in actuarial assumptions include changes in discount rates as follows:

Fiscal year 2018: 3.38%
Fiscal year 2019: 3.80%
Fiscal year 2020: 3.26%
Fiscal year 2021: 2.12%
Fiscal year 2022: 2.06%
Fiscal year 2023: 3.72%
Fiscal year 2023: 3.26%
Fiscal year 2024: 4.08%

* The Watermaster has presented information for those years for which information is available until a full 10-year trend is compiled.

Chino Basin Watermaster
Schedules of the Watermaster's Proportionate Share of the Net Pension Liability
As of June 30, 2025
Last Ten Years

Description	Measurement Dates									
	6/30/2024	6/30/2023	6/30/2022	6/30/2021	6/30/2020	6/30/2019	6/30/2018	6/30/2017	6/30/2016	6/30/2015
Watermaster's proportion of the net pension liability	0.01565%	0.01534%	0.01489%	0.01435%	0.01316%	0.01277%	0.01233%	0.01221%	0.01206%	0.01182%
Watermaster's proportionate share of the net pension liability	\$ 1,897,516	1,913,265	1,720,196	776,209	1,431,357	1,308,658	1,188,162	1,210,470	1,043,862	811,437
Watermaster's covered-employee payroll	\$ 1,551,813	1,498,233	1,311,262	1,246,404	1,198,184	1,091,719	1,031,755	860,266	979,741	888,483
Watermaster's proportionate share of the net pension liability as a percentage of its covered-employee payroll	122.28%	127.70%	131.19%	62.28%	119.46%	119.87%	115.16%	140.71%	106.54%	91.33%
Plan's proportionate share of fiduciary net position as a percentage of total pension liability	78.08%	76.21%	76.68%	88.29%	75.10%	75.26%	75.26%	73.31%	74.06%	78.40%

Notes to the Schedules of the Watermaster's Proportionate Share of Net Pension Liability

Changes in Benefit Terms

Public agencies can make changes to their plan provisions, and such changes occur on an ongoing basis. A summary of the plan provisions that were used for a specific plan can be found in the plan's annual valuation report.

Change of Assumptions and Methods

In fiscal year 2024 and 2023, there were no changes to actuarial assumptions or methods.

In fiscal year 2022, the accounting discount rate was reduced from 7.15% to 6.90%. In determining the long-term expected rate of return, CalPERS took into account long-term market return expectations as well as the expected pension fund cash flows. Projected returns for all asset classes are estimated, combined with risk estimates, and are used to project compound (geometric) returns over the long term.

The discount rate used to discount liabilities was informed by the long-term projected portfolio return. In addition, demographic

assumptions and the inflation rate assumption were changed in accordance with the 2021 CalPERS Experience Study and Review of Actuarial Assumptions.

In fiscal year 2021, there were no changes to actuarial assumptions or methods.

The CalPERS Board of Administration adopted a new amortization policy effective with the June 30, 2019, actuarial valuation. The new policy shortens the period over which actuarial gains and losses are amortized from 30 years to 20 years with the payments computed as a level dollar amount. In addition, the new policy does not utilize a five-year ramp-up and ramp-down on UAL bases attributable to assumption changes and non-investment gains/losses. The new policy also does not utilize a five-year ramp-down on investment gains/losses.

Chino Basin Watermaster
Schedules of the Watermaster's Proportionate Share of the Net Pension Liability, continued
As of June 30, 2025
Last Ten Years

Notes to the Schedules of the Watermaster's Proportionate Share of Net Pension Liability, continued
Change of Assumptions and Methods, continued

These changes will apply only to new UAL bases established on or after June 30, 2019. In fiscal year 2020, no changes have occurred to the actuarial assumptions in relation to financial reporting.

In fiscal year 2020, CalPERS implemented a new actuarial valuation software system for the June 30, 2018 valuation. This new system has refined and improved calculation methodology.

In December 2017, the CalPERS Board adopted new mortality assumptions for plans participating in the PERF. The new mortality table was developed from the December 2017 experience study and includes 15 years of projected ongoing mortality improvement using 90% of scale MP 2016 published by the Society of Actuaries. The inflation assumption is reduced from 2.75% to 2.50%.

The assumptions for individual salary increases and overall payroll growth are reduced from 3.00% to 2.75%. These changes will be implemented in two steps commencing in the June 30, 2017 funding valuation. However, for financial reporting purposes, these assumption changes are fully reflected in the results for fiscal year 2018.

In fiscal year 2017, the financial reporting discount rate for the PERF C was lowered from 7.65% to 7.15%. In December 2016, the CalPERS Board approved lowering the funding discount rate used in the PERF C from 7.50% to 7.00%, which is to be phased in over a three-year period (7.50% to 7.375%, 7.375% to 7.25%, and 7.25% to 7.00%) beginning with the June 30, 2016, valuation reports. The funding discount rate includes a 15 basis-point reduction for administrative expenses, and the remaining decrease is consistent with the change in the financial reporting discount rate.

In fiscal year 2015, the financial reporting discount rate was increased from 7.50% to 7.65% resulting from eliminating the 15 basis-point reduction for administrative expenses. The funding discount rate remained at 7.50% during this period, and remained adjusted for administrative expenses.

Chino Basin Watermaster
Schedules of Pension Plan Contributions
As of June 30, 2025
Last Ten Years

Description	Fiscal Years Ended									
	6/30/2025	6/30/2024	6/30/2023	6/30/2022	6/30/2021	6/30/2020	6/30/2019	6/30/2018	6/30/2017	6/30/2016
Actuarially determined contribution	\$ 315,959	282,102	267,270	245,656	220,388	192,849	155,931	151,169	132,932	110,292
Contributions in relation to the actuarially determined contribution	(309,143)	(253,545)	(282,363)	(262,145)	(238,632)	(226,625)	(188,604)	(159,828)	(137,342)	(83,557)
Contribution deficiency (excess)	\$ 6,816	28,557	(15,093)	(16,489)	(18,244)	(33,776)	(32,673)	(8,659)	(4,410)	26,735
Covered payroll	\$ 1,551,813	1,498,233	1,311,262	1,246,404	1,198,184	1,091,719	1,031,755	860,266	979,741	888,483
Contribution's as a percentage of covered-employee payroll	19.92%	16.92%	21.53%	21.03%	19.92%	20.76%	18.28%	18.58%	14.02%	9.40%

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Supplemental Information Section

Chino Basin Watermaster
Combining Schedule of Net Position
June 30, 2025

	<u>General Fund</u>	<u>Pool Fund</u>	<u>2025</u>
Current assets:			
Cash and cash equivalents	\$ 12,352,799	-	12,352,799
Accounts receivable	1,052,150	-	1,052,150
Accrued interest receivable	7,295	-	7,295
Due from General Fund	-	132,581	132,581
Prepaid expenses and other current assets	57,763	-	57,763
Total current assets	<u>13,470,007</u>	<u>132,581</u>	<u>13,602,588</u>
Non-current assets:			
Capital assets, net	1,144,851	-	1,144,851
Total non-current assets	<u>1,144,851</u>	<u>-</u>	<u>1,144,851</u>
Total assets	<u>14,614,858</u>	<u>132,581</u>	<u>14,747,439</u>
Deferred outflows of resources:			
Deferred OPEB outflows	79,011	-	79,011
Deferred pension outflows	667,453	-	667,453
Total deferred outflows of resources	<u>746,464</u>	<u>-</u>	<u>746,464</u>
Current liabilities:			
Accounts payable and accrued expenses	1,310,746	250	1,310,996
Accrued salaries and benefits	46,249	-	46,249
Due to Pool Fund	132,581	-	132,581
Long-term liabilities – due within one year:			
Compensated absences	173,011	-	173,011
Leases payable	135,787	-	135,787
Total current liabilities	<u>1,798,374</u>	<u>250</u>	<u>1,798,624</u>
Non-current liabilities:			
Long-term liabilities – due in more than one year:			
Compensated absences	12,998	-	12,998
Leases payable	575,151	-	575,151
Net OPEB liability	253,540	-	253,540
Net pension liability	1,897,516	-	1,897,516
Total non-current liabilities	<u>2,739,205</u>	<u>-</u>	<u>2,739,205</u>
Total liabilities	<u>4,537,579</u>	<u>250</u>	<u>4,537,829</u>
Deferred inflows of resources:			
Deferred OPEB inflows	148,597	-	148,597
Total deferred inflows of resources	<u>148,597</u>	<u>-</u>	<u>148,597</u>
Net position:			
Net investment in capital assets	433,913	-	433,913
Unrestricted	10,241,233	132,331	10,373,564
Total net position	<u>\$ 10,675,146</u>	<u>132,331</u>	<u>10,807,477</u>

Chino Basin Watermaster
Combining Schedule of Revenue, Expenses and Changes in Net Position
For the Fiscal Year Ended June 30, 2025

	<u>General Fund</u>	<u>Pool Fund</u>	<u>2025</u>
Operating revenues:			
Administrative assessments	\$ 9,834,155	130,200	9,964,355
Replenishment water revenue	92,858	-	92,858
Other revenue	192,540	-	192,540
Total operating revenue	<u>10,119,553</u>	<u>130,200</u>	<u>10,249,753</u>
Operating expenses:			
Groundwater replenishment and other water purchases	234,659	-	234,659
Optimum basin management plan	6,241,855	-	6,241,855
Watermaster administration	3,086,166	-	3,086,166
Pool, advisory, and board administration	523,314	338,961	862,275
Total operating expense	<u>10,085,994</u>	<u>338,961</u>	<u>10,424,955</u>
Operating income before depreciation	33,559	(208,761)	(175,202)
Depreciation and amortization expense	(209,957)	-	(209,957)
Operating income	<u>(176,398)</u>	<u>(208,761)</u>	<u>(385,159)</u>
Non-operating revenue (expense):			
Interest expense	(19,571)	-	(19,571)
Investment returns	473,247	86,390	559,637
Internal transfers	327,246	(327,246)	-
Total non-operating (expense) revenue, net	<u>780,922</u>	<u>(240,856)</u>	<u>540,066</u>
Changes in net position	604,524	(449,617)	154,907
Net position, beginning of period	<u>10,070,622</u>	<u>581,948</u>	<u>10,652,570</u>
Net position, end of period	<u>\$ 10,675,146</u>	<u>132,331</u>	<u>10,807,477</u>

Chino Basin Watermaster
Combining Schedule of Net Position
June 30, 2024

	<u>General Fund</u>	<u>Pool Fund</u>	<u>2024</u>
Current assets:			
Cash and cash equivalents	\$ 11,693,858	-	11,693,858
Accounts receivable	1,303,493	-	1,303,493
Accrued interest receivable	7,171	-	7,171
Due from General Fund	-	581,948	581,948
Prepaid expenses and other current assets	36,657	-	36,657
Total current assets	<u>13,091,179</u>	<u>581,948</u>	<u>13,673,127</u>
Non-current assets:			
Capital assets, net	983,347	-	983,347
Total non-current assets	<u>983,347</u>	<u>-</u>	<u>983,347</u>
Total assets	<u>14,074,526</u>	<u>581,948</u>	<u>14,656,474</u>
Deferred outflows of resources:			
Deferred OPEB outflows	91,055	-	91,055
Deferred pension outflows	811,933	-	811,933
Total deferred outflows of resources	<u>902,988</u>	<u>-</u>	<u>902,988</u>
Current liabilities:			
Accounts payable and accrued expenses	962,078	-	962,078
Accrued salaries and benefits	36,023	-	36,023
Due to Pool Fund	581,948	-	581,948
Long-term liabilities – due within one year:			-
Compensated absences	181,839	-	181,839
Leases payable	137,947	-	137,947
Total current liabilities	<u>1,899,835</u>	<u>-</u>	<u>1,899,835</u>
Non-current liabilities:			
Long-term liabilities – due in more than one year:			
Leases payable	678,397	-	678,397
Net OPEB liability	275,478	-	275,478
Net pension liability	1,913,265	-	1,913,265
Total non-current liabilities	<u>2,867,140</u>	<u>-</u>	<u>2,867,140</u>
Total liabilities	<u>4,766,975</u>	<u>-</u>	<u>4,766,975</u>
Deferred inflows of resources:			
Deferred OPEB inflows	139,917	-	139,917
Total deferred inflows of resources	<u>139,917</u>	<u>-</u>	<u>139,917</u>
Net position:			
Net investment in capital assets	167,003	-	167,003
Unrestricted	9,903,619	581,948	10,485,567
Total net position	<u>\$ 10,070,622</u>	<u>581,948</u>	<u>10,652,570</u>

Chino Basin Watermaster
Combining Schedule of Revenue, Expenses and Changes in Net Position
For the Fiscal Year Ended June 30, 2024

	<u>General Fund</u>	<u>Pool Fund</u>	<u>2024</u>
Operating revenues:			
Administrative assessments	\$ 9,187,986	677,000	9,864,986
Replenishment water revenue	349,825	-	349,825
Other revenue	186,443	-	186,443
Total operating revenue	<u>9,724,254</u>	<u>677,000</u>	<u>10,401,254</u>
Operating expenses:			
Groundwater replenishment and other water purchases	1,920,791	-	1,920,791
Optimum basin management plan	4,974,213	-	4,974,213
Watermaster administration	3,911,875	-	3,911,875
Pool, advisory, and board administration	514,516	433,166	947,682
Total operating expense	<u>11,321,395</u>	<u>433,166</u>	<u>11,754,561</u>
Operating income before depreciation	(1,597,141)	243,834	(1,353,307)
Depreciation and amortization expense	(182,093)	-	(182,093)
Operating income	<u>(1,779,234)</u>	<u>243,834</u>	<u>(1,535,400)</u>
Non-operating revenue (expense):			
Reserve distribution	(1,542,183)	-	(1,542,183)
Interest expense	(22,197)	-	(22,197)
Investment returns	644,453	83,413	727,866
Total non-operating revenue, net	<u>(919,927)</u>	<u>83,413</u>	<u>(836,514)</u>
Changes in net position	<u>(2,699,161)</u>	<u>327,247</u>	<u>(2,371,914)</u>
Net position, beginning of period	<u>12,769,783</u>	<u>254,701</u>	<u>13,024,484</u>
Net position, end of period	<u>\$ 10,070,622</u>	<u>581,948</u>	<u>10,652,570</u>

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Report on Internal Controls and Compliance

**Independent Auditor's Report on Internal Control over Financial Reporting
and on Compliance and Other Matters Based on Audits of Financial Statements
Performed in Accordance with *Government Auditing Standards***

Chino Basin Watermaster Board
Rancho Cucamonga, California

We have audited, in accordance with the auditing standards generally accepted in the United States of America and the standards applicable to financial audits contained in *Government Auditing Standards* issued by the Comptroller General of the United States, the financial statements of the Chino Basin Watermaster (Watermaster) as of and for the years ended June 30, 2025 and 2024, and the related notes to the financial statements, which collectively comprises the Watermaster's basic financial statements, and have issued our report thereon dated October 23, 2025.

Internal Control Over Financial Reporting

In planning and performing our audits of the financial statements, we considered the Watermaster's internal control over financial reporting (internal control) to determine the audit procedures that are appropriate in the circumstances for the purpose of expressing our opinion on the financial statements, but not for the purpose of expressing an opinion on the effectiveness of the Watermaster's internal control. Accordingly, we do not express an opinion on the effectiveness of the Watermaster's internal control.

A *deficiency in internal control* exists when the design or operation of a control does not allow management or employees, in the normal course of performing their assigned functions, to prevent, or detect and correct, misstatements on a timely basis. A *material weakness* is a deficiency, or a combination of deficiencies, in internal control, such that there is a reasonable possibility that a material misstatement of the entity's financial statements will not be prevented, or detected and corrected on a timely basis. A *significant deficiency* is a deficiency, or a combination of deficiencies, in internal control that is less severe than a material weakness, yet important enough to merit attention by those charged with governance.

Our consideration of internal control was for the limited purpose described in the first paragraph of this section and was not designed to identify all deficiencies in internal control that might be material weaknesses or significant deficiencies. Given these limitations, during our audits we did not identify any deficiencies in internal control that we consider to be material weaknesses. However, material weaknesses may exist that have not been identified.

Compliance and Other Matters

As part of obtaining reasonable assurance about whether the Watermaster's financial statements are free from material misstatement, we performed tests of its compliance with certain provisions of laws, regulations, contracts, and grant agreements, noncompliance with which could have a direct and material effect on the determination of financial statement amounts. However, providing an opinion on compliance with those provisions was not an objective of our audits and, accordingly, we do not express such an opinion. The results of our tests disclosed no instances of noncompliance or other matters that are required to be reported under *Government Auditing Standards*.

**Independent Auditor's Report on Internal Controls Over Financial Reporting
and on Compliance and Other Matters Based on Audits of Financial Statements
Performed in Accordance with *Government Auditing Standards*, (continued)**

Purpose of this Report

The purpose of this report is solely to describe the scope of our testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the Watermaster's internal control or on compliance. This report is an integral part of audits performed in accordance with *Government Auditing Standards* in considering the Watermaster's internal control and compliance. Accordingly, this communication is not suitable for any other purpose.

C.J. Brown & Company, CPAs

C.J. Brown & Company, CPAs
Cypress, California
October 23, 2025

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2024 State of the Basin

ArcGIS StoryMap Report

Prepared for

Chino Basin Watermaster



June 2025

The 2024 State of the Basin Report is presented in a new, interactive online format using ArcGIS StoryMaps. The full report can be accessed at: <https://arcg.is/1mfKvj>

It is also available on the Chino Basin Watermaster website (<https://cbwm.org/>) under Quick Links.

This document is a static PDF version of the online StoryMap, prepared for hard-copy submission. It was exported using the StoryMap print function and includes static images of figures and maps. Therefore, interactive map features are not fully represented here with the exception of time-series charts, which have been compiled in Appendices A and B for reference.

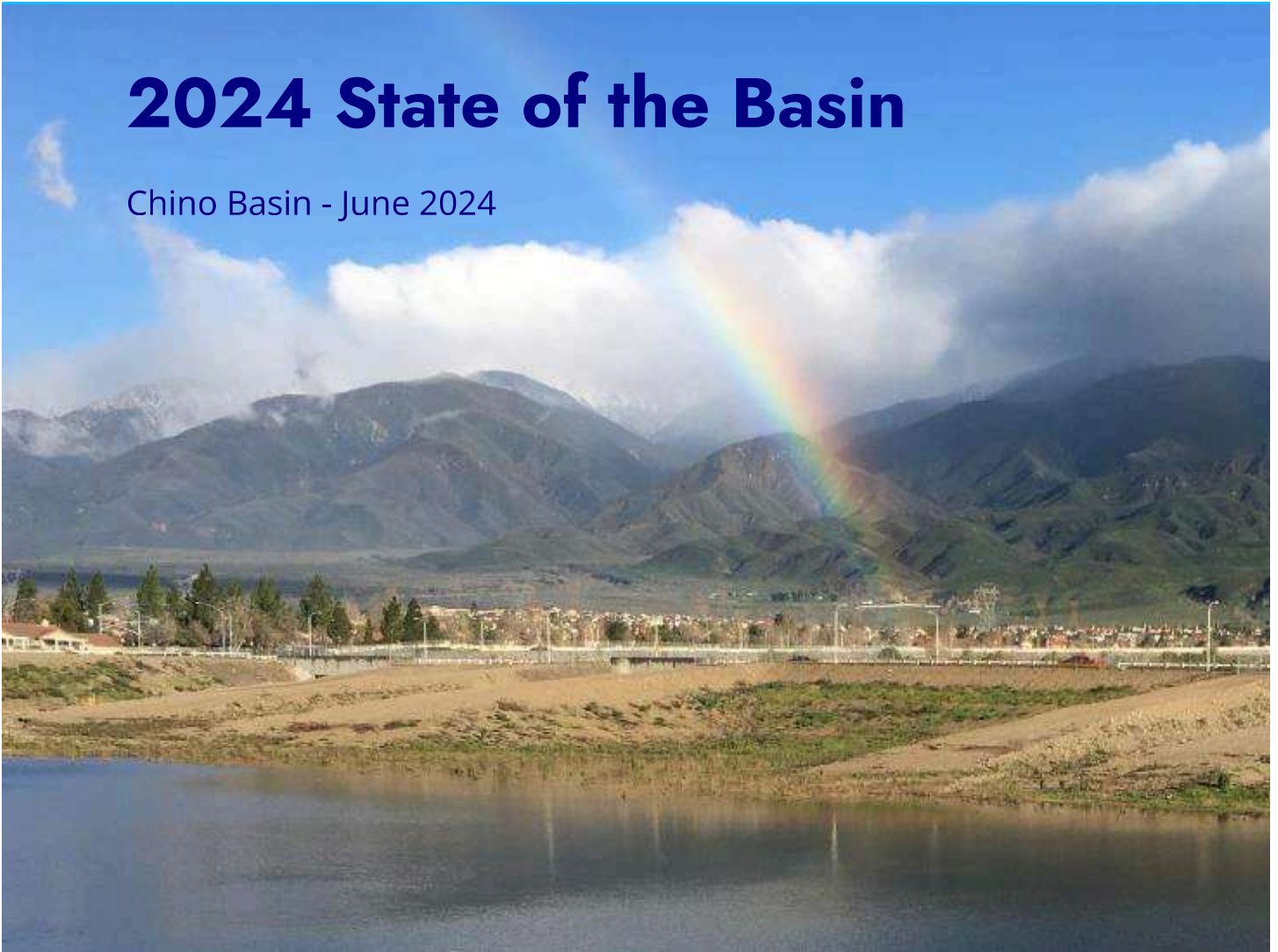
Please note that some formatting in this PDF differs from the online StoryMap, including text layout, figure sizing, and map design. For complete functionality and access to all interactive content, please refer to the online StoryMap link provided above.

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2024 State of the Basin

Chino Basin - June 2024



Prepared by West Yost for Chino Basin Watermaster





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Drinking Water Contaminants in the Chino Basin

- 1,2,3-TCP
- Benzene
- Chromium
- Hexavalent Chromium
- Nitrate-N
- Perchlorate
- PCE
- TCE
- PFOA
- PFOS
- PFHxS

Point-Source Contamination Plumes in the Chino Basin

- South Archibald TCE Plume
- GE Flatiron TCE Plume
- GE Test Cell TCE Plume
- Chino Airport TCE and 1,2,3-TCP Plumes

Ground Level Monitoring

GLMP Monitoring Network

- Transducer Wells
- Extensometers
- Benchmarks

Interferometric Synthetic Aperture Radar (InSAR)

Land Subsidence and Groundwater Management in the Chino Basin

Introduction

The 2000 Chino Basin Optimum Basin Management Program (OBMP) was developed pursuant to the Judgment (Chino Basin Municipal Water District v. City of Chino, et al., 1978) and a ruling by the Court on February 19, 1998. The OBMP is the master planning document for the Chino Basin Watermaster's (Watermaster) basin management activities that provide for the enhanced yield of the Chino Basin and reliable, high-quality, water supplies for the development that is expected to occur within the Basin. The OBMP Implementation Plan is the court-approved governing document for achieving the goals of the OBMP. The OBMP Implementation Plan includes the following Program Elements (PE):

- *PE 1. Develop and Implement a Comprehensive Monitoring Program*
- *PE 2. Develop and Implement a Comprehensive Recharge Program*
- *PE3. Develop and Implement a Water Supply Plan for the Impaired Areas of the Basin*
- *PE4. Develop and Implement a Comprehensive Groundwater Management Plan for Management Zone 1*
- *PE5. Develop and Implement a Regional Supplemental Water Program*
- *PE6. Develop and Implement Cooperative Programs with the Santa Ana Regional Water Quality Control Board (Regional Board) and Other Agencies to Improve Basin Management*
- *PE7. Develop and Implement a Salt Management Program*
- *PE8. Develop and Implement a Groundwater Storage Management Program*
- *PE9. Develop and Implement Conjunctive Use Programs*

In 2020, the OBMP was updated to address the management in the Basin for the next 20 years (WEI, 2020a). The updated 2020 OBMP retained the nine Program Elements of the 2000 OBMP while addressing evolving water management challenges.

The 2000 OBMP, OBMP Implementation Plan, and 2020 OBMP can be accessed through the links below.



A fundamental component for all OBMP program elements is the monitoring performed in accordance with *PE 1*, which includes monitoring of basin hydrology, pumping, recharge, groundwater levels, groundwater quality, and ground motion. Monitoring is performed by basin pumpers, Watermaster staff, and other cooperating entities. The Watermaster staff and engineer collect and compile the monitoring data into relational databases to support data analysis and reporting.

As a reporting mechanism pursuant to the OBMP Implementation Plan, Watermaster prepares a *State of the Basin Report* every two years that:

- Describes the current state of the Chino Basin with respect to its hydrology, pumping, recharge, groundwater levels, groundwater quality, and ground motion.
- Demonstrates the progress made since OBMP implementation began on July 1, 2000 related to activities, such as: well meter installation, desalter planning and engineering, recharge assessments, recharge master planning, hydraulic control, expansion of monitoring programs for groundwater levels and quality, and the monitoring and management of land subsidence.

Prior State of the Basin Reports can be found at the link below.

Previous SOB Reports

The 2024 State of the Basin Report features interactive exhibits that characterize current Basin conditions related to hydrology, water supply and use, groundwater recharge, groundwater levels, groundwater quality, and ground-level monitoring. In many of these exhibits, data are characterized as they relate to the groundwater Management Zones (MZs) defined in the OBMP. The map below shows the Chino Basin and the OBMP MZs. While the Chino Basin is considered one basin from geologic and legal perspectives, the OBMP delineates five MZs based on groundwater-flow systems that function as distinct hydrologic units. Each MZ has unique hydrology and water resource management activities that have limited impacts on the other MZs. The map below also shows key map features that are included on the maps in other sections of the report.

Legend



OBMP Management Zones



Streams & Flood Control Channels



Flood Control & Conservation Basins

Geology

Water-Bearing Sediments



Quaternary Alluvium

Consolidated Bedrock



Undifferentiated Pre-Tertiary to Early Pleistocene
Igneous, Metamorphic, and Sedimentary Rocks

Faults



Location Certain



Location Approximate



Approximate Location of Groundwater Barrier

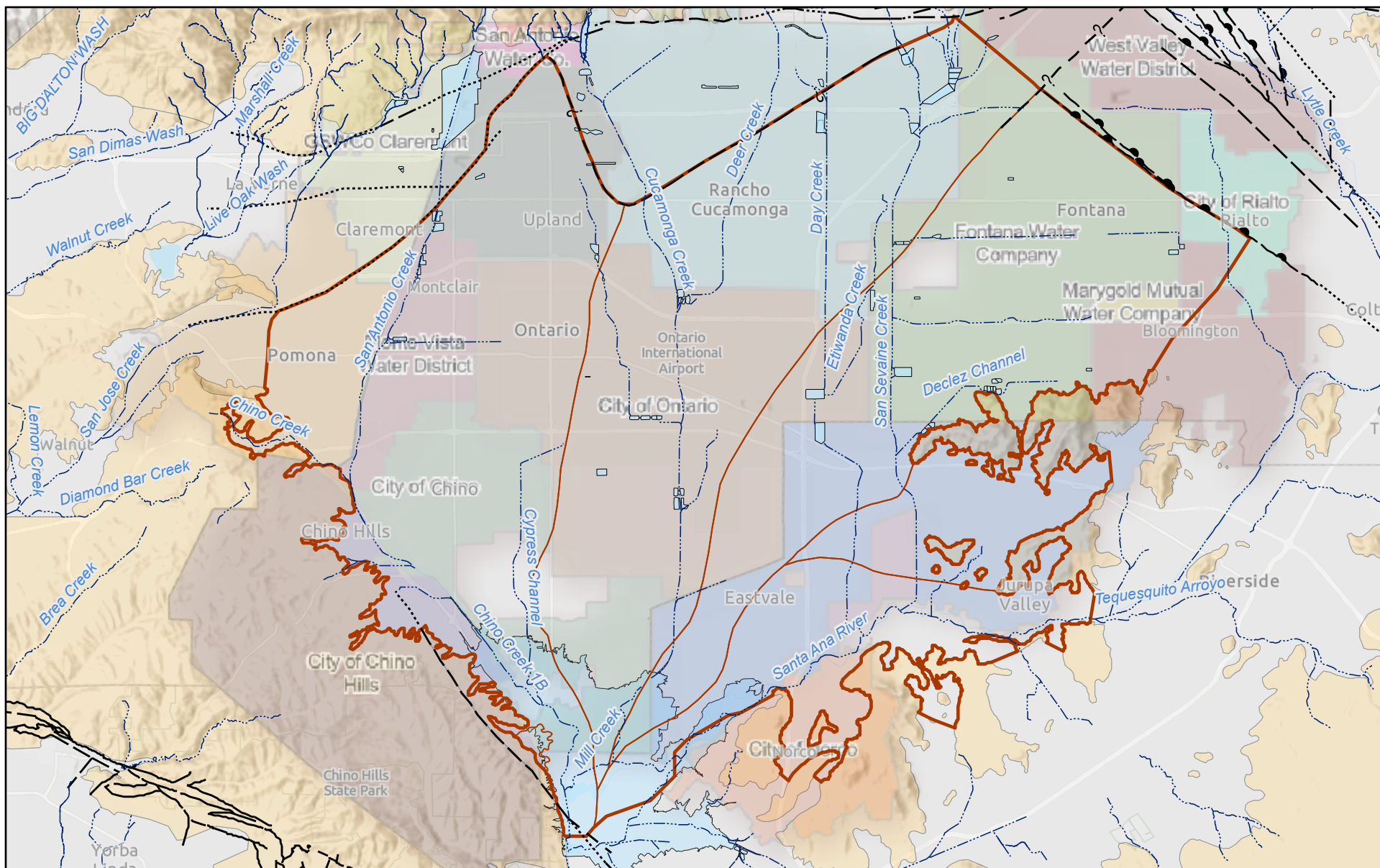


Location Concealed



Location Uncertain

The Chino Basin



Streams and Flood Control Channels
 Faults
 Location Certain
 Location Approximate

Location Concealed
 Location Uncertain
 Groundwater Barrier (approx.)

Chino Basin
 OBMP Management Zones
 Flood Control & Conservation Basins

Geology
 Consolidated Bedrock
 Water-Bearing Sediments

0 1.75 3.5 7 mi
 0 2.75 5.5 11 km

Esri, NASA, NGA, USGS

The remainder of the exhibits are grouped into the following sections, which can be accessed by clicking on the section title below or at any time in the banner at the top of the screen. You can also scroll down to navigate through each of the sections:

- **Table of Contents:** *This section provides quick links to each subsection of the report so users can quickly find the map or exhibit they are looking for.*
- **Basin Hydrology:** This section contains exhibits that characterize the state of the Chino Basin as it relates to land use, hydrology, and climate to provide context for understanding changes in the Basin related to OBMP implementation.
- **Water Use:** This section summarizes the water supply sources in Chino Basin, including groundwater produced from and stored in the Basin.
- **Managed Aquifer Recharge:** This section contains exhibits that characterize the artificial recharge of recycled water, imported water, and stormwater in the Chino Basin. This information is useful in understanding historical changes in groundwater levels, groundwater quality, and in ground motion.
- **Groundwater Levels:** This section contains exhibits that characterize groundwater-flow patterns and the change in groundwater elevations since OBMP implementation in 2000. It also includes characterizations of the time history of groundwater levels throughout the Chino Basin and correlates the change in groundwater levels to the observed stresses of precipitation, groundwater pumping, and managed aquifer recharge.

- **Groundwater Quality**: This section contains exhibits that characterize the groundwater quality across the Chino Basin. It includes exhibits that characterize salt and nutrient management planning for recycled water use compliance, as well as exhibits that characterize the distribution of drinking water contaminants of concern, including known, point-source groundwater contaminant plumes.
- **Ground Level Monitoring**: This section contains exhibits that characterize the history of land subsidence and ground fissuring and the current state of vertical ground motion movement in the five Areas of Subsidence Concern as understood through Watermaster's ground-level monitoring program.



BASIN HYDROLOGY

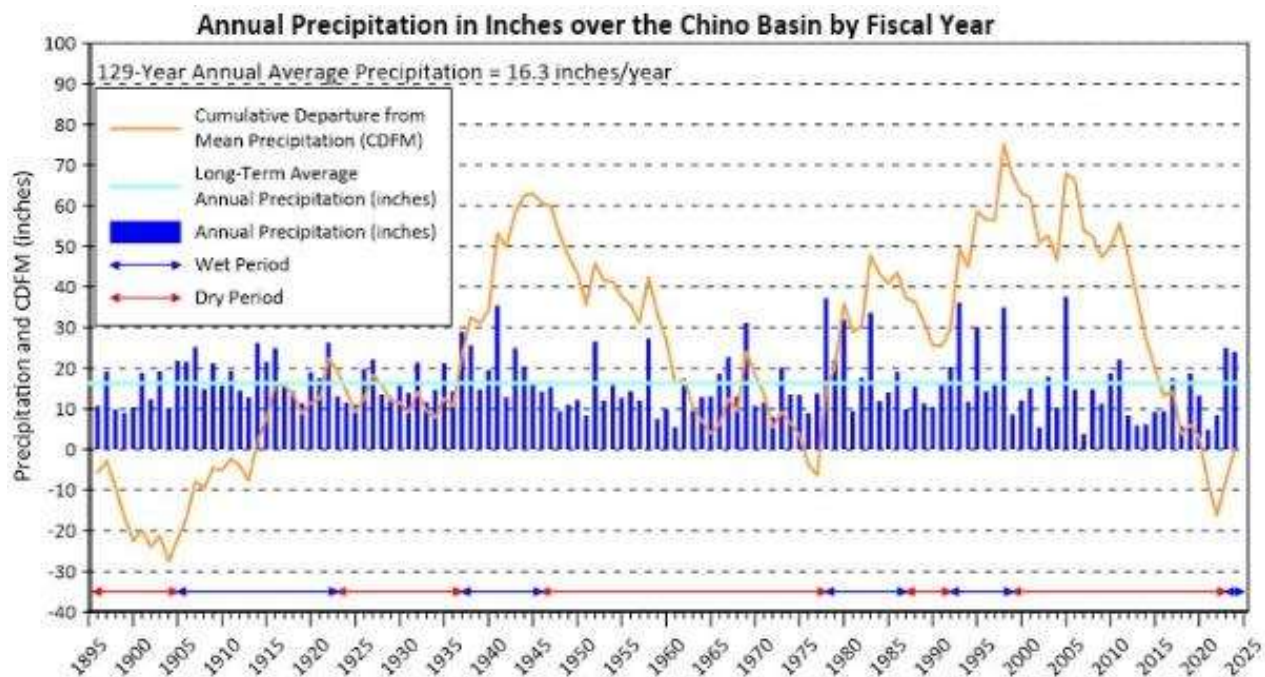
Basin Hydrology

This section illustrates important hydrologic concepts to aid in understanding contemporary water management issues in the Chino Basin. Earth's water is moved, stored, and exchanged between the atmosphere, land surface, and subsurface according to the Water Cycle. As precipitation falls on the land surface, some water may infiltrate into the ground to become groundwater, some water may runoff and contribute to streamflow, some may evaporate, and some may be used by plants and transpired back into the atmosphere. Both climatic and anthropogenic factors play an important role in determining what happens to the water that falls on the surface and how much of that water recharges the groundwater basin.

Rainfall

Rainfall is a major source of groundwater recharge for the Chino Basin through the deep infiltration of precipitation and stormwater recharge in streams and at recharge facilities. The rainfall chart below shows annual precipitation from Fiscal Year (FY) 1895 through FY 2024. These annual precipitation estimates are based on an areal average over the Chino Basin, created from gridded monthly precipitation estimates (800 by 800-meter grid) prepared by the PRISM Climate Group. The chart contains a horizontal line indicating the historical average annual precipitation of 16.3 inches per year, and the cumulative departure from mean (CDFM) precipitation (orange line). The CDFM plot is a useful way to characterize the occurrence and

magnitude of wet and dry periods: positive sloping segments (trending upward from left to right) indicate wet periods, and negative sloping segments (trending downward from left to right) indicate dry periods. The wet and dry periods are also shown at the bottom of the chart. Dry periods tend to be long and very dry and wet periods tend to be relatively short and very wet. The most recent dry period lasted 24 years from 1998 to 2022. This was followed by two wet years in 2023 and 2024.

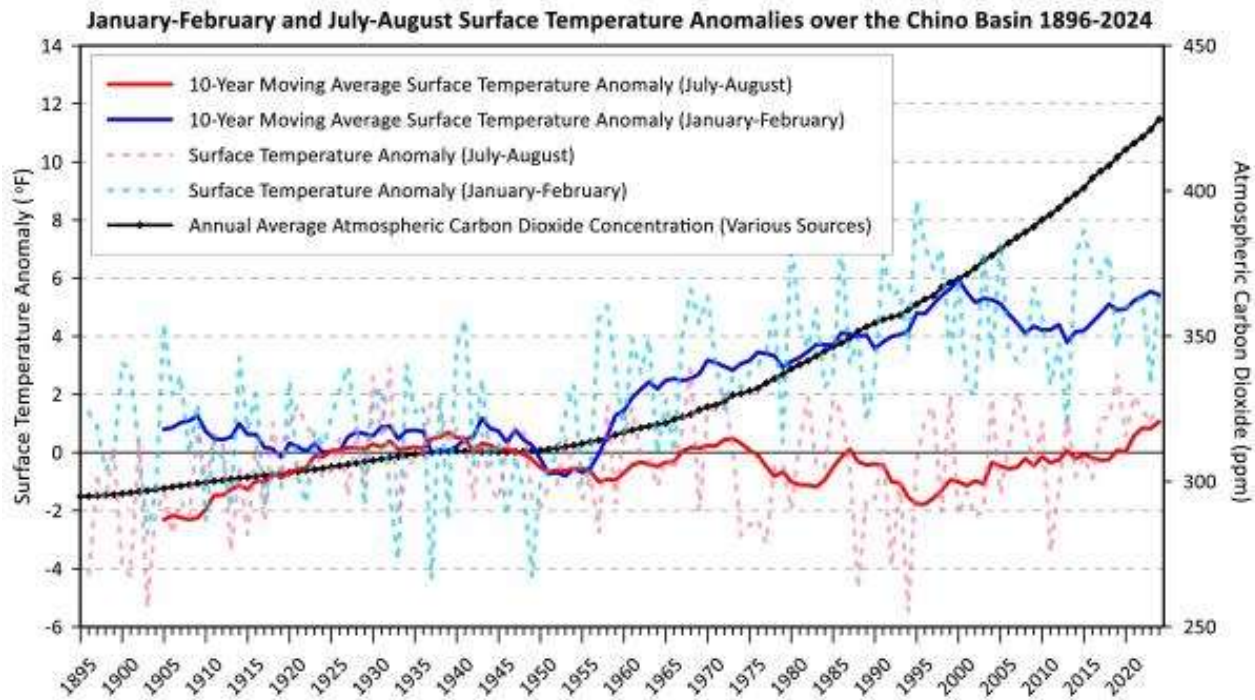


Temperature and Evapotranspiration

Temperature

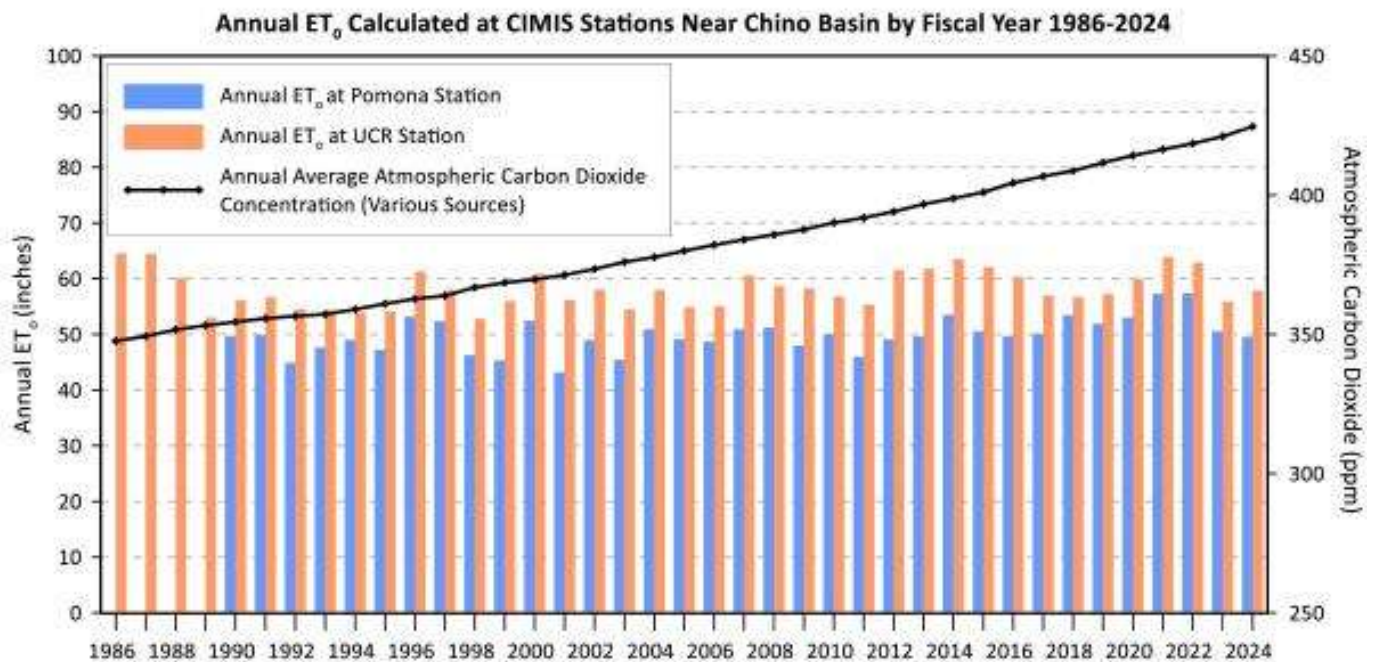
In addition to rainfall, temperature also influences basin hydrology with increasing temperatures resulting in an increase in water demands for irrigation and urban uses. The chart below shows that since 1950, winter temperatures in the Chino Basin have increased by almost 6°F. This increase correlates with an increase in atmospheric carbon dioxide. An increase in winter temperatures can result in a decrease in the occurrence of snowfall and increase in precipitation, directly impacting the hydrology of the Chino Basin and, therefore, management of

the Basin. A reduction in snowfall, coupled with an increase in precipitation, increases the surface water discharge associated with individual precipitation events, causing more frequent exceedances of the recharge capacity of existing recharge facilities, and subsequently reducing the amount of stormwater recharged in the Basin relative to precipitation in the past.



Evapotranspiration

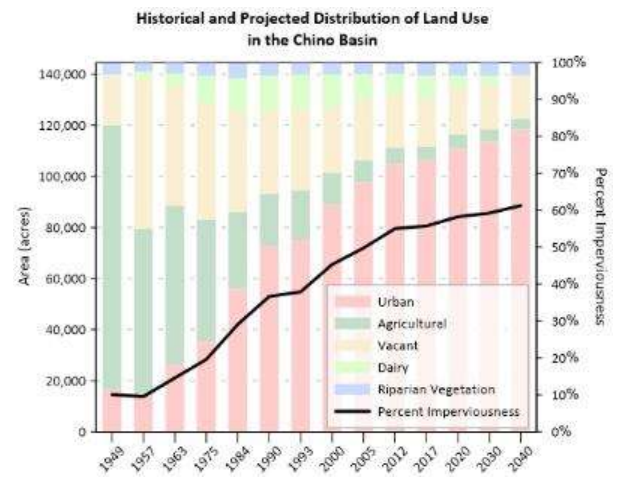
Along with temperature, reference evapotranspiration (ET_o) is another critical factor that influences groundwater recharge and storage in the Chino Basin. ET_o is a combination of the evaporation of water from water bodies and the soil and transpiration of water from plants. It is influenced by temperature with higher temperatures typically resulting in greater ET_o and less available water to recharge the basin. The chart below shows annual ET_o at weather-gaging stations near the Chino Basin from FY 1986 to FY 2024. Although there does not appear to be an increasing trend in annual ET_o, increased winter temperatures could result in an increase in winter-time ET_o, which could result in a reduction in recharge and storage in the Chino Basin.



Land Use History

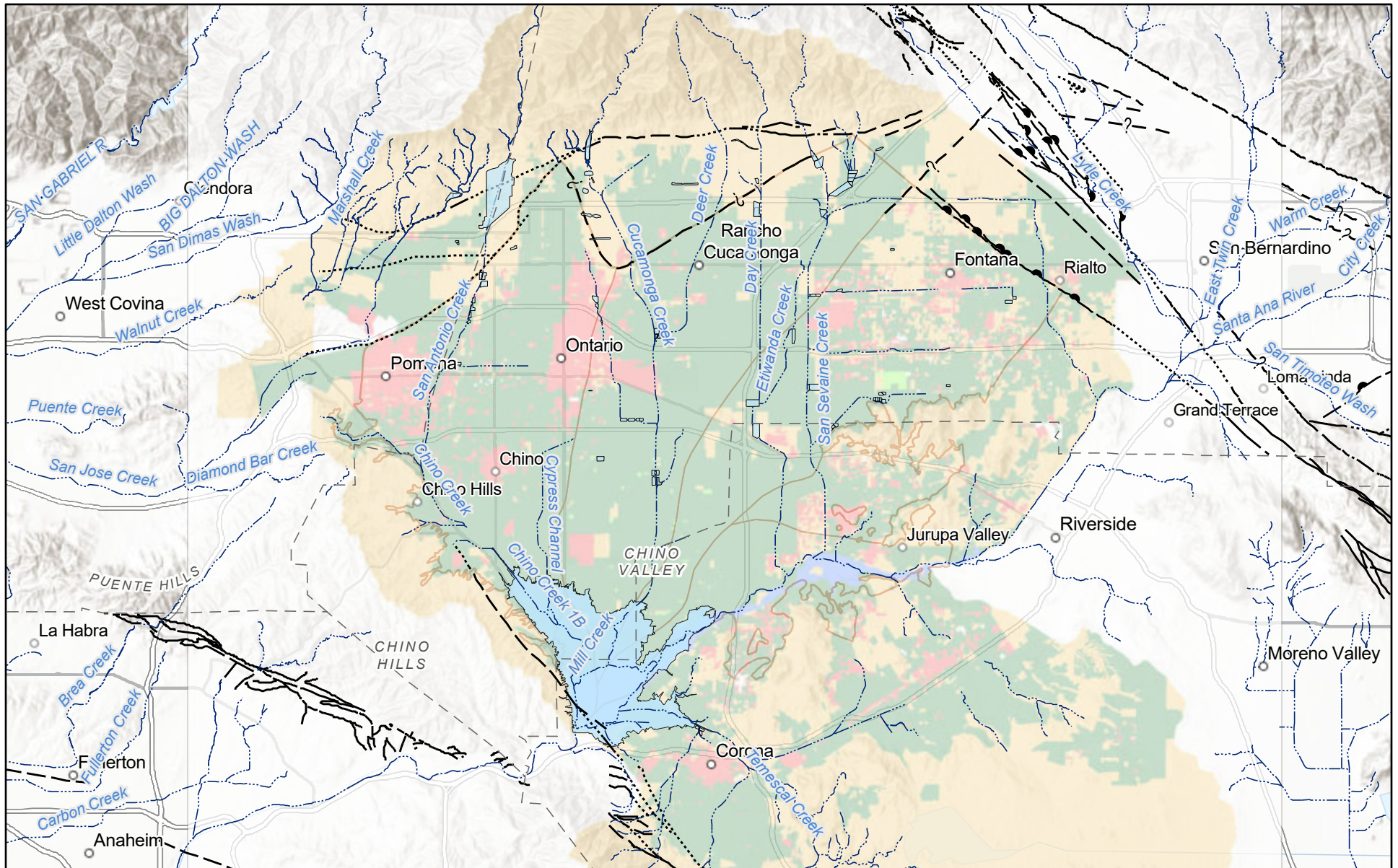
The shift towards urbanization has profoundly impacted the hydrology of the Chino Basin. As agricultural and dairy lands have been replaced by urban areas, the corresponding growth in impervious surfaces has reduced the amount of rainfall that can infiltrate into the ground to become groundwater.

This change has led to increased runoff and a reduction in the amount of water recharging the groundwater table.



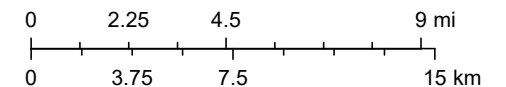
The chart on the right shows the change in the distribution of land use in the Chino Basin from 1949 to 2040 and the corresponding growth in impervious surface. The maps below show the land use data for the Chino Basin for the years 1949, 2001, and 2022. Together the chart and maps show how urbanization and the subsequent reduction of agricultural land have lowered the Basin's ability to absorb rainfall over the last 75 years.

Land Use in the Chino Basin - 1949



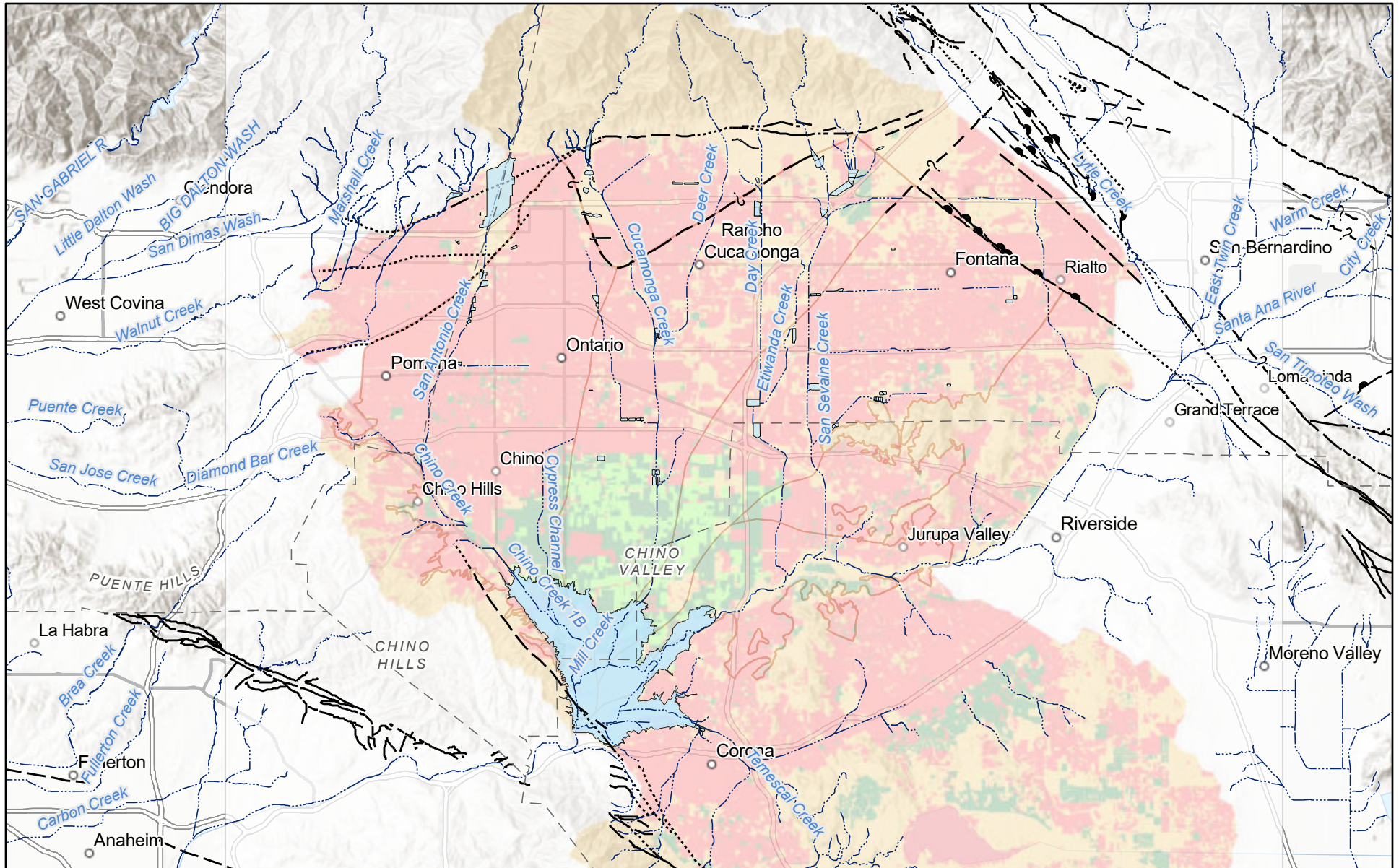
1949 Land Use

 Agriculture	 Dairy	 Vacant
 Urban	 Riparian Vegetation	



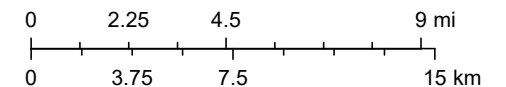
Esri, NASA, NGA, USGS, Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community

Land Use in the Chino Basin - 2001



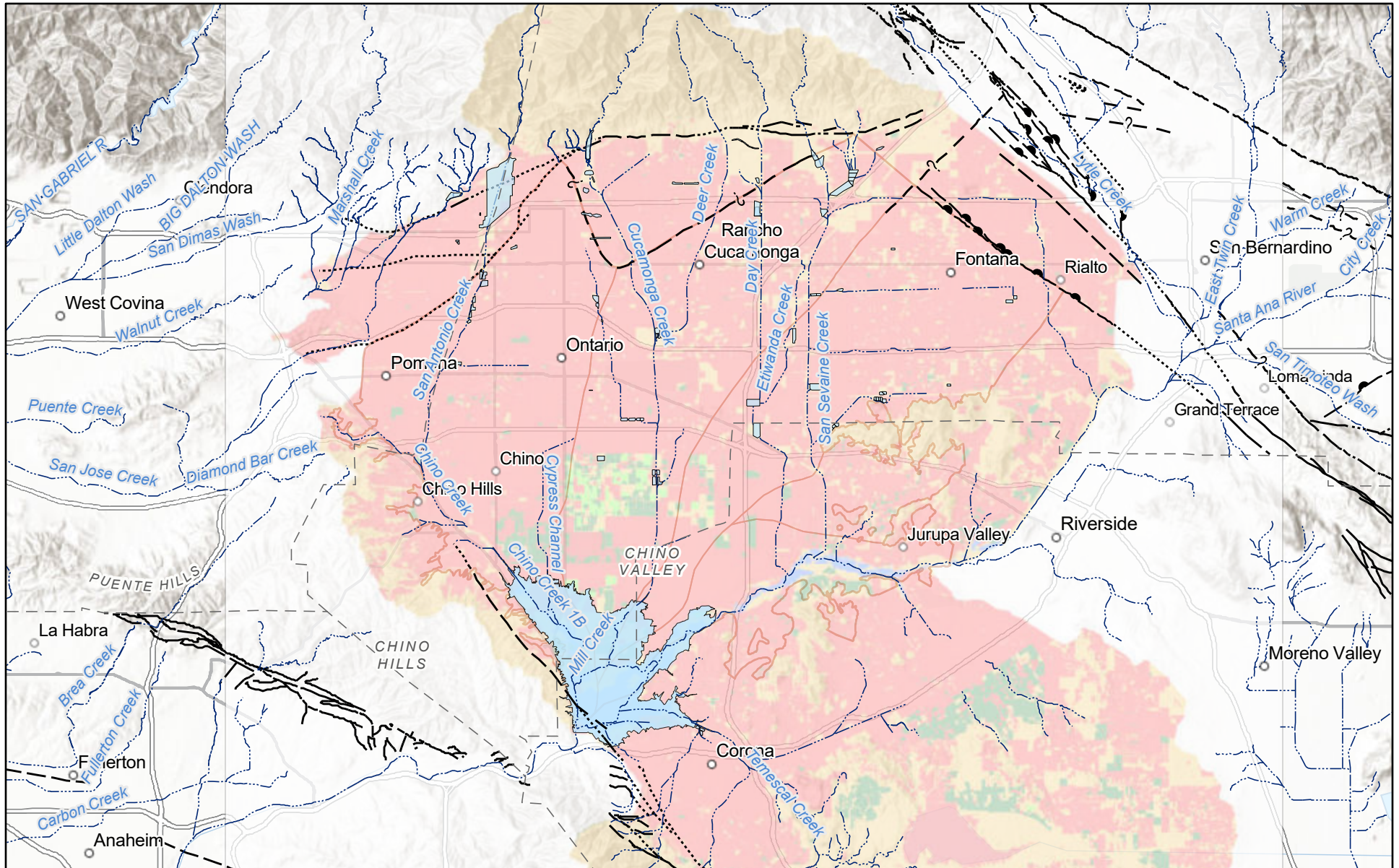
2001 Land Use

 Agriculture	 Dairy	 Vacant
 Urban	 Riparian Vegetation	



Esri, NASA, NGA, USGS, Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community

Land Use in the Chino Basin - 2022



2022 Land Use

■ Agriculture	■ Dairy	■ Vacant
■ Urban	■ Riparian Vegetation	

0 2.25 4.5 9 mi
0 3.75 7.5 15 km

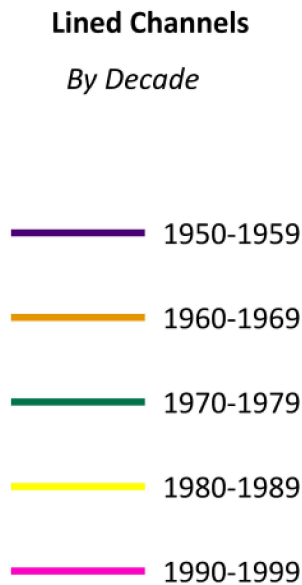
Esri, NASA, NGA, USGS, Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community

Channel Lining History and Stormwater Recharge

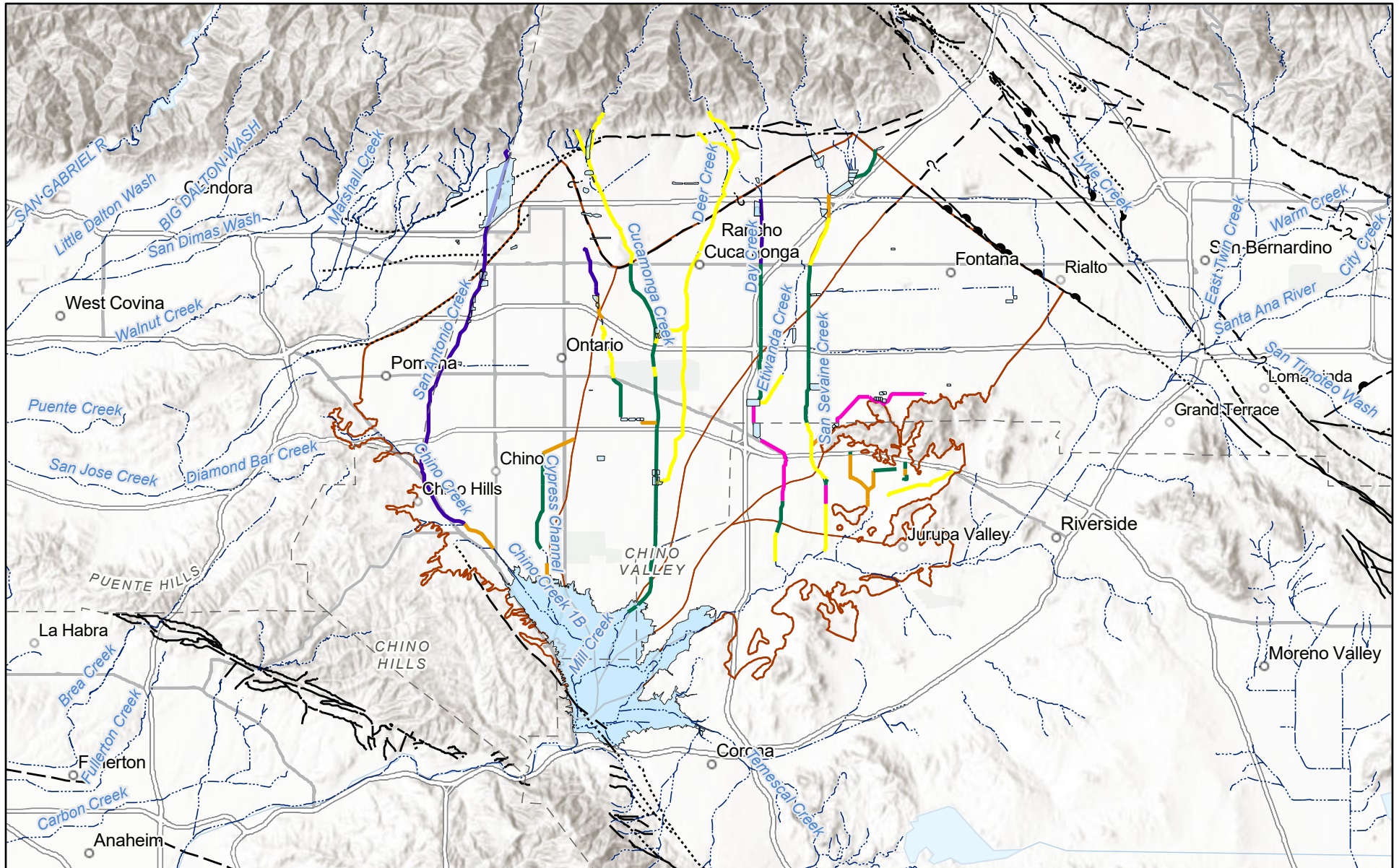
As urbanization in the Chino Basin increased during the 1950s, drainage improvements were incorporated into the landscape to convey stormwater rapidly, safely, and efficiently away from urbanized areas. From roughly 1957 to the present, the drainage areas overlying the valley floor have been almost completely converted to urban uses, and almost all the streams have been converted from unlined to concrete-lined channels, further decreasing the amount of water recharging the groundwater table.

Channel Lining History

The map below shows the stream systems that start in the San Gabriel Mountains and flow from the north to the south, crossing the Cucamonga, Chino, Claremont Heights, and Pomona Basins and when they were lined with concrete.



Channel Lining History in the Chino Basin



Lined Channels

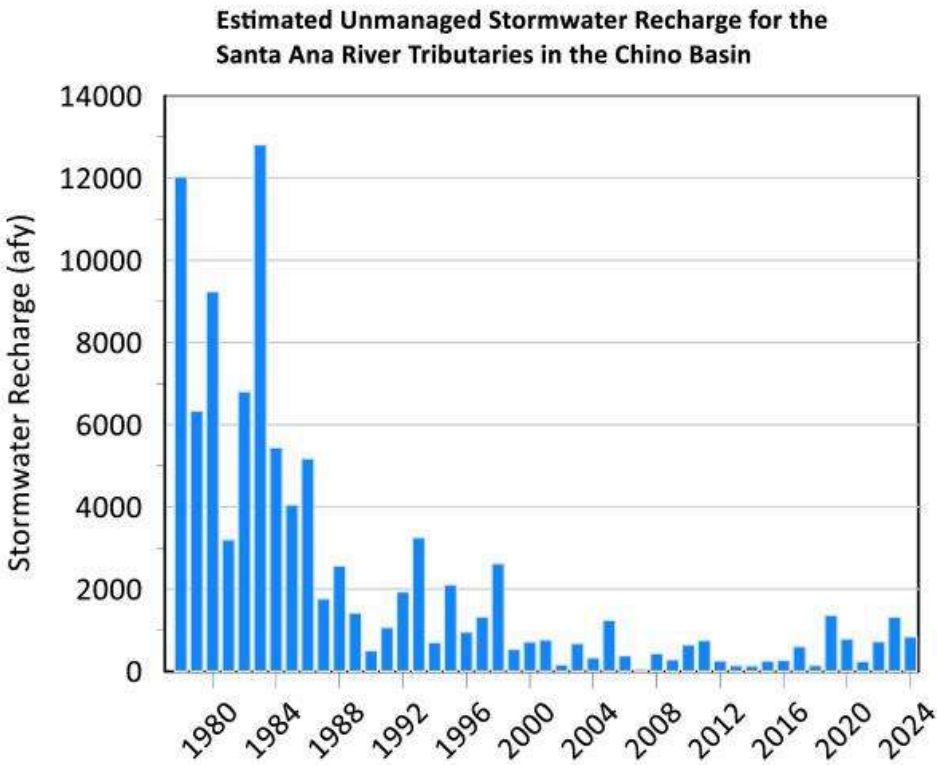
1950-1959	1970-1979	1990-1999
1960-1969	1980-1989	

0 2.25 4.5 9 mi
0 3.75 7.5 15 km

Esri, NASA, NGA, USGS, Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community

Unmanaged Stormwater Recharge

The chart below depicts the estimated "unmanaged" recharge of stormwater occurring in channels and flood control spreading basins between 1978 and 2024. The significant reduction in recharge shown in the chart is largely attributable to urbanization and the channel lining projects, most of which were implemented by the mid-1980s.







Runoff

Unlike the tributaries, the Santa Ana River, which flows through the Chino Basin, is unlined. As a result, streamflow in the Santa Ana River continues to serve as an important source of recharge to the Chino Basin. Streamflow in the Santa Ana River consists of storm flow and base flow. Storm flow is discharge that is the direct result of runoff from precipitation. Base flow is the difference between the total measured discharge and storm flow; it consists of discharge from wastewater treatment plants and rising groundwater. Stream-gaging stations (gages) measure flow in the Santa Ana River as it enters and leaves the

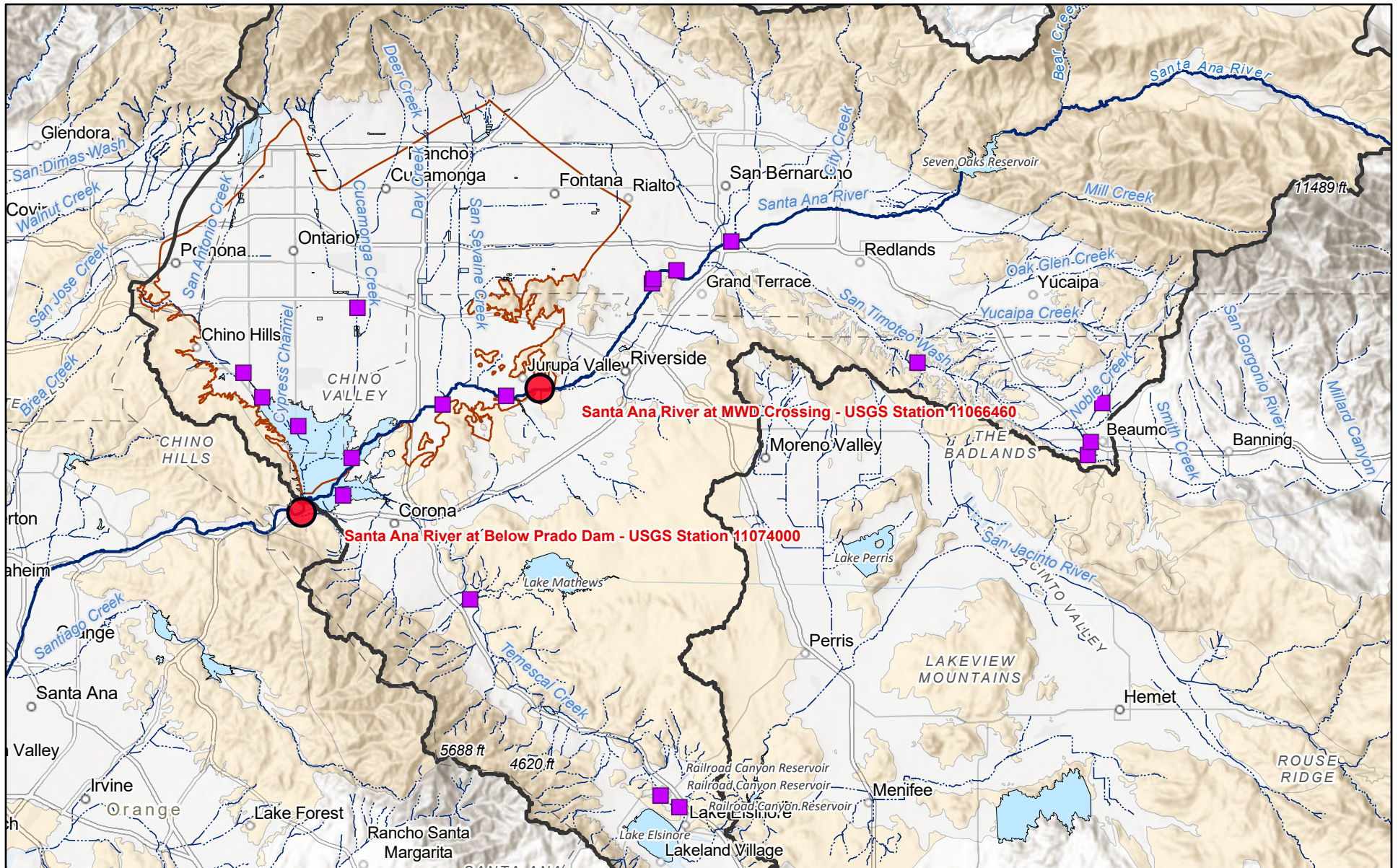
Chino Basin. Between the two gages, additional water flows into the Santa Ana River from uncaptured runoff in the Chino Basin watershed, wastewater treatment plant discharges, and groundwater that surfaces in the river. Conversely, some of the water in the Santa Ana River infiltrates back into the Chino Basin as recharge.

The map below shows the locations of the two gages. Clicking on the gages reveals charts of historical streamflow at these critical points in the Chino Basin. The charts show that baseflow generally increased from the 1970s until about 2008. This increase was a result of urbanization and the increased use in sewer systems and channel lining to manage runoff, which led to an increase in wastewater being discharged to the Santa Ana River. After 2008, baseflow generally decreased due to a decrease in wastewater being discharged to the Santa Ana River. This decrease was the result of both a decrease in water use as a result of recession and drought, and an increase in the use of recycled water.

Legend

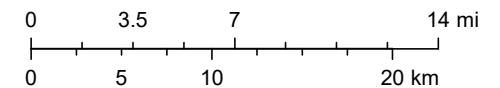
-  Wastewater Treatment Plant Point of Discharge Location
-  USGS Stream-gaging Station
-  Santa Ana River Watershed
-  Tributary to Prado Dam (Upper Watershed)

Chino Basin Runoff via Santa Ana River



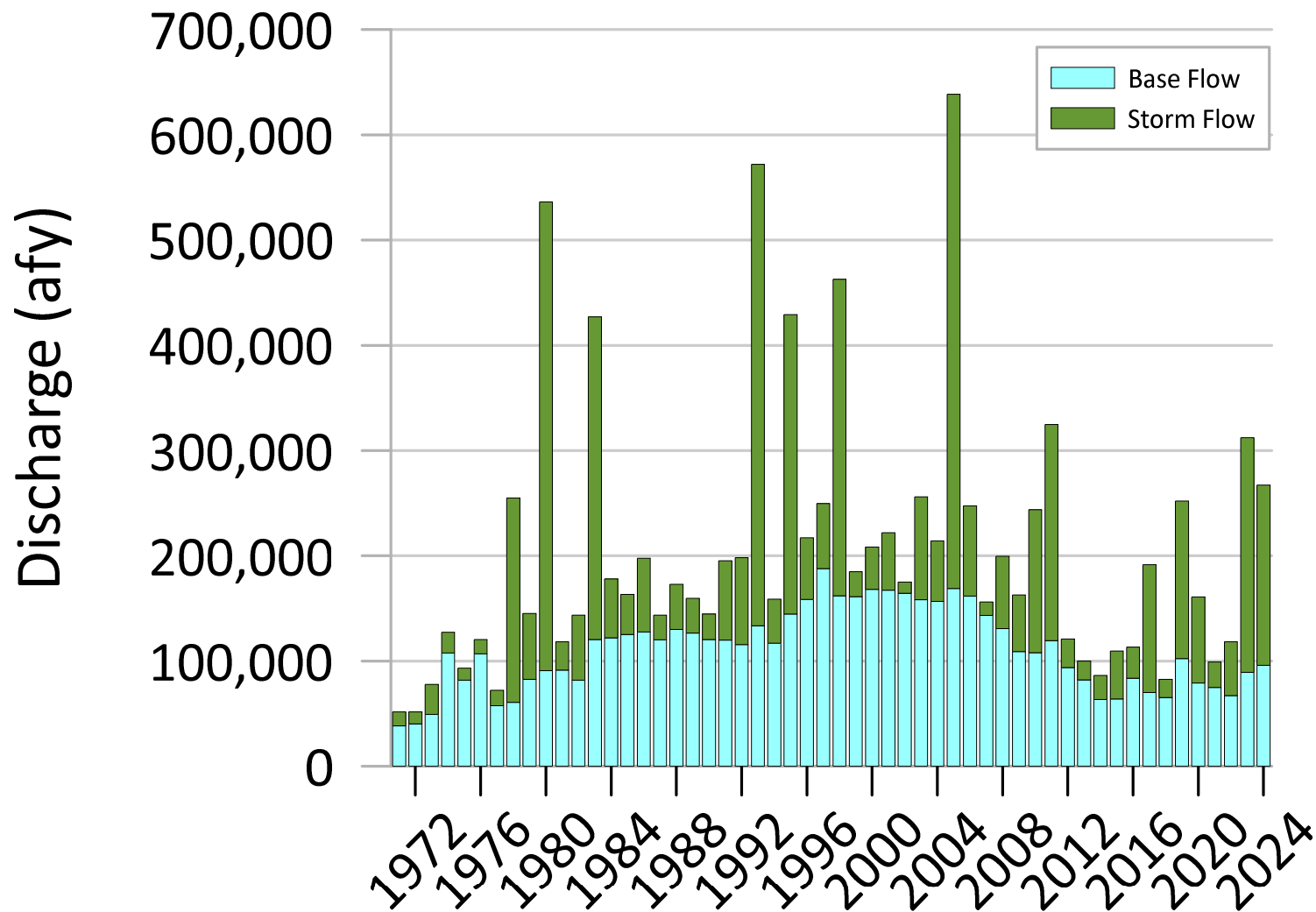
- Wastewater Treatment Plant Discharge Location
- USGS Stream-gaging Station
- Santa Ana River Watershed Tributary to Prado Dam (Upper Watershed)
- Santa Ana River

Appendix

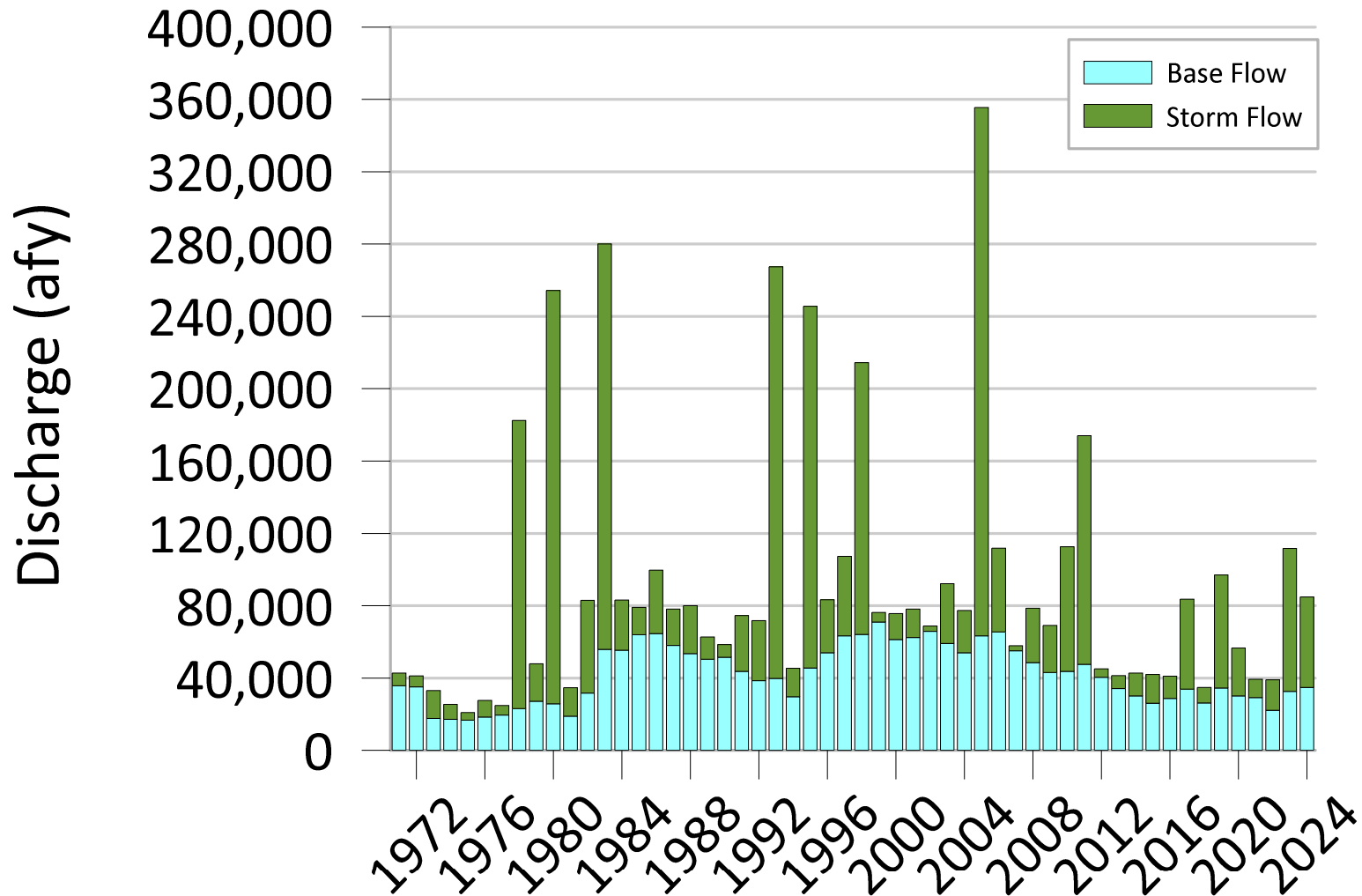


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**Discharge Reckoned in the Santa Ana River
at Below Prado Dam by Water Year**



**Discharge Reckoned in the Santa Ana River at
MWD Crossing (Riverside Narrows) by Water Year**





WATER USE

Water Use

This section describes all the water sources that make up the Watermaster Parties' water supply, including both potable and non-potable supplies for consumption or irrigation.

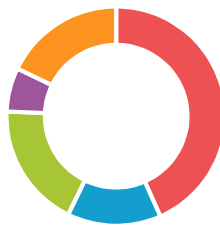
Although in recent years, the region has increasingly relied on alternative sources for water supply, groundwater continues to be the primary water supply source. As a result, groundwater pumping has a significant impact on Basin storage. Therefore, managing groundwater production is a critical part of managing the Chino Basin.

Sources of Water Supply in the Chino Basin

In Fiscal Year (FY) 2024, groundwater from the Chino Basin constituted 43% of the total water supply. In recent years, the region has increasingly relied on recycled water to meet growing demand, accounting for 7% of the total supply in FY 2024. Other sources of water include groundwater from other basins (18%), native surface water (14%), and imported water (18%). Because FY 2024 was a wet year, overall demand was lower and a higher proportion of surface water and imported water were used compared to an average year.

The pie chart below shows the total volume of each of the water sources that made up the parties' FY 2024 water supply as well as the percent of the total water supply that the source represents.

Total Water Supply in the Chino Basin - Fiscal Year 2024 (acre-feet)



- Chino Basin Groundwater
- Native Water Surface Diversions
- Imported Water from State Water Project and Colorado River

Assets of Each Water Supply

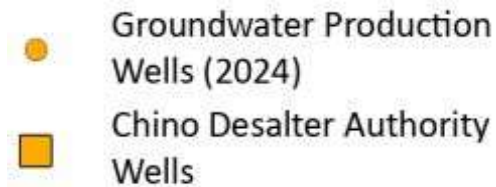
This map shows each of the water sources included in the pie chart and provides more information about these water assets.

Native Surface Water Diversions

Rivers and Streams

Parties with access to native surface water, typically originating from nearby mountain watersheds may divert flow for treatment to supplement their potable water supply.

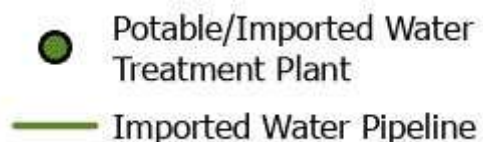
Chino Basin Groundwater



Groundwater production wells are outlined by Pool as follows:
Red - Appropriative, Blue - Agricultural, Green - Non-Agricultural

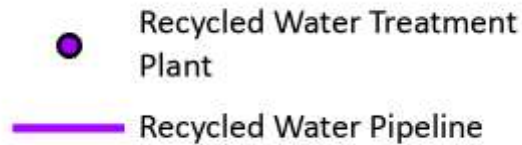
The Chino Basin is an adjudicated groundwater basin with groundwater pumping rights allocated to Watermaster parties. Parties are divided into and managed as three different pools: the Agricultural Pool parties, the Overlying Non-Agricultural Pool parties, and the Appropriative Pool parties. The Chino Desalter Authority, which operates the Chino Desalter wells is part of the Appropriative Pool. This map shows the locations of the production wells in the Basin that produced groundwater in 2024, symbolized by Pool.

Imported Water



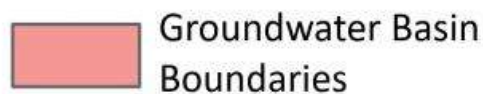
Several parties import both treated and untreated State Water Project water from the Metropolitan Water District. Agencies either receive treated water from the Metropolitan water treatment plant or have direct connections to the untreated imported water lines.

Recycled Water



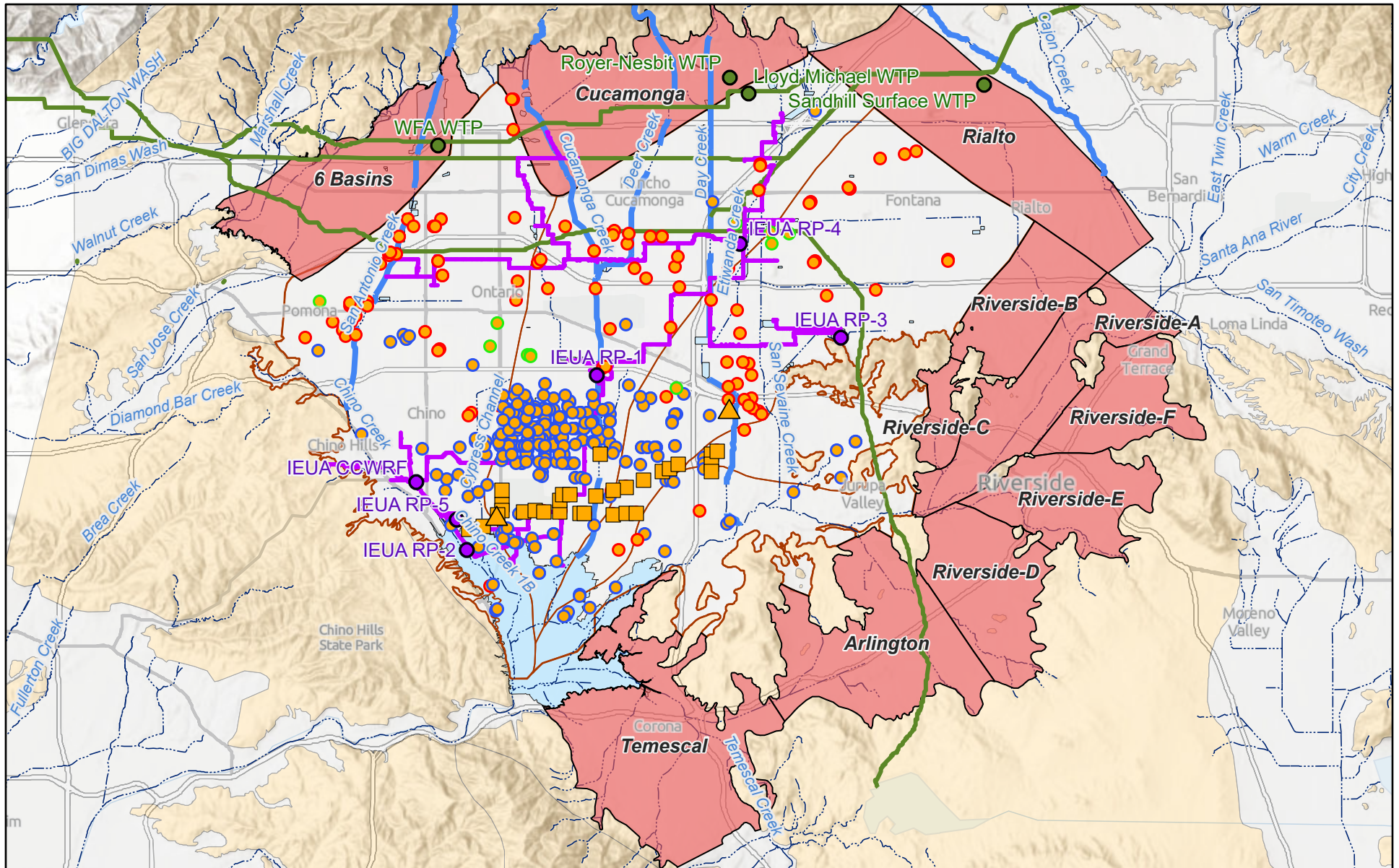
The OBMP established the path for the development of the Inland Empire Utilities Agency's (IEUA's) regional recycled water distribution system. The IEUA provides sewage utility services to contracting agencies in the Chino Basin. It owns and operates five wastewater treatment plants that produce tertiary-treated, Title 22-quality recycled water. This recycled water is used by Chino Basin parties as a water supply source for irrigation.

Groundwater from other Basins



Several Chino Basin parties have service areas that overlap groundwater basins adjacent to the Chino Basin and utilize groundwater from these smaller basins to provide additional potable and non-potable groundwater supplies.

Water Supply Facilities for the Chino Basin



Groundwater Production Wells by Pool

1

3

2

Recycled Water Pipeline

Devil Canyon/Azusa Pipeline

MWDSC Pipelines

Rivers and Streams

Groundwater Basin Boundaries

Imported Water Treatment Plants in Chino Basin

Recycled Water Treatment Plant

Chino Desalter Authority Well

0 2.25 4.5 9 mi

0 3.5 7 14 km

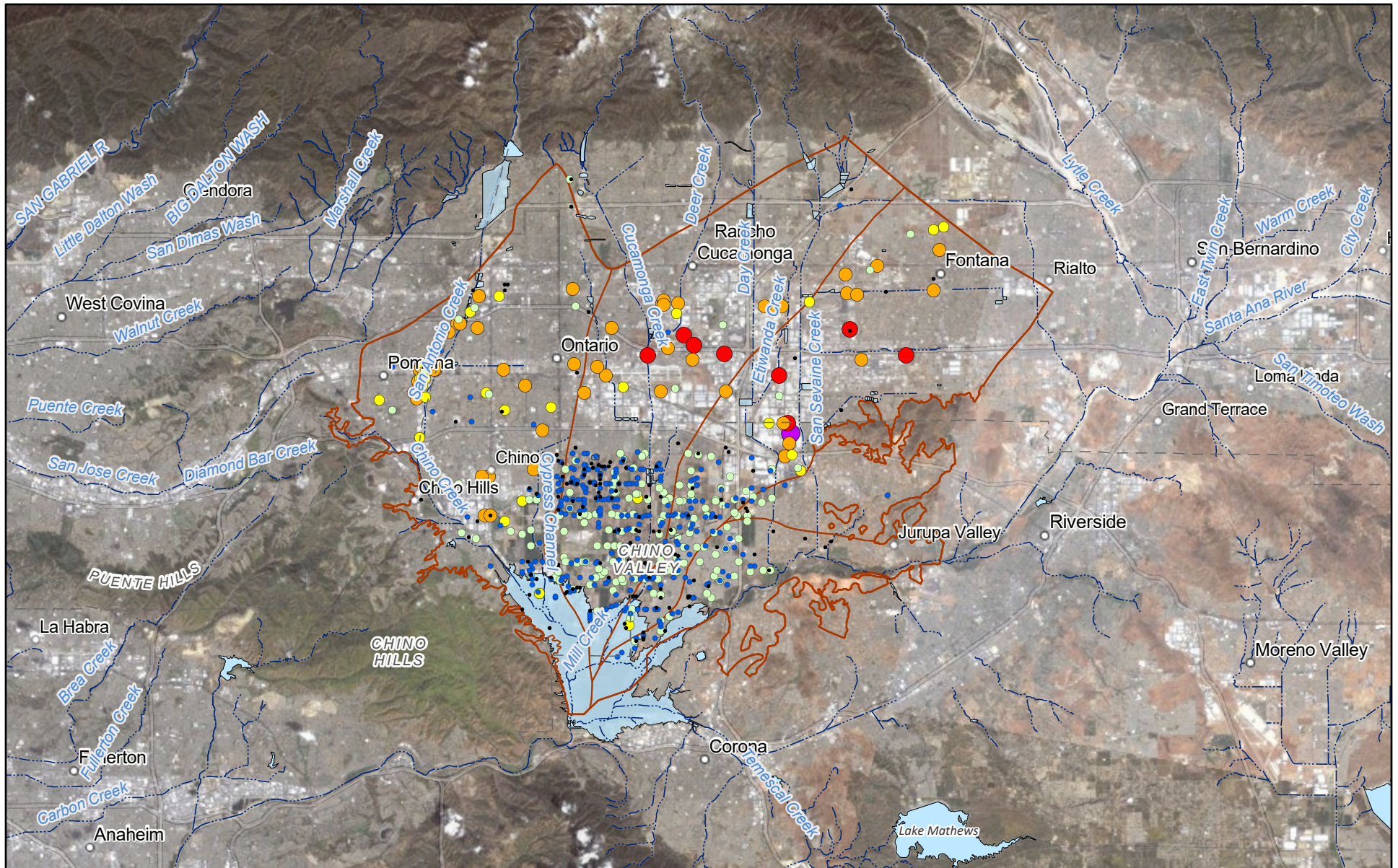
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Groundwater Production

Since the adoption of the Peace Agreement and start of OBMP implementation in 2000, the spatial distribution of production in the Chino Basin has shifted. This map shows the distribution of groundwater production in 2000 (left) and in 2024 (right) along with the imagery captured by the Landsat satellite in March 2000 and March 2024.

Urbanization in the Chino Basin led to an increase in groundwater production at the Appropriative Pool wells in the north of the Basin and a decrease in groundwater production at the Agricultural Pool wells in the south of the Basin. As a result, production shifted north and became concentrated over fewer wells. The OBMP recognized that if municipal pumping did not replace the lost agricultural pumping in the southern part of the Basin, groundwater levels would rise and discharge to the Santa Ana River resulting in a loss of Safe Yield in the Chino Basin and degradation of water quality in the Santa Ana River. Thus, the OBMP called for the formation of the Chino Desalter Authority (CDA) to construct the Chino Desalters. The purpose of the Chino Desalters was to pump brackish groundwater from the southern portion of the Basin and treat it with reverse osmosis and ion exchange. The treated water would then be delivered to CDA member agencies for water supply. The Chino Desalter began operating in FY 2000/2001 with the goal of producing 40,000 acre-feet (af) per year to replace agricultural production and, in doing so, enhance water supply reliability and improve groundwater quality in the Chino Basin. The table below summarizes the production by Pool in FY 2000 and FY 2024.

Groundwater Production in the Chino Basin - 2000

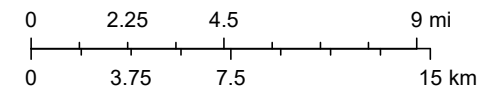


Groundwater Production in 2000

- > 0 - 10
- > 10 - 100

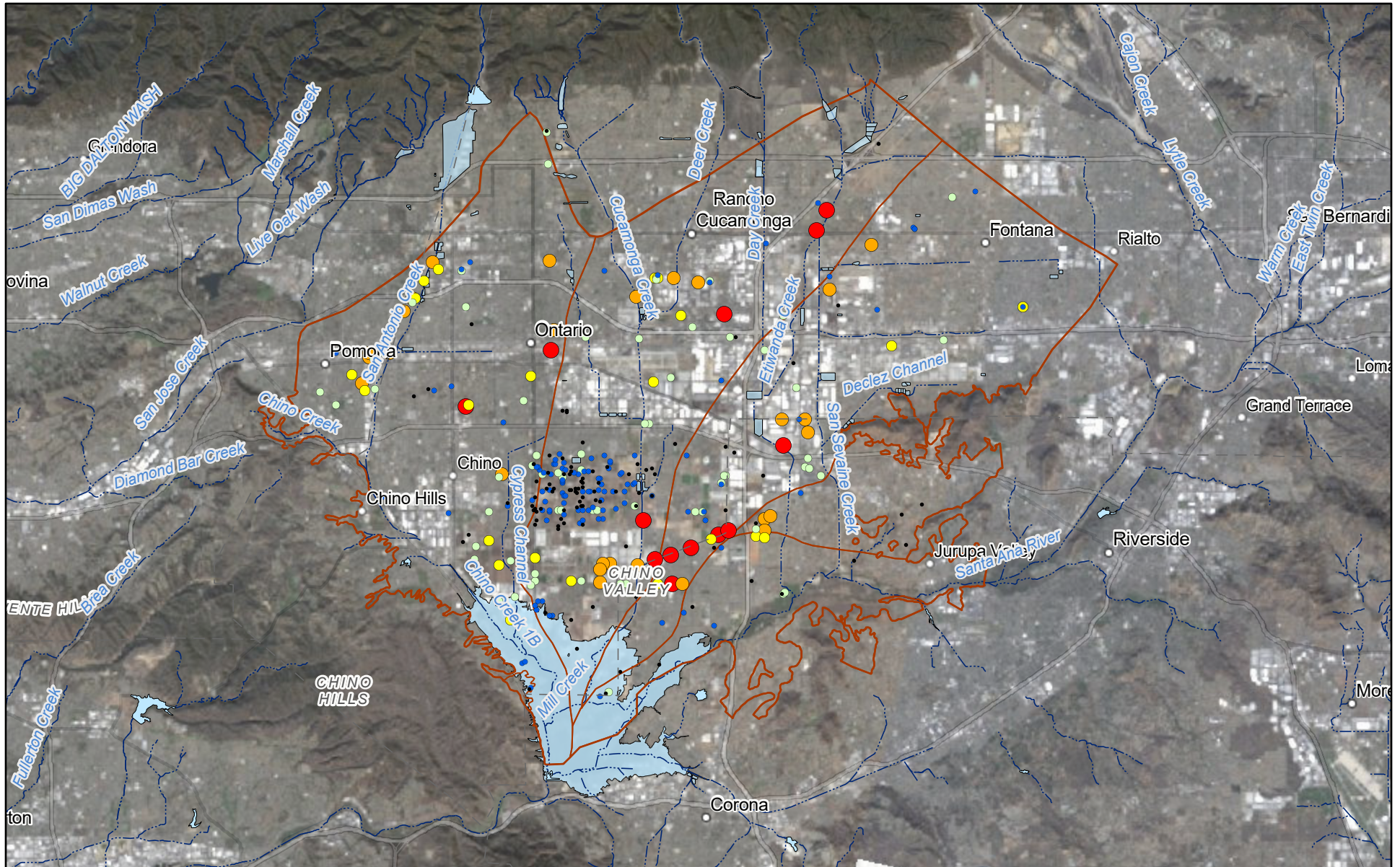
- > 100 - 500
- > 500 - 1,000
- > 1,000 - 2,500

- > 2,500 - 5,000
- > 5,000 - 10,000



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Groundwater Production in the Chino Basin - 2024



Groundwater Production in 2024

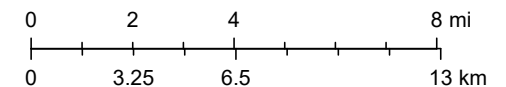
- > 0 - 10
- > 10 - 100

• > 100 - 500

• > 500 - 1,000

• > 1,000 - 2,500

• > 2,500 - 5,000



Esri, NASA, NGA, USGS, Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community

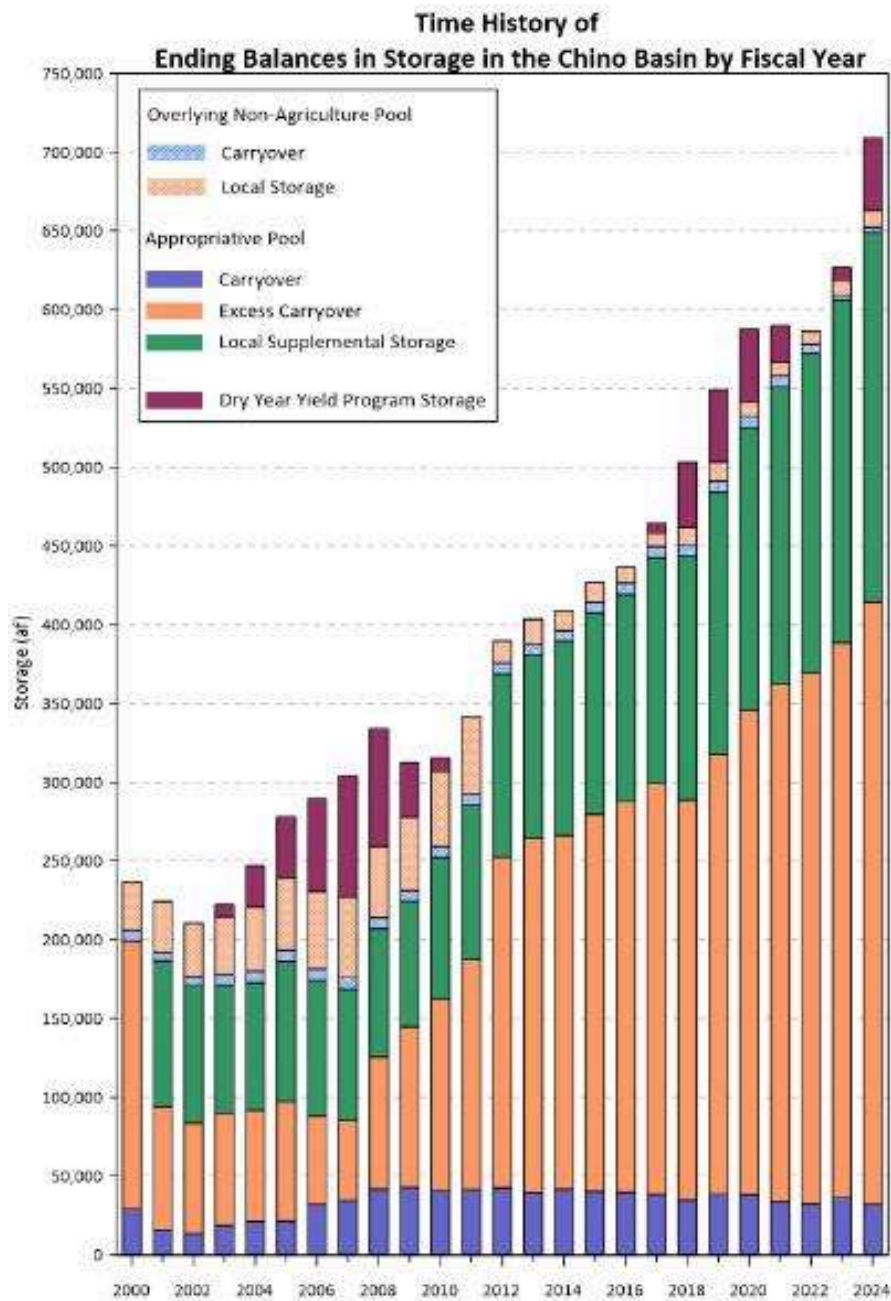
Production by Pool

Pumper	FY 1999/00 Production		FY 2023/24 Production	
	af	percentage	af	percentage
Agricultural	44,200	25	11,000	9
Overlying Non-Agricultural	5,600	3	2,500	2
Appropriative	128,900	72	63,400	54
Chino Desalters	0	0	40,300	34
Total	178,700	100	117,200	100

Managed Storage

The Overlying Non-Agricultural and Appropriative Pool parties can choose to store unpumped groundwater pumping rights in a managed storage account and recover the stored water as needs arise.

Parties can store water by either pumping less than their rights (Carryover or Excess Carryover) or through wet-water recharge (Local Storage and Local Supplemental Storage). The chart on the right shows how consistent under-pumping since 2000 by parties in both Pools has increased managed storage in the Basin from approximately 237,000 af in June 2000 to about 709,000 af in June 2024. Additionally, a master agreement between Chino Basin Watermaster, IEUA, and Metropolitan Water District of Southern California (Metropolitan) resulted in the implementation of



Metropolitan's Dry-Year Yield Program, a Storage and Recovery Program in the Basin that allows Metropolitan to store up to 100,000 acre-feet of water in the Chino Basin with a maximum of 25,000 acre-feet per year. Following the record wet year in 2023, the maximum was increased to accommodate the large amounts of imported water available. As of June 2024, the program had a total of about 46,000 acre-ft of water stored in the Basin.



MANAGED AQUIFER RECHARGE

Managed Aquifer Recharge

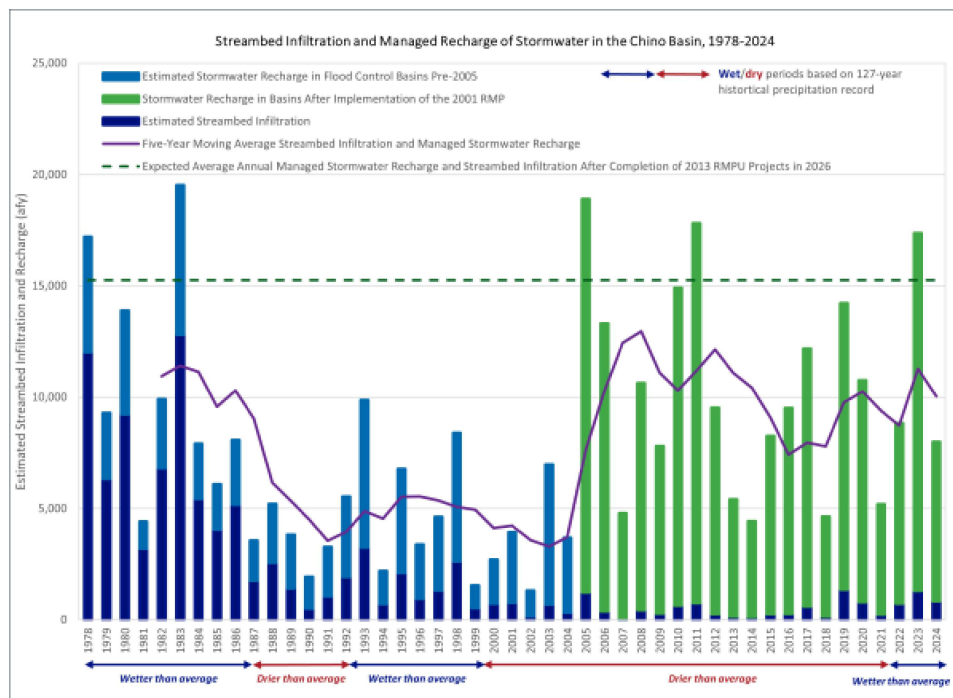
This section describes the artificial recharge activities in the Chino Basin, including the recharge of recycled water, imported water, and stormwater. Managed aquifer recharge is necessary to enhance the yield of the Chino Basin and Program Element 2 of the OBMP Implementation plan calls for the development and implementation of a comprehensive recharge program. Watermaster partners with the Inland Empire Utilities Agency (IEUA), Chino Basin Water Conservation District, and the San Bernardino County Flood Control District to plan and implement groundwater recharge projects in the Chino Basin to increase the capacity for groundwater recharge in the Basin. Additionally, Watermaster prepares a Recharge Master Plan Update (RMPU) every five years.

In addition to artificial recharge activities, in-lieu recharge occurs when a Party with pumping rights in the Chino Basin elects to use supplemental water directly (i.e. imported water) in lieu of pumping some or all its rights for the specific purpose of recharging supplemental water.

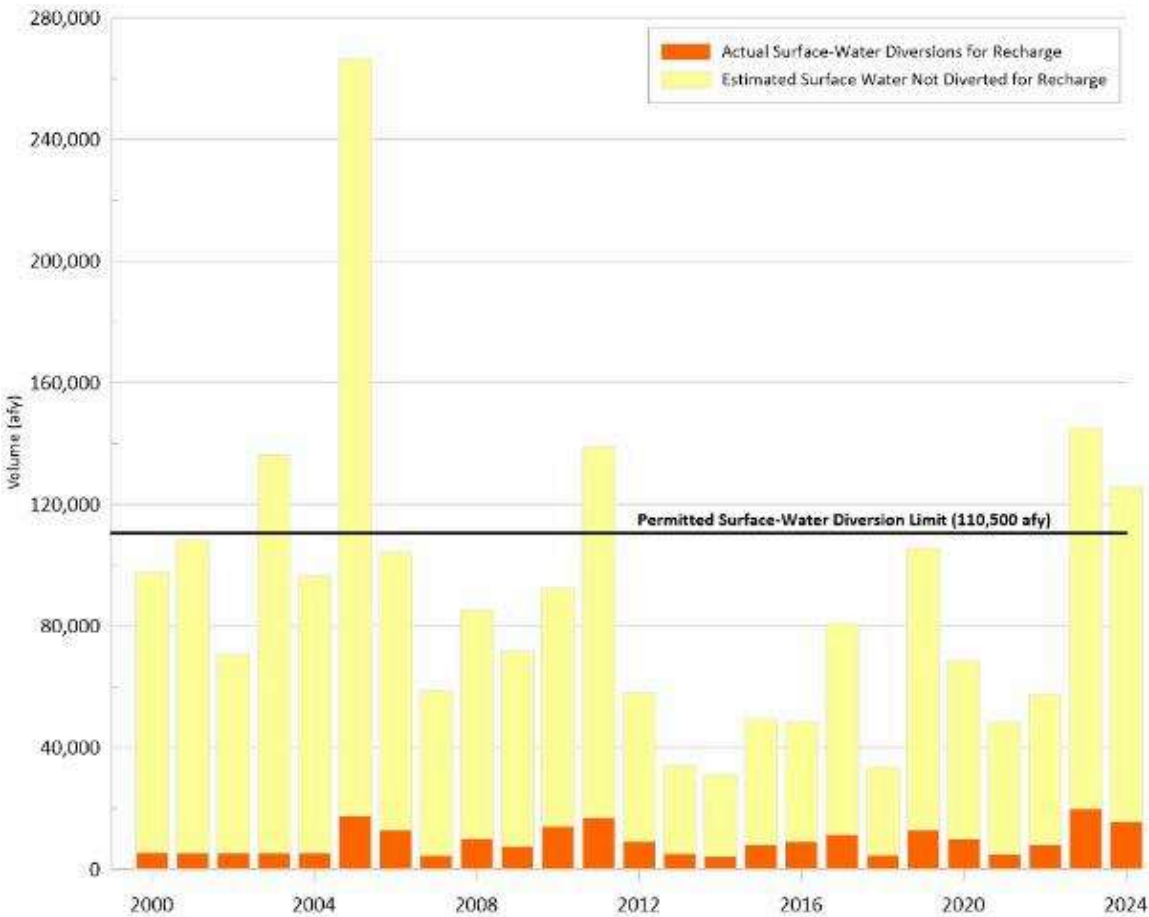
Stormwater Recharge

The [bar chart](#) in the Channel Lining History and Stormwater Recharge section of the Basin Hydrology section shows how the estimated "unmanaged" recharge of stormwater occurring in channels and flood control spreading basins decreased significantly between 1978 and 2024 due to urbanization and channel lining projects, resulting in a decline in recharge to the

Basin, and hence, a decline in the yield of the Basin. Program Element 2 of the OBMP, as described above was developed to reverse the loss in stormwater recharge from urbanization by capturing and recharging stormwater and dry-weather runoff. In addition to increasing recharge to the Basin, capturing and recharging stormwater also improves water quality in the Santa Ana River by reducing contributions of metals, nutrients, pathogens, and other constituents of concern, which are eliminated during recharge through soil-aquifer treatment processes. The chart below shows the total estimated stormwater recharge from streambed infiltration and flood control/recharge basins from 1978 through 2024. Following the implementation of the 2001 Recharge Management Plan (RMP) and the construction of recharge basins, which increased the capacity for stormwater recharge, total stormwater recharge (through streambed infiltration and managed stormwater recharge) increased significantly and by 2007, the five-year moving average of total stormwater recharged (purple line) was greater than the average stormwater recharged prior to channel lining. Additional RMP projects planned for 2026 are expected to further increase recharge to just over 15,000 acre-feet per year (afy), exceeding the average recharge that occurred prior to channel lining.



The Chino Basin Watermaster has permits from the State Water Resources Control Board to divert stormwater and dry-weather flow to recharge facilities for recharge, storage, and recovery for beneficial uses. Watermaster holds these permits in trust for all entities that rely on groundwater for the Chino Basin. Altogether the permits allow for a maximum total surface water diversion of 110,500 afy. The chart below shows the total amount of surface water diverted for recharge each year from 2000 to 2024 (in orange) compared to the total estimated amount of surface water. The permit limit is shown in the chart as a black line. Over the last 25 years the amount of surface water diverted for recharge annually is considerably less than the permit limit and a relatively small percent of the total surface water. Thus, an opportunity exists to expand the RMP and increase groundwater recharged to the Chino Basin using stormwater recharge.








Recharge Facilities in the Chino Basin

In addition to permits to divert stormwater for recharge, Watermaster and the IEUA also have a permit from the Regional Board to utilize recycled water for recharge. Diverted stormwater and recycled water are recharged at various facilities throughout the Basin, along with imported water. The map below shows existing recharge facilities and their supporting infrastructure. More information about the facilities is included below.

Legend



Recharge Facility

Recharge Basin (by water source)



-  Incidental Recharge
-  Stormwater
-  Stormwater and Imported Water
-  Stormwater, Imported Water, and Recycled Water
-  Monte Vista Water District Aquifer Storage and Recovery (ASR) Wells

Water Source

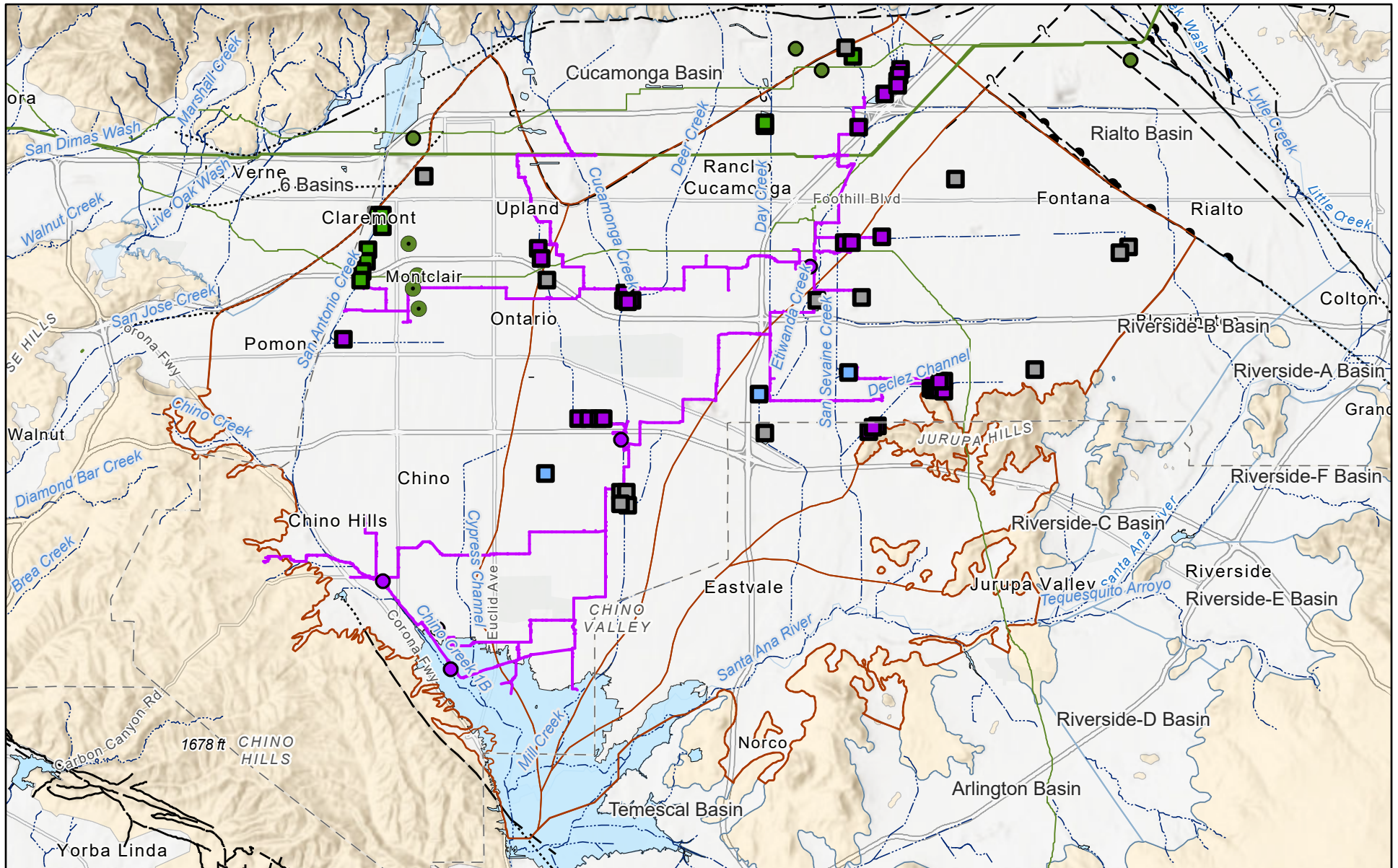
Imported Water

-  Potable Water Treatment Plant
-  Imported Water Pipeline

Recycled Water

-  Wastewater Treatment Plant
-  Recycled Water Pipeline

Groundwater Recharge Facilities in the Chino Basin



Recharge Basins in Chino Basin

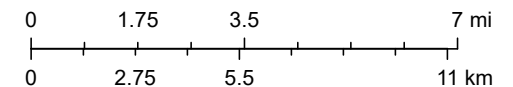
- Incidental Recharge
- SW
- SW+IW

ASR Wells

- Monte Vista Water District ASR Wells
- Recycled Water Treatment Plants

Imported Water Treatment Plants

- Recycled Water Pipeline
- Devil Canyon/Azusa Pipeline
- Imported Water Pipelines - MWDSC Pipelines



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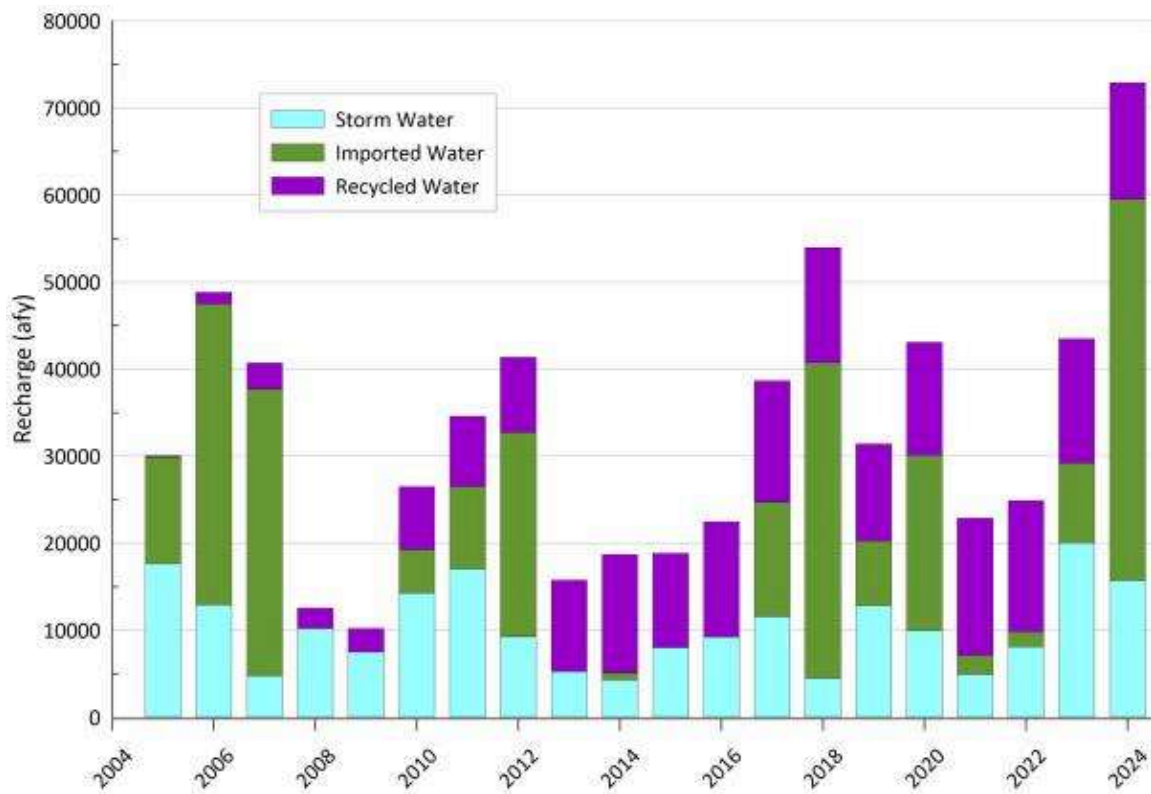
Recharge basins. Recharge basins are critical infrastructure in the Chino Basin, serving as key components for the implementation of the OBMP. Recharge basins play a vital role in capturing diverted stormwater and facilitating the recharge of recycled and imported water. Stormwater, dry-weather flow (incidental recharge), imported water, and recycled water are recharged at 17 recharge basins across the Chino Basin.

ASR wells. ASR wells are used to inject treated imported water into the Basin and to pump groundwater. The Monte Vista Water District (MVWD) owns and operates four ASR wells in the Chino Basin.

Not shown on the map are the Municipal Separate Storm Sewer System (MS4) Facilities. MS4 Facilities are storm drainage facilities that are owned or operated by the State and can be utilized to capture runoff and discharge stormwater into the Chino Basin.

The chart below shows the water recharged at the recharge basins in Chino Basin by fiscal year, broken up by type of recharge conducted in the basin.

Water Recharged at Chino Basin Recharge Basins by Fiscal Year



Recharge Basin Tour

Take a tour of Chino Basin Watermaster's recharge basins. Navigate via the picture grid or the map to see specific details about each facility and its functions, including the basin name and the amount of stormwater, recycled water, and imported water recharged at the basin during fiscal year 2023/24. Click on the "X" button to end the tour.



College Heights Basins

Owner: Chino Basin Water Conservation District



Upland Basin

Owner: City of Upland



Montclair Basins

Owner: Chino Basin Water Conservation District



Brooks Basin

Owner: Chino Basin Water Conservation District



7th & 8th Street Basins

Owner: San Bernardino County Flood Control District



Ely Basins

Owner of Ely 1 and 2: San Bernardino County Flood Control District



Turner Basins

Owner of Turner 1 and 2: Chino Basin Water Conservation District / San Bernardino County Flood Control District



Grove Basin

Owner: San Bernardino County Flood Control District



Lower Day Basin

Owner: San Bernardino County Flood Control District



Wineville Basin

Owner: San Bernardino County Flood Control District



Etiwanda Debris Basin

Owner: San Bernardino County Flood Control District



San Sevaine Basins

Owner: San Bernardino County Flood Control District



Agricultural Managed Aquifer Recharge Intex Property

Owner: Private Owner



Victoria Basin

Owner: San Bernardino County Flood Control District



Banana Basin

Owner: San Bernardino County Flood Control District



Hickory Basins

Owner: San Bernardino County Flood Control District



Jurupa Basin

Owner: San Bernardino County Flood Control District



RP3 Basins

Owner: Inland Empire Utilities Agency



Declez Basins

Owner: San Bernardino County Flood Control District



GROUNDWATER LEVELS

Groundwater Levels

This section illustrates the current physical state of groundwater levels in the Chino Basin compared to the implementation of the Judgment and the OBMP. The data were collected as part of Watermaster's groundwater-level monitoring program, which was established by the OBMP as part of a comprehensive basin-wide monitoring program to support various Watermaster activities and initiatives. Prior to implementation of the OBMP, there was no formal monitoring program, leading to issues like inadequate monitoring well distribution, short data histories, and questionable data quality. Over time, the program has been refined to meet new regulatory requirements and the evolving needs of the Watermaster and the Inland Empire Utilities Agency (IEUA). Currently, the monitoring program supports various OBMP program elements, including functions such as reassessing Safe Yield, managing land subsidence, assessing Hydraulic Control, updating the groundwater-flow model, understanding groundwater flow directions, estimating storage changes, interpreting groundwater-quality data, identifying imbalances in recharge and discharge, and monitoring depth to groundwater within the groundwater-dependent ecosystem in the Prado Basin





Groundwater Level Change Over Time

The Chino Basin has two distinct aquifer systems: a shallow unconfined to semi-confined aquifer system, and a deeper confined aquifer system. The groundwater elevations on the map are based on measured groundwater elevations within the shallow aquifer system. Groundwater flows within the aquifer system sediments from higher to lower elevations, with flow direction perpendicular to the contours.

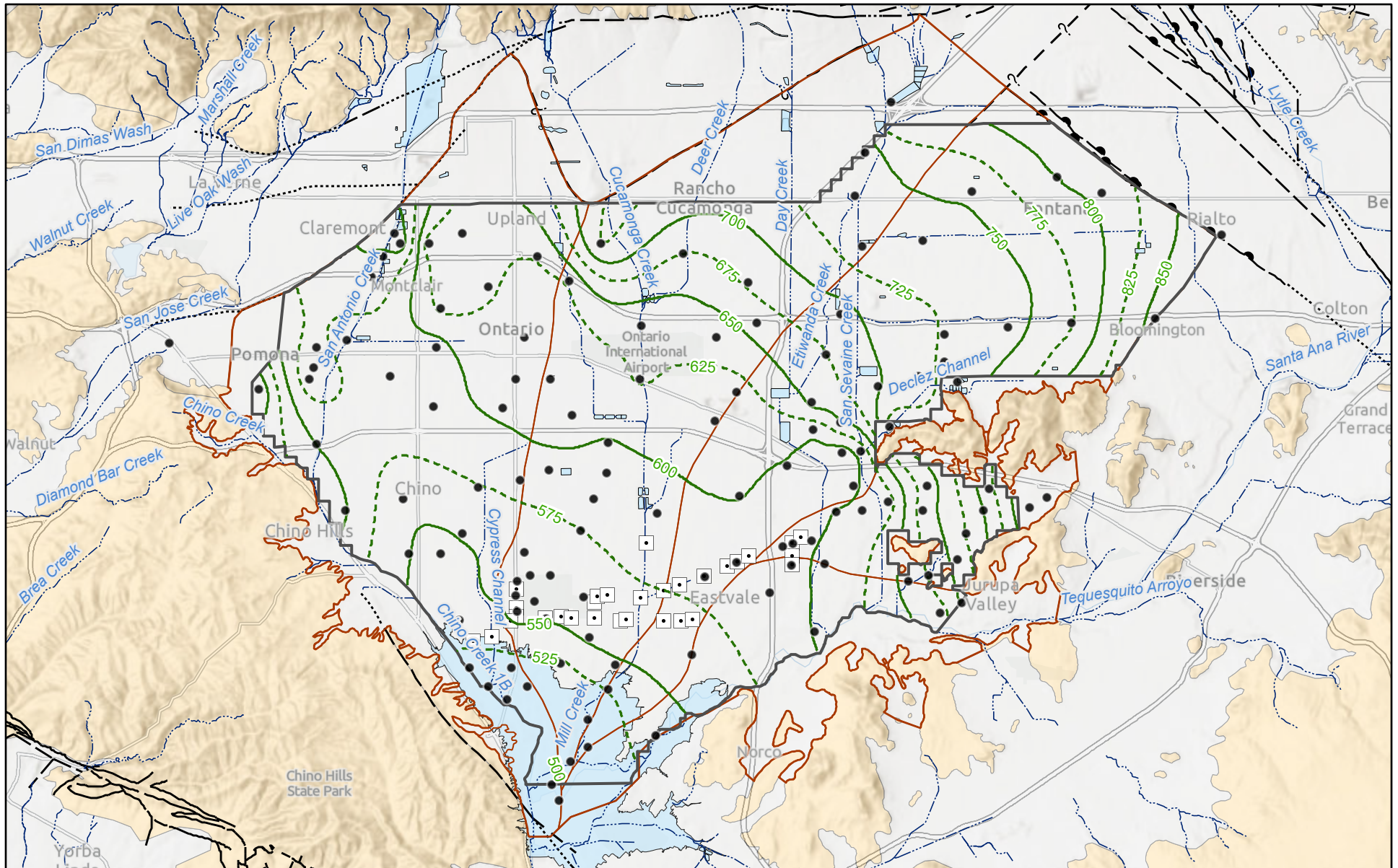
Groundwater-Elevation Contours for Spring 2000 and Spring 2024

This map shows groundwater elevation contours across the Chino Basin during spring 2000, just before the implementation of the OBMP and during spring 2024, representing approximately 24 years of implementation under the OBMP. The groundwater elevations on the map are based on measured groundwater elevations within the shallow aquifer system.

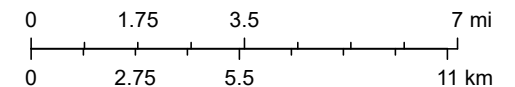
Legend

-  Groundwater-Elevation Contours
(feet above mean sea-level)
-  Boundary of Contoured Area
(contours are not shown outside of this boundary due to lack of groundwater-level data)
-  Well With a Groundwater Elevation Used to
Prepare Groundwater Elevation Contours
-  Chino Desalter Well

Chino Basin Groundwater Levels - Spring 2000

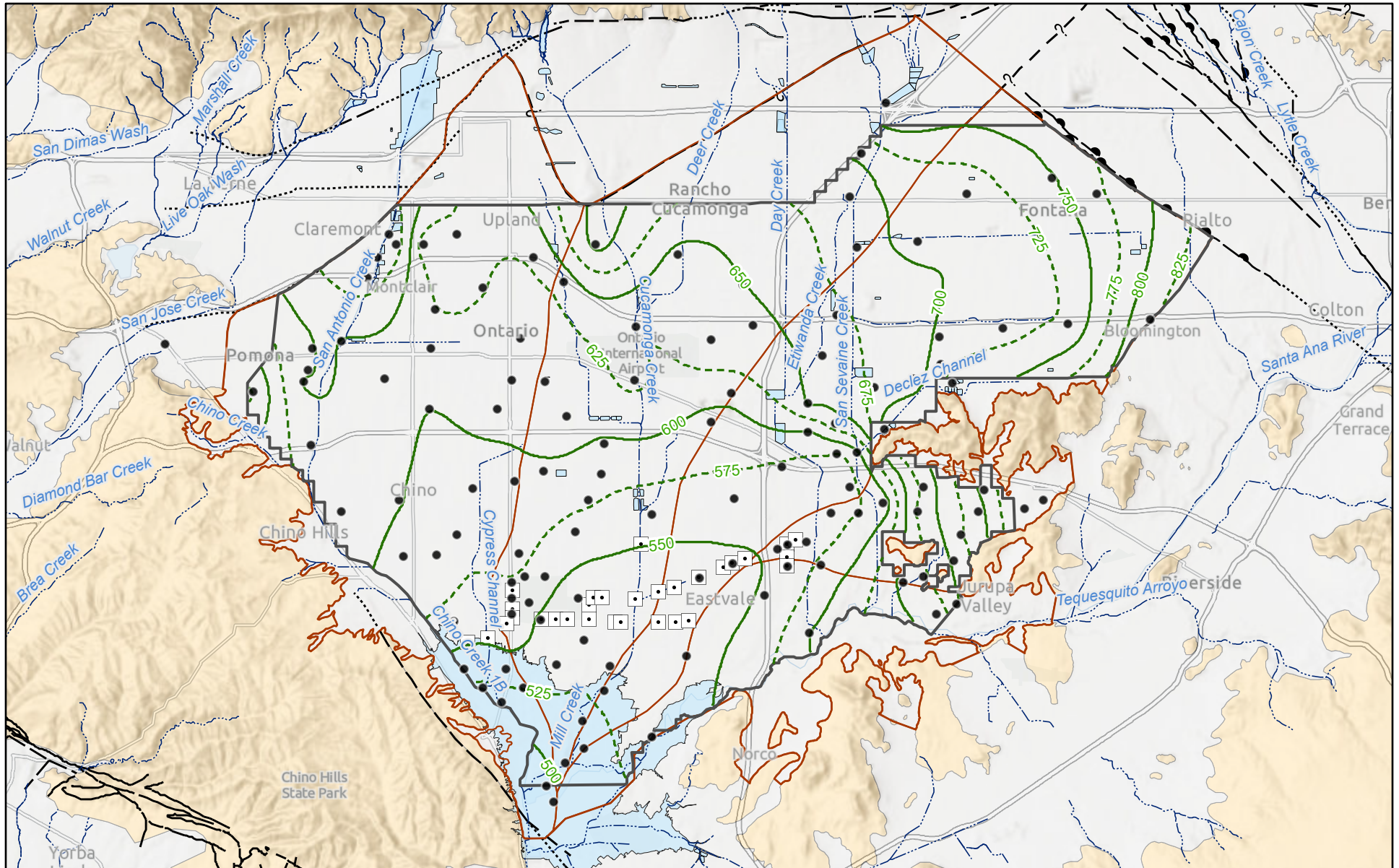


- Well with Groundwater Level Measurement
- Desalter Wells
- Boundary of Contoured Area

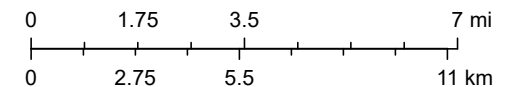


Esri, NASA, NGA, USGS, Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community

Chino Basin Groundwater Levels - 2024



- Well with Groundwater Level Measurement
- Desalter Wells
- Boundary of Contoured Area



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Spring 2000

In 2000, groundwater flowed south-southwest from primary recharge areas in the northern parts of the Basin towards the Prado Basin in the south. There were significant pumping depressions in the groundwater table that interrupted the general flow patterns in the northern portion of Management Zone 1 (Montclair and Pomona areas) and directly west of the Jurupa Mountains (near the JCSD wellfield). Pumping at the Chino Basin Desalter Authority wells had not yet begun.

Spring 2024

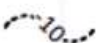
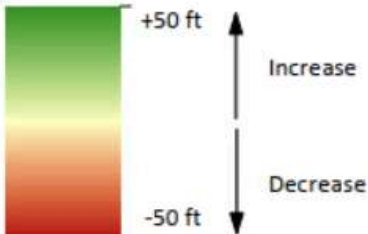
Currently, groundwater continues to flow in a south-southwesterly direction, moving from primary recharge areas in the northern portion of the Basin toward the Prado Basin in the south. A noticeable depression in groundwater levels around the eastern portion of the Chino Basin Desalter Authority wellfield indicates the achievement of "hydraulic control" in this area. This depression has merged with the pumping depression around the JCSD wellfield to the east, increasing the hydraulic gradient from the Santa Ana River towards the Desalter wellfield. As in 2000, there remains a notable pumping depression in the groundwater table in the northern portion of Management Zone 1 (Montclair and Pomona areas)

Groundwater Level Change from Spring 2000 to Spring 2024

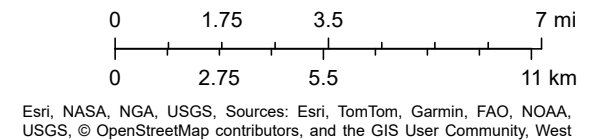
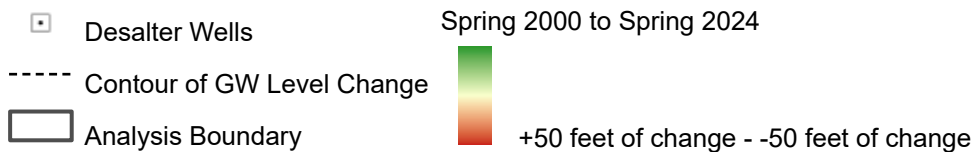
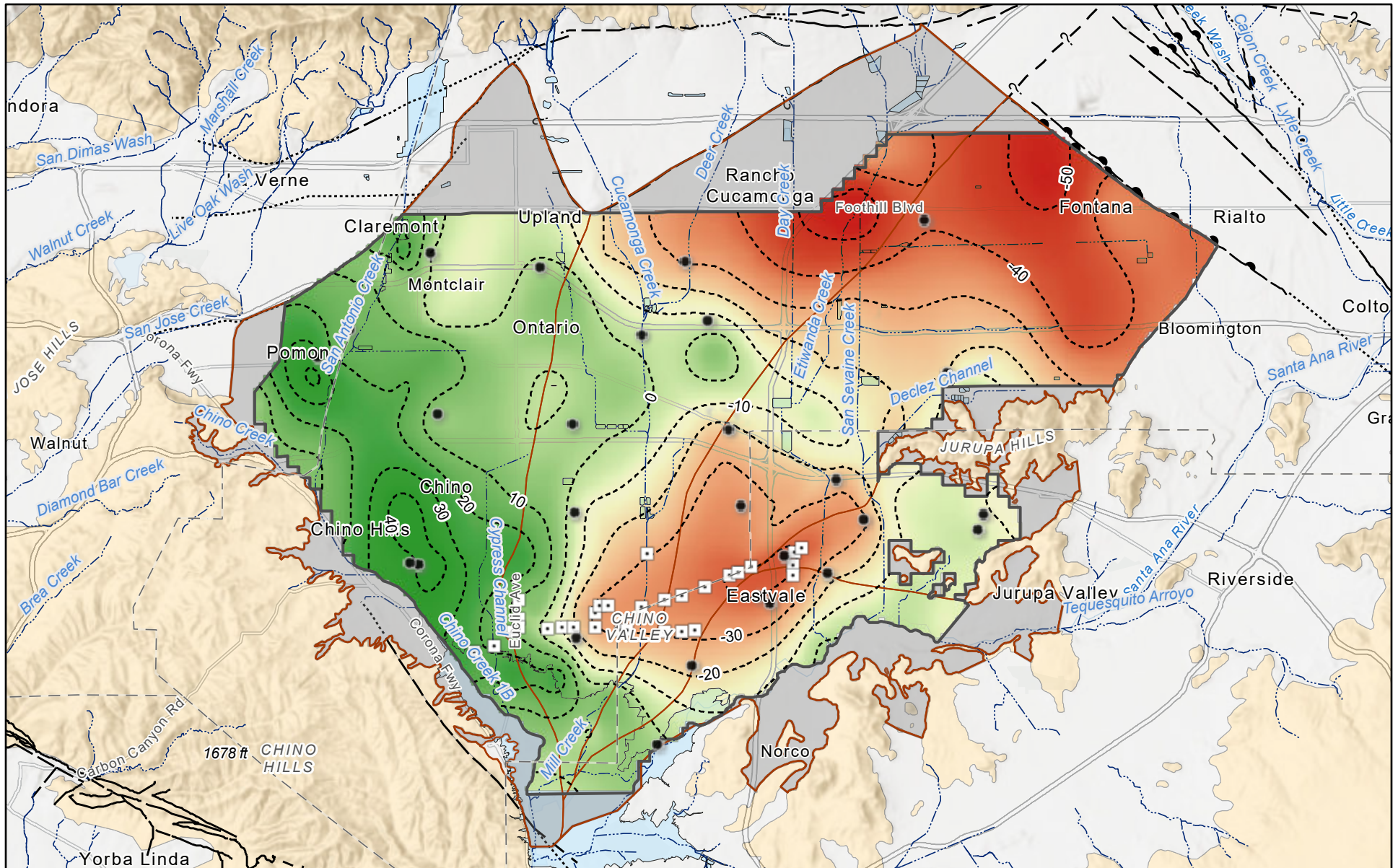
This map illustrates the change in groundwater levels over the 24-year period of OBMP implementation (from spring 2000 to spring 2024). It was created by subtracting the rasterized grid of groundwater elevations for spring 2000 from spring 2024.

Appendix A includes time-series charts for select wells showing groundwater elevations, and production and managed aquifer recharge in the groundwater management zones.

Legend

- Well With a Groundwater-Level Time History
 - ◻ Chino Desalter Well
 -  Contour of Groundwater-Level Change (ft)
Spring 2000 to Spring 2024
- Groundwater-Level Change
Spring 2000 to Spring 2024
- 
- Area Not Included in the Change Calculation
Due to a Lack of Groundwater-level Data

Chino Basin Groundwater Level Change - 2000-2024







Groundwater levels have increased in the western portion of the Basin, while they have decreased in the central and eastern portions, particularly around the eastern Chino Basin Desalter Authority wellfield. These changes align with projections from Watermaster's groundwater modeling efforts, which simulated changes based on production and recharge strategies outlined in various agreements. These strategies include Desalter production in the southern Basin, controlled overdraft to achieve hydraulic control, subsidence management in Management Zone 1 (MZ1), mandatory recharge of supplemental water in MZ1, and facilities improvements to enhance the recharge of storm, recycled, and imported waters.

State of Hydraulic Control in the Chino Basin

Hydraulic Control is a commitment by the Watermaster and the IEUA to the Regional Board, allowing for the reuse and recharge of recycled water in the Chino Basin. It involves eliminating or minimizing groundwater discharge from the Chino-North GMZ to the Prado Basin MZ to less than 1,000 acre-feet per year (afy). Hydraulic Control has been achieved by controlling groundwater levels through pumping at the Chino Basin Desalter Authority wellfield.

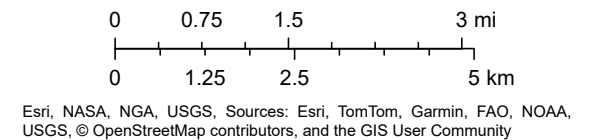
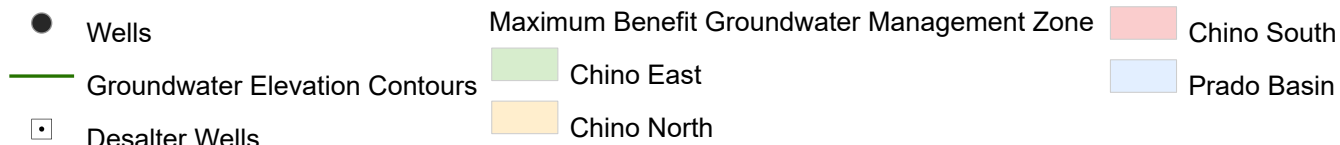
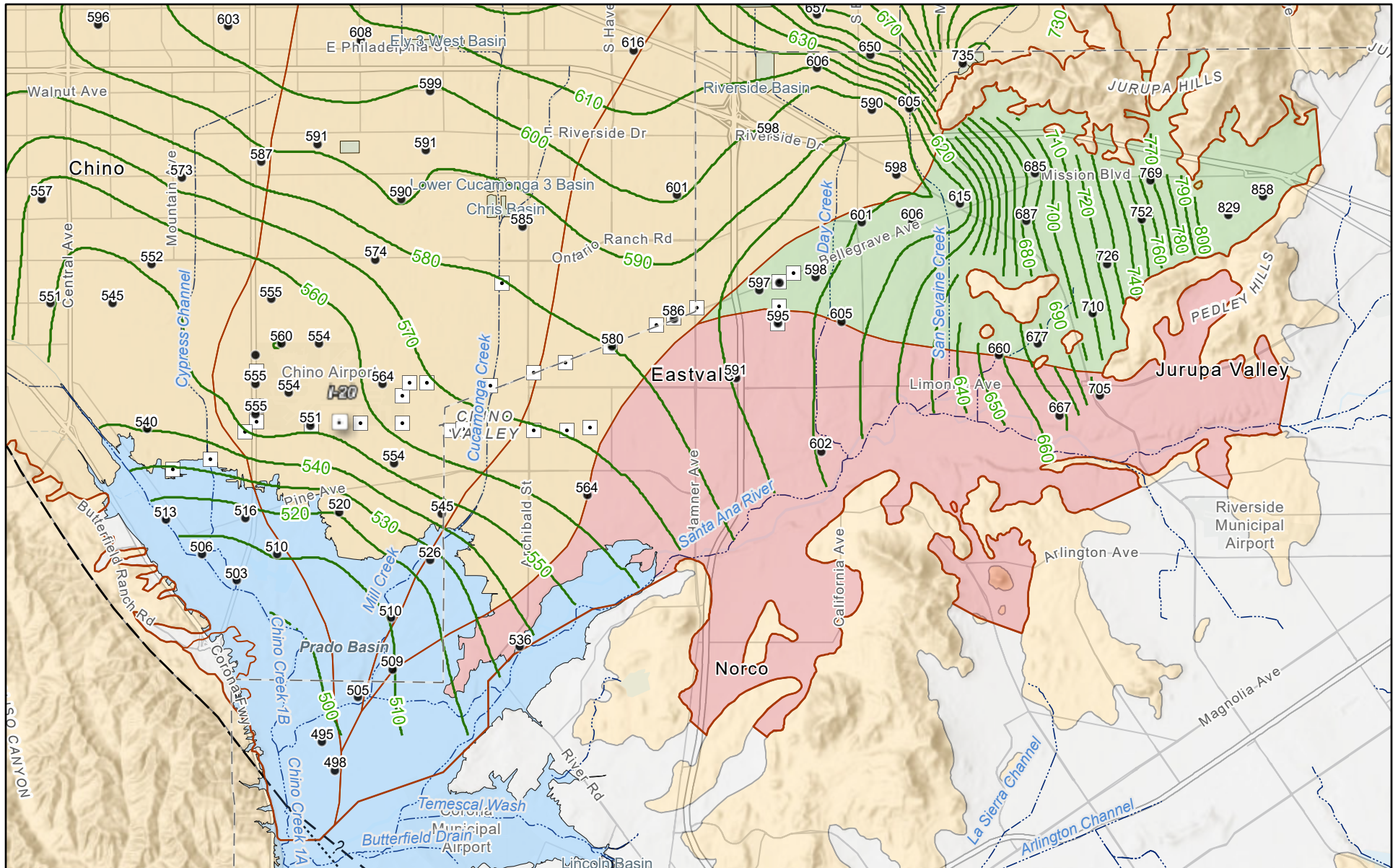
This map shows groundwater elevation and flow directions in the southern Chino Basin before pumping began at the Desalter wells in spring 2000 and after 24 years of pumping at the Chino-I Desalter well field and 18 years at the Chino-II Desalter well field. Pumping at the western Chino Creek Well Field (CCWF) began in 2014.

Legend

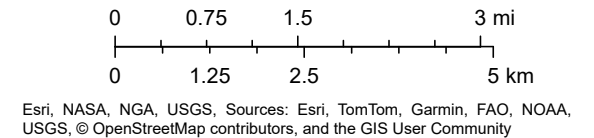
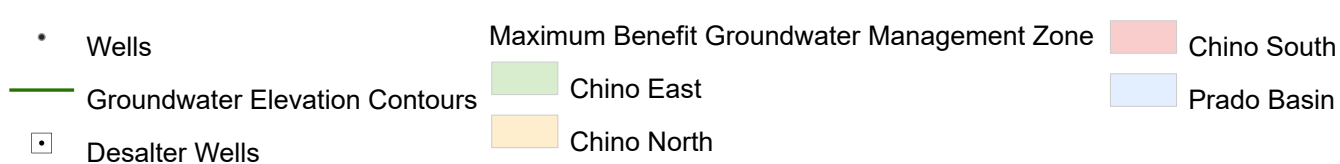
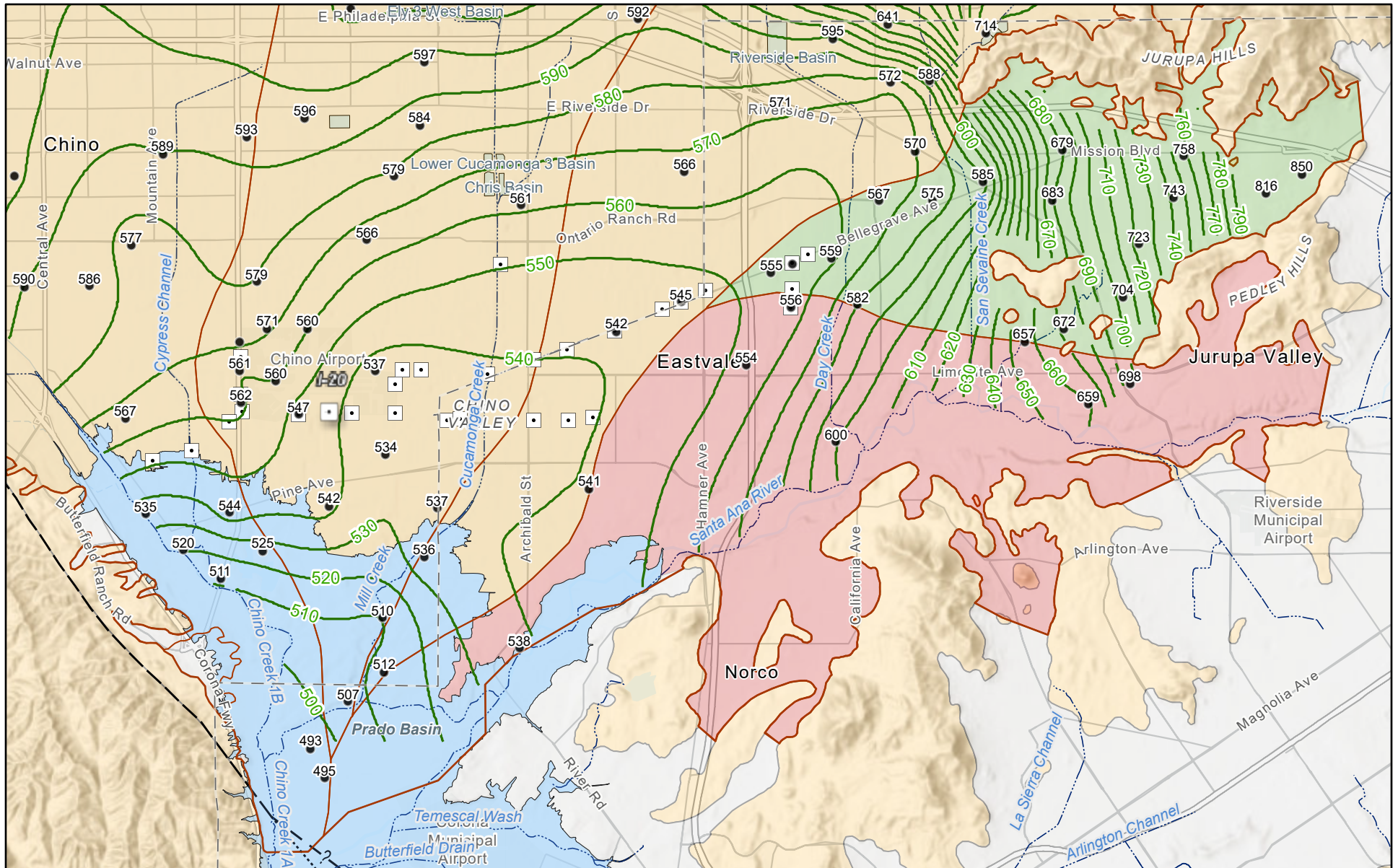
-  Groundwater-Elevation Contours
(feet above mean sea-level)
-  Boundary of Contoured Area
(contours are not shown outside of this
boundary due to lack of groundwater-level data)
-  Well With a Groundwater Elevation Used to
Prepare Groundwater Elevation Contours
-  Chino Desalter Well



State of Hydraulic Control in Spring 2000



State of Hydraulic Control in Spring 2024



State of Hydraulic Control in Spring 2000

Groundwater flowed from the northeast to the southwest, with a slightly steeper gradient south of the Chino-I Desalter well field. This flow pattern aligns with the conceptual model of the Chino Basin, where groundwater moves from recharge areas in the north/northeast to discharge areas in the south near the Prado Basin and the Santa Ana River. The effects of pumping, which started in late spring to early summer 2000, are not visible on this map.

State of Hydraulic Control in Spring 2024

The contours reveal a regional depression in groundwater levels around the Chino-II Desalter well field and the eastern half of the Chino-I Desalter well field (east of well I-20), indicating that groundwater flowing south in the Chino-North GMZ is being captured and pumped by the desalter wells. Southeast of the Desalter wellfield (east of Archibald Avenue), the contours show that the Santa Ana River is recharging the Chino Basin and flowing northwest towards the Desalter wells, achieving Hydraulic Control east of I-20. West of I-20, some groundwater flows past the Desalter wells, but pumping at the CCWF reduces this flow to less than 1,000 afy, which is considered de minimis discharge by the Regional Board.

In 2017, pumping at the CCWF declined due to a new maximum contaminant level (MCL) for 1,2,3-trichloropropane (1,2,3-TCP). In 2020, Watermaster's groundwater model indicated that groundwater discharge past the CCWF into Prado Basin was always below the de minimis level of 1,000 af, both historically through 2018 and in projections through 2050.



GROUNDWATER QUALITY

Groundwater Quality

This section shows the physical state of groundwater quality in the Chino Basin. The data were collected as part of Watermaster's groundwater-quality monitoring program, which was established by the OBMP as part of a comprehensive basin-wide monitoring program to support various Watermaster activities and initiatives. Currently, the monitoring program supports various OBMP program elements and enables Watermaster to continue to provide reliable, high-quality, water supplies to users in the Chino Basin. Specifically, results from the monitoring program are used to:

- characterize non-point source contamination and plumes associated with point-source discharges
- support ground-water modeling
- characterize long-term trends in water quality
- comply with two of Watermaster and the Inland Empire Utility Agency's (IEUA's) maximum benefit salinity management commitments: the triennial ambient water quality re-computation and the analysis of Hydraulic Control
- perform special studies as needed

The maps and figures below illustrate the current state of groundwater quality in the Chino Basin.

The section is divided into the following subsections. Scroll down to view the subsections sequentially or click the links below to skip to a specific subsection.

[Groundwater Quality Monitoring](#)

[Maximum Benefit Objectives for TDS and Nitrate](#)

- [Total Dissolved Solids \(TDS\)](#)
- [Nitrate](#)

[Drinking Water Contaminants](#)

[Point-Source Contamination Plumes](#)

[Other Known Point-Sources of Contamination](#)

Groundwater Quality Monitoring

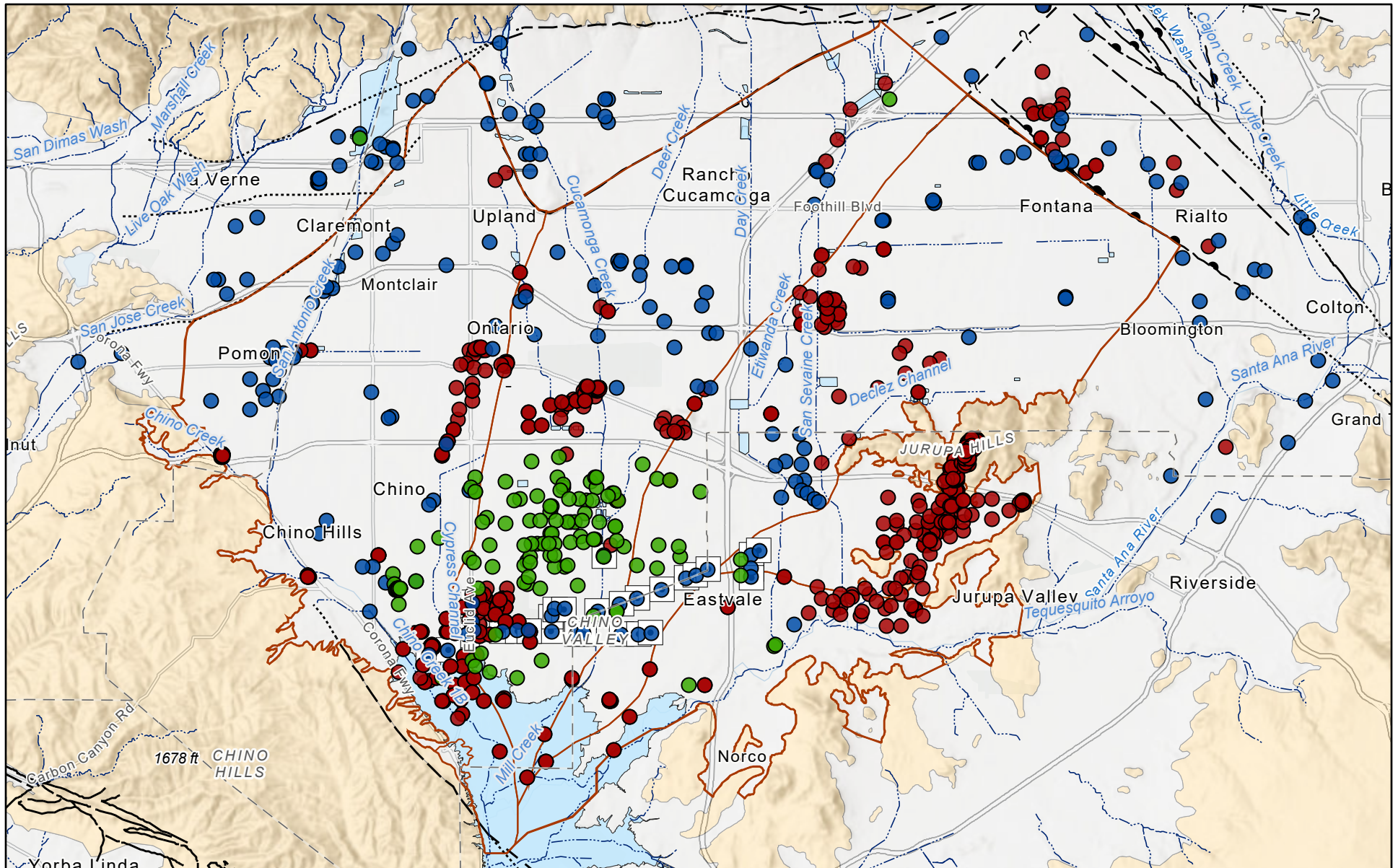
In 1999, as part of the implementation of the OBMP, Watermaster began conducting a more robust groundwater-quality monitoring program to support the various OBMP Program Elements described in the Introduction section.

This map shows all the wells in Chino Basin monitored for groundwater quality during fiscal year (FY) 2023/24 symbolized by well type (monitoring, municipal, and private).

Groundwater Monitoring Program

	Monitoring (821 wells)
	Municipal (205 wells)
	Private (125 wells)
	Chino Desalter Well (30 wells)

Wells in Chino Basin with Water Quality Data



Wells With Water Quality Data in 2025

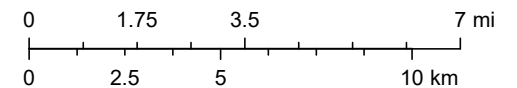
● Monitoring (821 wells)

● Municipal (205 wells)

● Private (125 wells)

■ Chino Desalter Well (30 wells)

Appendix



Esri, NASA, NGA, USGS, Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community

The groundwater monitoring program includes:

Chino Basin Data Collection. Watermaster routinely and proactively collects groundwater-quality data from well owners that perform sampling at their own wells, such as municipal producers and government agencies. Groundwater-quality data are also obtained from special studies and monitoring that takes place under the orders of the Santa Ana Water Board, the USGS, and others.

Watermaster Field Groundwater Quality Monitoring

Programs. Watermaster samples privately owned wells and its own monitoring wells on a routine basis.

- **Private Wells:** Watermaster collects groundwater quality samples at about 80 private wells, located predominantly in the southern portion of the Basin.
- **Watermaster Monitoring Wells:** Watermaster collects groundwater quality samples at 22 multi-nested monitoring sites. Each nested well site contains up to four wells in the borehole.

Maximum Benefit Objectives for TDS and Nitrate

This map series characterizes the current state and long-term trends in groundwater quality in the Chino Basin for total dissolved solids (TDS) and nitrate. The management of TDS and nitrate concentrations is essential to Watermaster's Maximum Benefit Salt and Nutrient Management Plan (SNMP), which enables Watermaster and the IEUA to implement the recycled water recharge program and recycled water reuse in the Chino Basin.

The Santa Ana Regional Water Quality Control Board (Santa Ana Water Board) oversees the development and implementation of SNMPs for groundwater management zones (GMZs) within the Santa Ana River Watershed. In 2002 during the development of



Chino Basin Groundwater Management Zones and anti-degradation management zones.

the amendment to the Water Quality Control Plan for the Santa Ana River (Basin Plan), the Watermaster and the IEUA collaborated with the Santa Ana Water Board to establish alternative, less-stringent, “maximum-benefit” TDS and nitrate objectives for the Chino-North GMZ (combined Antidegradation GMZs: MZ-1, MZ-2, and MZ-3) allowing for recycled water reuse and recharge without the immediate need for mitigation. These maximum-benefit objectives and the Maximum Benefit SNMP were incorporated into the Basin Plan in 2004. Table 1 provides the TDS and nitrate objectives for the Chino Basin GMZs.

Table 1. Summary of Basin Plan TDS and Nitrate Objectives for GMZs in the Chino Basin		
GMZ	Basin Plan Objectives	
	TDS (mg/l) ^(a)	Nitrate (mg/l) ^(a)
Chino-North ^(b)	420	5
Chino-East ^(c)	730	10
Chino-South ^(c)	680	4.2
Note: (a) Milligram per liter (b) Maximum-benefit GMZ (c) Antidegradation GMZ		

The application of the maximum-benefit objectives is contingent on nine commitments of the Watermaster and IEUA in the Maximum Benefit SNMP. The commitments include requirements for basin-wide monitoring of groundwater quality and the triennial re-computation of ambient TDS and nitrate. The commitments also require the development of plans and schedules for water quality improvement programs when current ambient TDS exceeds the maximum-benefit objective or when recycled water used for recharge and irrigation exceeds the discharge limitations listed in the IEUA’s recycled water discharge and reuse permits. The ambient TDS and nitrate concentrations for the GMZs in the Chino Basin are computed periodically based on current monitoring data, and are

compared to the TDS and nitrate objectives. The historical and current computations of the ambient TDS and nitrate concentrations for the Chino Basin GMZs is described in the Maximum Benefit Annual Reports. Watermaster and IEUA submit annual reports to the Santa Ana Water Board detailing compliance with each maximum benefit commitment. They are currently in compliance with all commitments. Maximum Benefit Annual Reports are available on Watermaster's website. Follow the instructions below to access the reports.

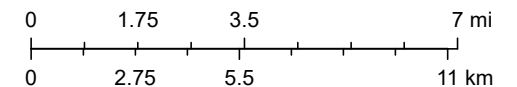
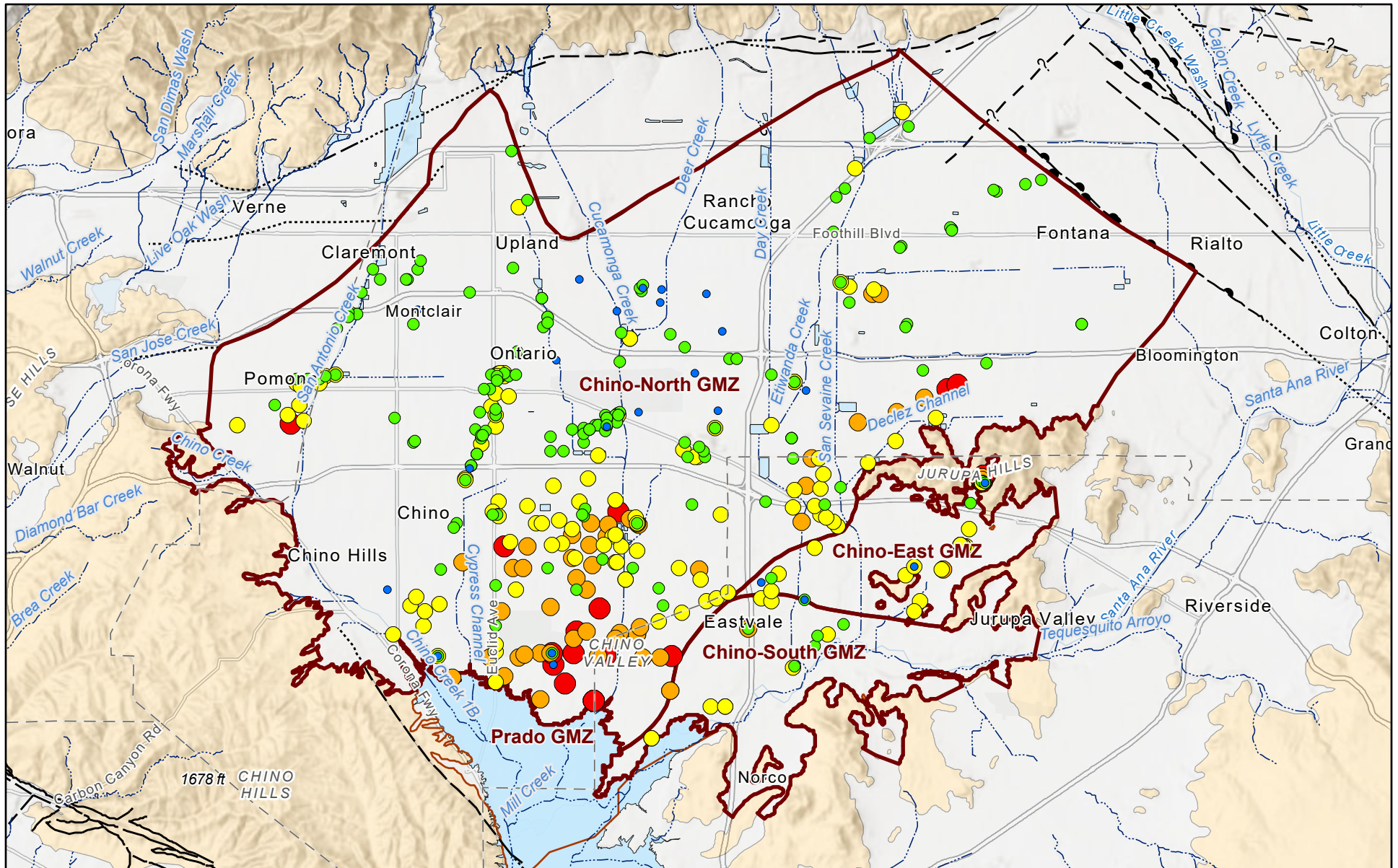
1. Click the link to access the [Chino Basin Watermaster – Reports – Engineering.page](#).
2. Scroll down to the "**Routinely Published Reports**" section.
3. Select the "**Max Benefit/Hydraulic Control**" tile.
4. A pop-up window will appear with a list of available reports. Select the desired document to download.

The following map series shows the current state of TDS and nitrate concentrations in the Chino Basin. Each well is symbolized by the maximum concentration measured during the recent five-year period of July 2019 through June 2024. The symbology is a class interval scheme aligned with the TDS and nitrate objectives specific to the GMZ. For selected key wells, Appendix B includes time-series charts showing long-term trends in TDS and nitrate concentrations.

TDS

TDS is a measure of all dissolved substances in water (salinity), which includes organic matter and ions such as chloride, sodium, nitrate, calcium, potassium, magnesium, bicarbonate, and sulfate. Common sources of salinity in groundwater can include agricultural, municipal, and industrial wastewaters; applied water for irrigation (urban and agricultural); or natural sources.

Maximum 5-Year TDS Concentration by Groundwater Management Zone

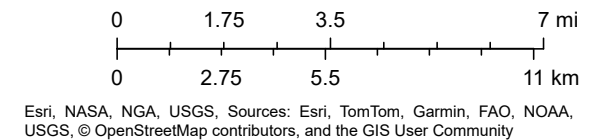
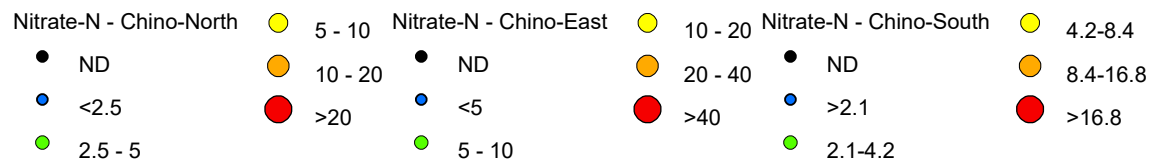
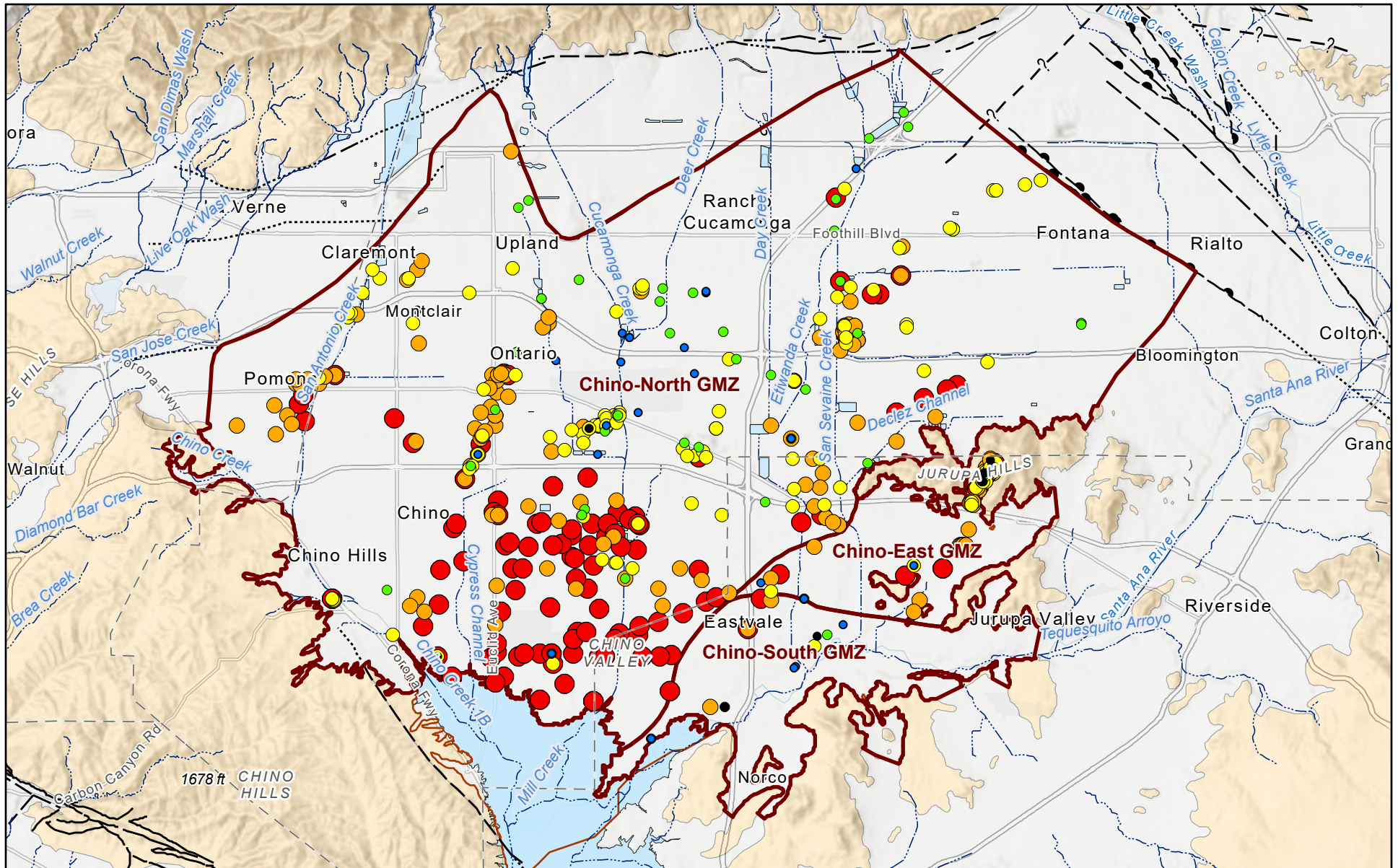


Esri, NASA, NGA, USGS, Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community

Nitrate

Nitrate is a common nutrient in groundwater. It forms naturally through nitrification (overall conversion of ammonia to nitrate) and is synthesized in the industrial manufacturing of fertilizers. Nitrate is also a common contaminant in groundwater and has a Primary Maximum Contaminant Level for drinking water. This is discussed more in the [Drinking Water Contaminants](#) subsection below.

Maximum 5-Year Nitrate Concentration by Groundwater Management Zone



Drinking Water Contaminants

Understanding the distribution of water quality contaminants in the Chino Basin is critical for the overall management of groundwater quality and to ensure that Chino Basin remains a sustainable drinking water resource.

Maximum contaminant levels (MCLs) are regulatory limits for drinking water adopted by the California State Water Resources Control Board (State Water Board)'s Division of Drinking Water (DDW) and/or the federal Environmental Protection Agency (EPA) to protect public health. Notification levels (NLs) are nonregulatory, health-based advisory levels established for contaminants without an MCL. NLs are established as precautionary measures for contaminants that may be considered candidates for the establishment of MCLs.

Click the button below to view an exceedance table showing constituents with MCLs or NLs and the number of wells in the Chino Basin that had detections of that constituent in the raw groundwater within the five-year period of July 2019 to June 2024, as well as the number of wells with detections that exceeded the MCL for that constituent during the five-year period. Groundwater with constituent concentrations greater than the regulatory limits indicates areas where groundwater may be impaired for municipal drinking water use. Note that concentrations shown in the maps are for raw groundwater and not representative of the drinking water supplies in Chino Basin.







Exceedance Table

Exceedances of Drinking Water Contaminant Regulatory Limits at Wells in Chino Basin from July 2019 to June 2024											
Drinking Water Contaminant	Regulatory Limit	Unit	WQ Standard	Number of Wells Sampled	Percent of Wells with Detect Results	Number of Wells with Exceedances	Percent of Wells with Exceedances	Minimum Detected Value	Maximum Detected Value	Mean Detected Value	Median Detected Value
PFOA (Perfluorooctanoic acid)	4	ng/L	US EPA Primary MCL	172	49%	63	37%	0.13	48.0	7.56	5.00
PFOS (Perfluorooctanesulfonic acid)	4	ng/L	US EPA Primary MCL	172	44%	58	34%	0.14	210	13.4	6.80
Perfluorohexanesulfonic acid (PFHxS) (sulfonamide)	10	ng/L	US EPA Primary MCL*	172	56%	34	20%	0.07	214	12.0	6.70
1,1,1,2-Tetrachloroethane	1200	µg/L	California Primary MCL	943	2%	0	0%	0.20	8.00	0.67	0.20
1,1,1-Trichloroethane	200	µg/L	California Primary MCL	996	2%	0	0%	0.20	7.90	0.66	0.20
1,1,2,2-Tetrachloroethane	1	µg/L	California Primary MCL	992	2%	3	0%	0.14	5.40	0.46	0.14
1,1,2-Trichloroethane	5	µg/L	California Primary MCL	992	5%	2	0%	0.10	7.20	0.85	0.41
1,1-Dichloroethane	5	µg/L	California Primary MCL	1,003	5%	3	0%	0.10	29.4	1.12	0.34
1,1-Dichloroethene (1,1-DCE)	6	µg/L	California Primary MCL	1,004	13%	29	3%	0.12	88.0	4.27	1.40
1,2,3-Trichloropropane	0.005	µg/L	California Primary MCL	775	22%	148	19%	0.001	22.0	0.54	0.02
1,2,4-Trichlorobenzene	5	µg/L	California Primary MCL	964	6%	14	2%	0.26	330	12.2	0.58
1,2-Dibromo-3-chloropropane	0.2	µg/L	California Primary MCL	665	7%	23	4%	0.01	34.0	0.50	0.03
1,2-Dichlorobenzene	600	µg/L	California Primary MCL	991	17%	35	4%	0.14	15,000	695.9	35.0
1,2-Dichloroethane	0.5	µg/L	California Primary MCL	993	9%	43	4%	0.10	10.1	0.84	0.37
1,2-Dichloropropane	5	µg/L	California Primary MCL	992	4%	1	0%	0.14	5.80	1.01	0.72
1,3-Dichloropropene	0.5	µg/L	California Primary MCL	248	0%	0	0%	-	-	-	-
1,4-Dichlorobenzene	5	µg/L	California Primary MCL	992	16%	98	10%	0.11	4,400	207.5	13.0
2,3,7,8-Tetrachlorodibenzo-p-dioxin (2,3,7,8-TCDD)	0.00003	µg/L	California Primary MCL	119	16%	0	0%	< 0.001	< 0.001	< 0.001	< 0.001
2,4-Dichlorophenoxyacetic acid	70	µg/L	California Primary MCL	154	0%	0	0%	-	-	-	-
Alachlor	2	µg/L	California Primary MCL	142	0%	0	0%	-	-	-	-
Aluminum	1	mg/L	California Primary MCL	224	53%	23	10%	< 0.001	880	13.2	0.02
Antimony	6	µg/L	California Primary MCL	232	29%	2	1%	< 0.001	7.05	0.38	0.08
Arsenic	0.01	mg/L	California Primary MCL	490	61%	28	6%	< 0.001	0.44	0.01	0.001
Asbestos	7	MFL	California Primary MCL	84	23%	0	0%	< 0.001	2.00	0.10	-
Atrazine	1	µg/L	California Primary MCL	142	2%	0	0%	0.03	0.06	0.04	0.04
Barium	1	mg/L	California Primary MCL	302	85%	1	0%	0.0002	1.40	0.08	0.06
Bentazon	18	µg/L	California Primary MCL	152	0%	0	0%	-	-	-	-
Benzene	1	µg/L	California Primary MCL	1,042	10%	61	6%	0.08	19,800	618.4	3.20
Benzo(a)pyrene	0.2	µg/L	California Primary MCL	248	1%	3	1%	10.0	11.0	10.3	10.0
Beryllium	0.004	mg/L	California Primary MCL	232	24%	6	3%	< 0.001	0.07	0.01	0.0004
Bromate	10	mg/L	California Primary MCL	23	13%	0	0%	0.001	0.002	0.001	0.001
Cadmium	0.005	mg/L	California Primary MCL	362	32%	46	13%	< 0.001	9.60	0.30	0.001
Carbofuran	18	µg/L	California Primary MCL	141	0%	0	0%	-	-	-	-
Chlordane	0.1	µg/L	California Primary MCL	234	0%	0	0%	-	-	-	-
Chlorine	4	mg/L	California Primary MCL	43	100%	43	100%	5.00	368	50.4	43.0
Chlorite (ClO2-)	1	mg/L	California Primary MCL	40	3%	0	0%	0.01	0.01	0.01	0.01
Chromium	50	µg/L	California Primary MCL	694	88%	139	20%	0.003	720,000	4,708.5	7.40
Chromium (VI)	10	µg/L	California Primary MCL	649	85%	86	13%	0.01	7,000	47.8	4.90
cis-1,2-Dichloroethene (cis-1,2-DCE)	6	µg/L	California Primary MCL	976	19%	46	5%	0.09	280	7.63	1.80
Cyanide	150	µg/L	California Primary MCL	253	25%	0	0%	< 0.001	120	10.8	6.65
Dalapon	200	µg/L	California Primary MCL	162	0%	0	0%	-	-	-	-
Di(2-ethylhexyl)adipate	400	µg/L	California Primary MCL	143	4%	0	0%	0.08	0.15	0.13	0.14

Exceedances of Drinking Water Contaminant Regulatory Limits at Wells in Chino Basin from July 2019 to June 2024											
Drinking Water Contaminant	Regulatory Limit	Unit	WQ Standard	Number of Wells Sampled	Percent of Wells with Detect Results	Number of Wells with Exceedances	Percent of Wells with Exceedances	Minimum Detected Value	Maximum Detected Value	Mean Detected Value	Median Detected Value
Di(2-ethylhexyl)phthalate	4	µg/L	California Primary MCL	241	23%	23	10%	0.05	390	11.5	2.50
Dichloromethane (Freon 30)	5	µg/L	California Primary MCL	1,003	16%	87	9%	0.16	6,000	396	12.0
Dinoseb	7	µg/L	California Primary MCL	170	1%	0	0%	0.25	0.99	0.55	0.49
Diquat	20	µg/L	California Primary MCL	143	14%	0	0%	< 0.001	< 0.001	< 0.001	< 0.001
Endothall	100	µg/L	California Primary MCL	141	0%	0	0%	-	-	-	-
Endrin	2	µg/L	California Primary MCL	234	4%	0	0%	0.002	1.20	0.28	0.04
Ethylbenzene	300	µg/L	California Primary MCL	1,041	10%	34	3%	0.14	6,500	633	62.0
Fluoride	2	mg/L	California Primary MCL	464	96%	38	8%	0.02	880	5.03	0.15
Glyphosate	700	µg/L	California Primary MCL	141	0%	0	0%	-	-	-	-
Haloacetic Acids 5 (HAA5)	60	µg/L	California Primary MCL	31	7%	0	0%	3.70	16.6	10.8	11.3
Heptachlor	0.01	µg/L	California Primary MCL	234	4%	7	3%	0.01	4.40	1.01	0.09
Hexachlorobenzene	1	µg/L	California Primary MCL	246	4%	3	1%	0.02	11.0	3.44	0.06
Hexachlorocyclopentadiene	50	µg/L	California Primary MCL	246	2%	4	2%	0.01	53.0	43.2	51.0
Lindane (Gamma-BHC)	0.2	µg/L	California Primary MCL	234	6%	0	0%	0.004	0.07	0.02	0.02
Mercury	0.002	mg/L	California Primary MCL	344	14%	0	0%	< 0.001	0.002	0.0001	0.0001
Methoxychlor	30	µg/L	California Primary MCL	228	1%	0	0%	0.03	0.05	0.04	0.03
Methyl Tert-Butyl Ether (MTBE)	13	µg/L	California Primary MCL	1,013	7%	17	2%	0.10	6,600	159	2.00
Molinate	20	µg/L	California Primary MCL	142	0%	0	0%	-	-	-	-
Nickel	0.1	mg/L	California Primary MCL	294	58%	54	18%	< 0.001	50.0	0.81	0.01
Nitrate-Nitrogen	10	mg/L	California Primary MCL	526	99%	335	64%	0.04	280	15.4	9.20
Nitrite + Nitrate as N	10	mg/L	California Primary MCL	195	98%	103	53%	0.22	280	20.0	8.75
Nitrite-Nitrogen	1	mg/L	California Primary MCL	416	15%	6	1%	0.003	34.0	0.72	0.19
Oxamyl	50	µg/L	California Primary MCL	141	0%	0	0%	-	-	-	-
Pentachlorophenol	1	µg/L	California Primary MCL	249	2%	4	2%	51.0	53.0	51.8	51.0
Perchlorate	6	µg/L	California Primary MCL	731	80%	343	47%	0.004	10,000	21.3	4.40
Picloram	500	µg/L	California Primary MCL	152	0%	0	0%	-	-	-	-
Polychlorinated Biphenyls (PCB)	0.5	µg/L	California Primary MCL	148	0%	0	0%	-	-	-	-
Ra 226 + Ra 228	5	pCi/L	California Primary MCL	14	93%	0	0%	< 0.001	3.70	0.41	-
Selenium	0.05	mg/L	California Primary MCL	302	57%	3	1%	< 0.001	0.42	0.01	0.002
Silvex	50	µg/L	California Primary MCL	150	0%	0	0%	-	-	-	-
Simazine	4	µg/L	California Primary MCL	143	6%	0	0%	0.05	0.29	0.14	0.08
Strontium-90	8	pCi/L	California Primary MCL	23	0%	0	0%	-	-	-	-
Styrene	100	µg/L	California Primary MCL	964	4%	0	0%	0.15	11.0	0.87	0.27
Tetrachloroethene (PCE)	5	µg/L	California Primary MCL	1,005	27%	117	12%	0.10	14,000	83.5	4.30
Thallium	2	µg/L	California Primary MCL	232	27%	10	4%	< 0.001	6.33	0.40	0.11
Thiobencarb	70	µg/L	California Primary MCL	154	8%	0	0%	0.20	0.20	0.20	0.20
Toluene	150	µg/L	California Primary MCL	1,041	14%	26	3%	0.11	31,200	761	6.75
Total Xylene	1750	µg/L	California Primary MCL	784	12%	14	2%	0.39	52,000	1,110	19.0
Toxaphene	3	µg/L	California Primary MCL	234	0%	0	0%	-	-	-	-
trans-1,2-Dichloroethene (trans-1,2-DCE)	10	µg/L	California Primary MCL	993	5%	0	0%	0.16	8.80	0.88	0.54
Trichloroethylene (TCE)	5	µg/L	California Primary MCL	1,008	51%	315	31%	0.06	280,000	758.4	6.50
Trichlorofluoromethane	150	µg/L	California Primary MCL	993	6%	0	0%	0.15	140	7.00	2.00

Exceedances of Drinking Water Contaminant Regulatory Limits at Wells in Chino Basin from July 2019 to June 2024											
Drinking Water Contaminant	Regulatory Limit	Unit	WQ Standard	Number of Wells Sampled	Percent of Wells with Detect Results	Number of Wells with Exceedances	Percent of Wells with Exceedances	Minimum Detected Value	Maximum Detected Value	Mean Detected Value	Median Detected Value
Trihalomethanes	80	µg/L	California Primary MCL	203	33%	1	1%	0.11	86.6	7.00	1.20
Tritium	20000	pCi/L	California Primary MCL	23	0%	0	0%	-	-	-	-
Uranium	20	pCi/L	California Primary MCL	92	86%	0	0%	< 0.001	19.1	6.34	5.98
Chloride	500	mg/L	California Secondary MCL	531	100%	11	2%	1.70	200,000	855	59.0
Color	15	-	California Secondary MCL	159	32%	11	7%	2.00	35.0	7.87	5.00
Copper	1	mg/L	California Secondary MCL	367	63%	19	5%	< 0.001	26.0	0.34	0.002
Iron	0.3	mg/L	California Secondary MCL	305	43%	54	18%	< 0.001	668	7.36	0.05
Methylene Blue Active Substances (MBAS)	500	µg/L	California Secondary MCL	27	74%	0	0%	< 0.001	40.0	< 0.001	< 0.001
Odor	3	TON	California Secondary MCL	158	35%	3	2%	1.00	8.00	1.45	1.00
Silver	0.1	mg/L	California Secondary MCL	363	15%	0	0%	< 0.001	0.004	< 0.001	< 0.001
Specific Conductance	1600	µS/cm	California Secondary MCL	453	100%	87	19%	0.75	29,000	1,427	1,324
Sulfate	500	mg/L	California Secondary MCL	512	100%	52	10%	0.55	73,000	384	40.3
TDS	1000	mg/L	California Secondary MCL	432	100%	82	19%	0.41	20,000	708	530
Turbidity	5	NTU	California Secondary MCL	294	94%	53	18%	0.01	495	5.27	0.56
Zinc	5	mg/L	California Secondary MCL	366	56%	23	6%	< 0.001	190	2.59	0.01
Lead	0.015	mg/L	California Action Level	363	33%	9	3%	< 0.001	0.27	0.002	0.0002
1,2,4-Trimethylbenzene	330	µg/L	California NL	951	8%	18	2%	0.13	8,200	543	4.80
1,3,5-Trimethylbenzene	330	µg/L	California NL	951	5%	10	1%	0.19	1,600	182	2.70
1,4-Dioxane	1	µg/L	California NL	229	55%	65	28%	0.07	180	9.02	0.65
2-Chlorotoluene	140	µg/L	California NL	941	2%	0	0%	0.23	9.20	0.78	0.23
4-Chlorotoluene	140	µg/L	California NL	941	2%	0	0%	0.24	9.60	0.80	0.24
Boron	1	mg/L	California NL	245	55%	0	0%	0.004	0.80	0.11	0.07
Chlorate	0.8	mg/L	California NL	40	98%	0	0%	0.003	0.49	0.12	0.10
Diazinon	1.2	µg/L	California NL	76	0%	0	0%	-	-	-	-
Dichlorodifluoromethane	1000	µg/L	California NL	972	7%	0	0%	0.12	200	2.75	1.10
Formaldehyde	100	µg/L	California NL	2	0%	0	0%	-	-	-	-
Isopropylbenzene	770	µg/L	California NL	941	4%	0	0%	0.21	430	34.5	3.10
Manganese	0.5	mg/L	California NL	305	60%	17	6%	< 0.001	7,030	14.4	0.003
Methyl Isobutyl Ketone	120	µg/L	California NL	883	5%	5	1%	1.60	620	54.2	1.60
Naphthalene	17	µg/L	California NL	959	10%	39	4%	0.02	2,100	186	4.25
n-Butylbenzene	260	µg/L	California NL	941	3%	1	0%	0.24	520	17.6	0.80
N-Nitrosodiethylamine (NDEA)	10	ng/L	California NL	41	0%	0	0%	-	-	-	-
N-Nitrosodimethylamine (NDMA)	0.01	µg/L	California NL	103	12%	9	9%	0.003	3.00	0.37	0.10
N-Nitrosodipropylamine (NDPA)	0.01	µg/L	California NL	162	3%	3	2%	0.003	11.0	8.20	10.0
n-Propylbenzene	260	µg/L	California NL	941	6%	9	1%	0.08	610	83.2	2.00
Propachlor	90	µg/L	California NL	112	0%	0	0%	-	-	-	-
Tert-Butyl Alcohol	12	µg/L	California NL	692	14%	42	6%	2.21	50,000	800	15.1
Vanadium	0.05	mg/L	California NL	163	90%	6	4%	0.0003	0.55	0.01	0.01
Note: Highlighted rows indicate that the maximum detected values measured at the wells are shown in the maps below.											
*MCL was rescinded in May 2025											

The map series below shows the five-year maximum concentrations of water quality constituents with MCL exceedances at 50 or more wells in the Basin. It does not include contaminants where 90 percent or more of the wells with exceedances are directly tied to a single point-source contaminant plume. Additionally, it includes maps showing the maximum concentration of three per- and polyfluoroalkyl substances (PFAS) compounds with new or proposed regulatory limits. Note that concentrations are for raw groundwater and not representative of the drinking water supplies in Chino Basin.

Symbol	Class Interval
	Not Detected above the reporting limit (ND)
	< 0.5x WQS
	0.5x WQS to WQS
	> WQS to 2x WQS
	> 2x WQS to 4x WQS
	> 4x WQS

For each constituent below, the water-quality standard is defined in the legend, and each well is symbolized by the maximum concentration measured during the 5-year reporting period from July 2019 to June 2024. The image on the right shows the class interval convention that is applied to each constituent based on the water-quality standard.

Click on a constituent below to jump to the map that shows the spatial distribution of maximum concentrations of that constituent or scroll down to view maps for all the constituents.

- [1,2,3-TCP \(µg/l\)](#)
- [Benzene \(µg/l\)](#)

- Chromium (µg/l)
- Hexavalent Chromium (µg/l)
- Nitrate-N (mg/l)
- Perchlorate (µg/l)
- PCE (µg/l)
- TCE (µg/l)
- PFOA (ng/l)
- PFOS (ng/l)
- PFHxS (ng/l)

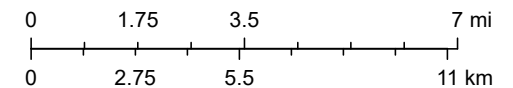
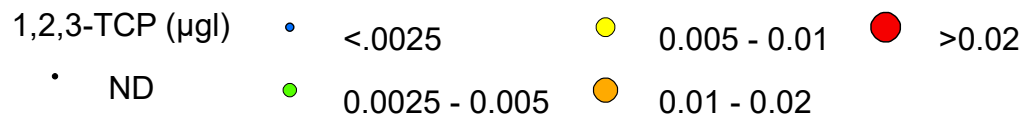
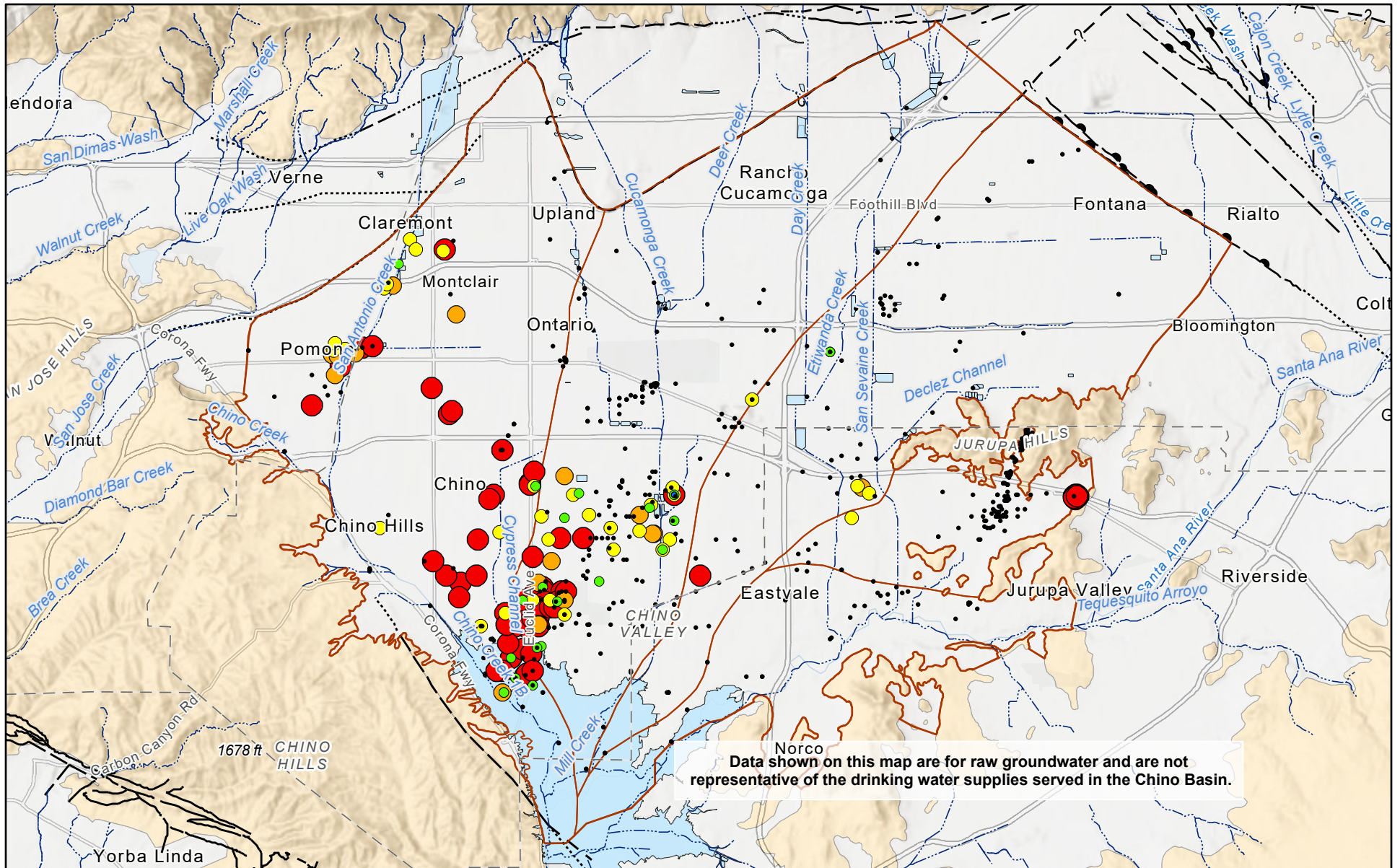
1,2,3-Trichloropropane (1,2,3-TCP)

1,2,3-TCP (µg/l)

- ND
- <.0025
- 0.0025 - 0.005
- 0.005 - 0.01
- 0.01 - 0.02
- >0.02

California Primary MCL = 0.005 µg/l

Drinking Water Contaminants in the Chino Basin - 1,2,3-TCP



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1,2,3-Trichloropropane (1,2,3-TCP) is a synthetic chemical that was used as a solvent, paint remover, and cleaning and degreasing agent. It was also used to manufacture soil fumigants for agriculture until the 1980s. Although 1,2,3-TCP is no longer being used in soil fumigants, it is still used as a chemical intermediate in manufacturing. Due to its chemical structure, 1,2,3-TCP is highly stable, making it persistent in the environment long after application. 1,2,3-TCP was first detected in the late 1990's and in 1999, an NL of 0.005 µgl was adopted based on its known carcinogenicity. Initially, there were no laboratory analytical methods that could analyze 1,2,3-TCP concentrations at detection limits equivalent to the NL. During the early 2000s, an analytical method with a lower detection limit for reporting became available and in 2008, Watermaster began using this method for its monitoring programs. In December 2017, the DDW adopted the primary MCL for 1,2,3-TCP of 0.005 µgl based on the previously established NL.

In Chino Basin, the majority of the 1,2,3-TCP concentrations detected in groundwater above the MCL are collected from wells located in the western Chino Basin. Some of these wells are associated with point-source contamination plumes and have 1,2,3-TCP concentrations that are one to two orders of magnitude greater than concentrations measured at the other wells in the western Chino Basin, which are likely the result of the historical application of soil fumigants to crops.

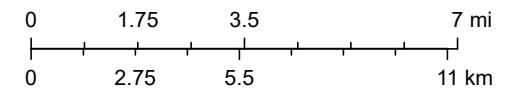
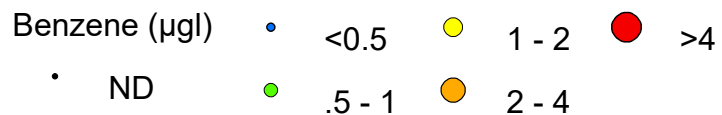
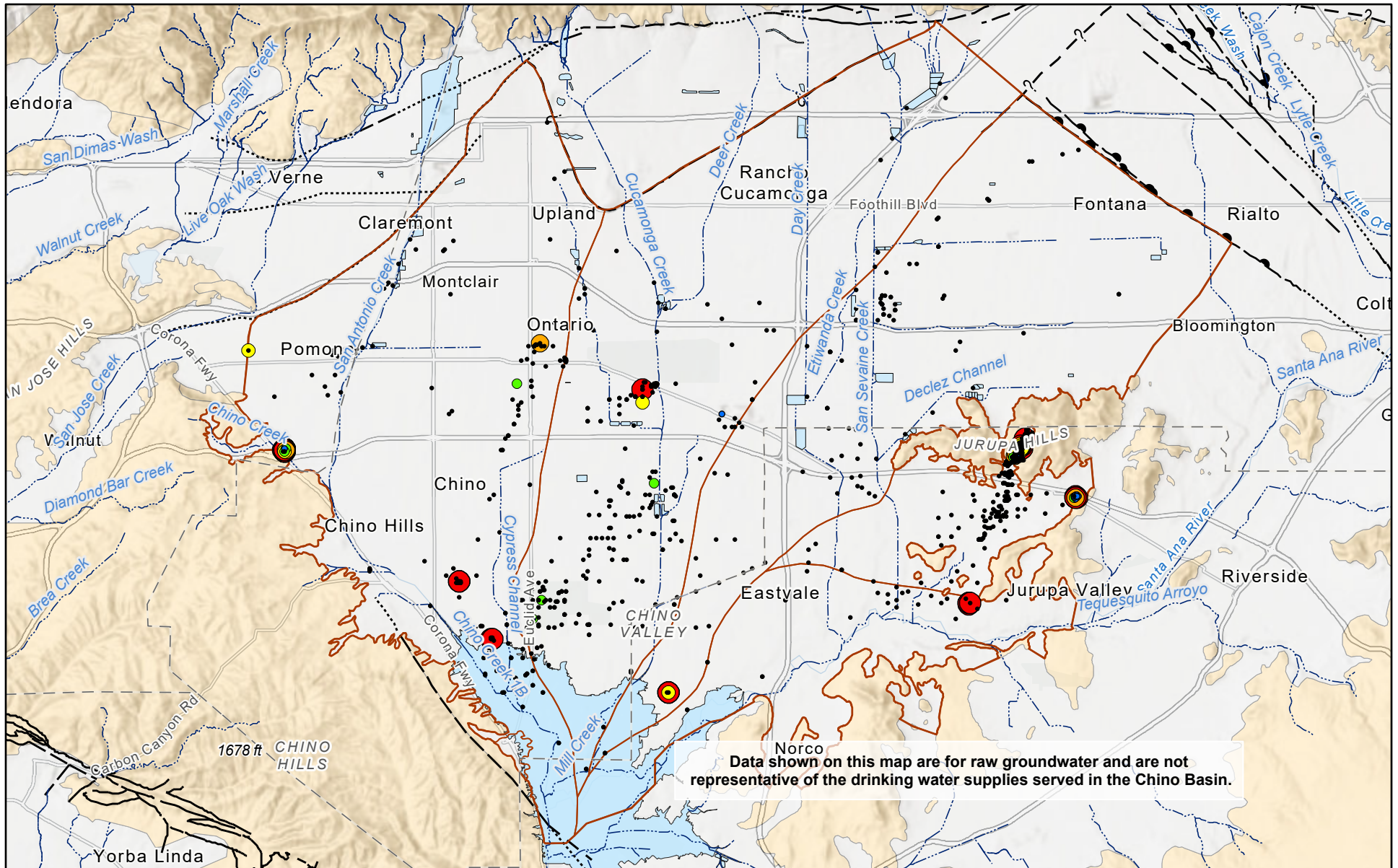
Benzene (µg/l)

Benzene (µg/l)

•	ND
•	<0.5
•	.5 - 1
•	1 - 2
•	2 - 4
•	>4

California Primary MCL = 1 µg/l

Drinking Water Contaminants in the Chino Basin - Benzene



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Benzene is a volatile organic compound and known human carcinogen that has been a concern since the 1980s. In 1989, in response to growing health concerns, the DDW adopted the primary MCL for benzene. Benzene is found in crude oil and gasoline, but also occurs naturally in volcanic gasses and smoke resulting from forest fires. Benzene is most likely to be released to groundwater from leaking underground oil and gasoline storage tanks, fuel spills, and leaks at refineries and can be particularly problematic in groundwater in urban and industrial areas. Benzene is slightly soluble in water and can take days to years to degrade depending on the environment conditions.

The majority of the wells with detectable levels of benzene in the Chino Basin occur in monitoring wells at point-source contamination sites associated with leaking underground fuel storage tanks.

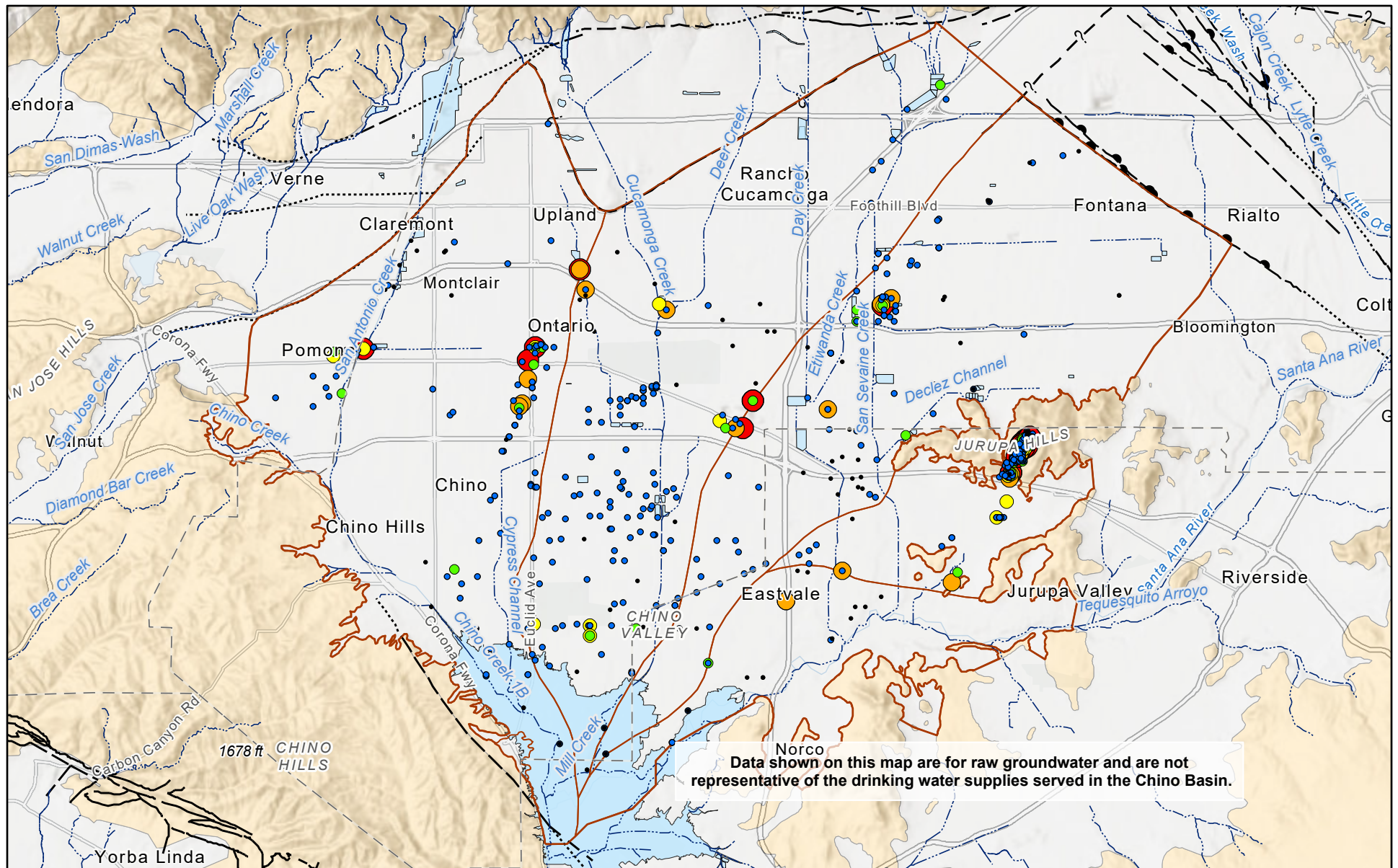
Chromium (µg/l)

Chromium (µg/l)



California Primary MCL = 50 µg/l

Drinking Water Contaminants in the Chino Basin - Chromium



Chromium ($\mu\text{g/l}$)

- ND
- <25
- 25 - 50
- 50 - 100
- 100 - 200
- >200

0 1.75 3.5 7 mi
0 2.75 5.5 11 km

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Total chromium in groundwater consists of trivalent and hexavalent chromium. It is derived from both natural geologic sources and anthropogenic sources, such as dyes, paint pigments, and chrome plating liquid wastes. Most chromium in the environment exists in the generally insoluble trivalent form; however, under oxidizing conditions, more soluble hexavalent chromium (Cr(VI)) may form. Although trivalent chromium is considered a micronutrient, Cr(VI) is a known carcinogen.

Wells with higher concentrations of total chromium occur predominantly in monitoring wells associated with known point-source contamination sites for the former Kaiser Steel Mill CCG property, GE Flatiron, and Stringfellow National Priorities List site.

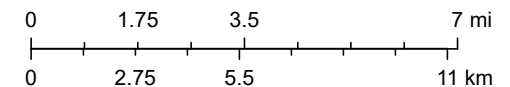
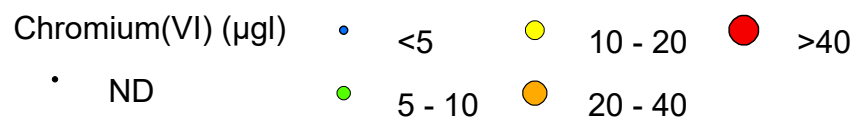
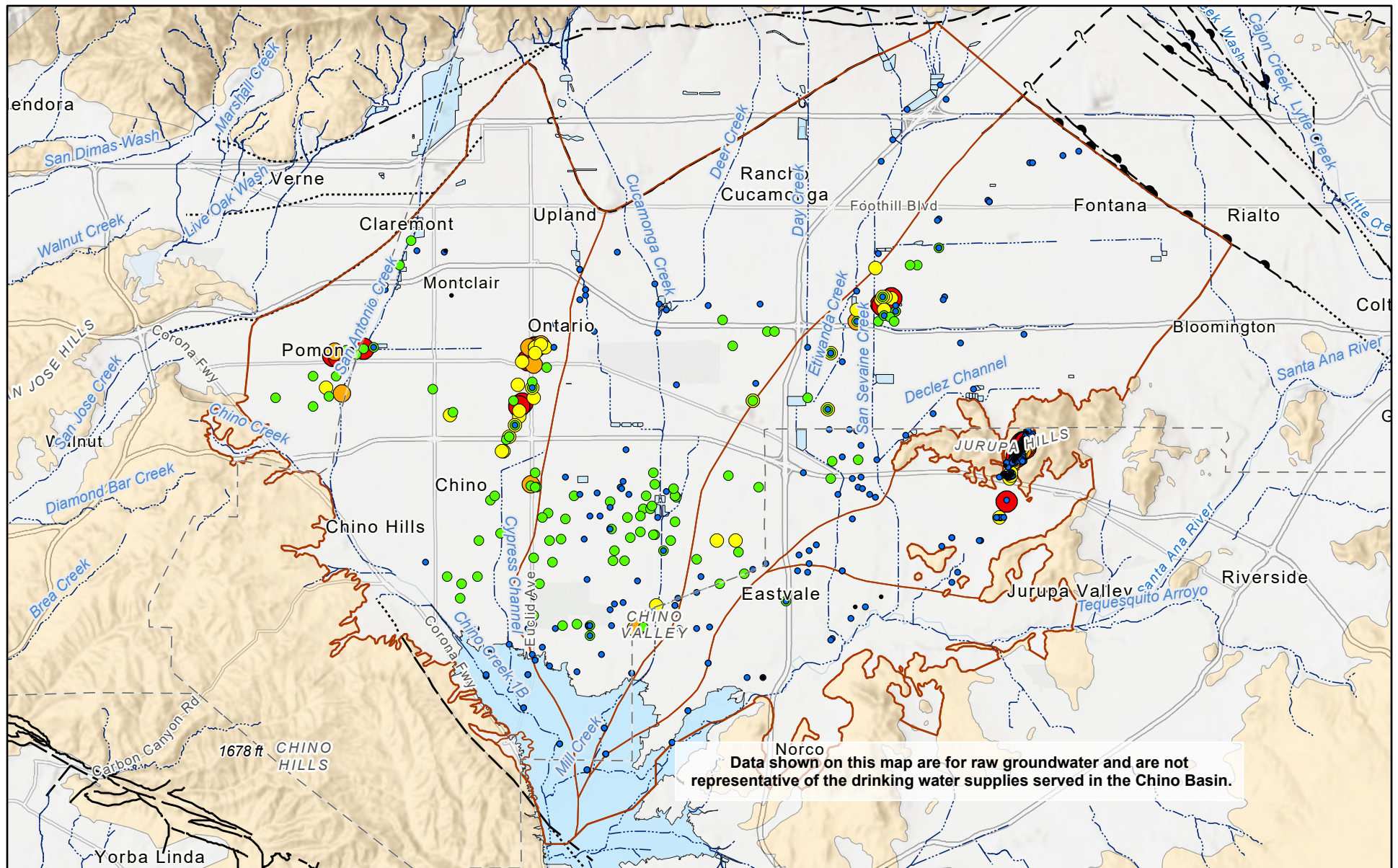
Chromium(VI) (µg/l)

Chromium (VI) (µg/l)



California Primary MCL = 10 µg/l

Drinking Water Contaminants in the Chino Basin - Hexavalent Chromium



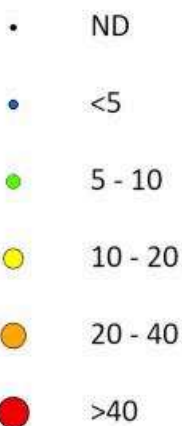
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In 2001, California began requiring public water systems to monitor hexavalent chromium (Cr(VI)) as an unregulated contaminant. In July 2011, the California Office of Environmental Health Hazard Assessment established a public health goal for Cr(VI) of 0.02 µg/l due to its carcinogenicity. In July 2014, the State Water Board adopted a primary MCL for Cr(VI) of 10 µg/l. However, the MCL was invalidated in 2017 based on the economic feasibility of complying with the MCL and the court ordered the DDW to establish and adopt a new MCL, which could be the same or different from the invalidated MCL. On October 1, 2024, the DDW established the current MCL of 10 µg/L.

Wells with higher concentrations of Cr(VI) occur predominantly in monitoring wells associated with contamination sites for the former Kaiser Steel Mill CCG property, GE Flatiron, and Stringfellow National Priorities List site, and in the [Pomona Plume area](#).

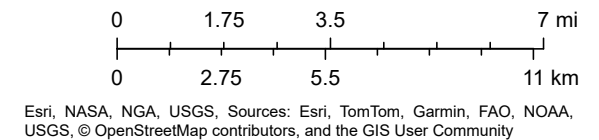
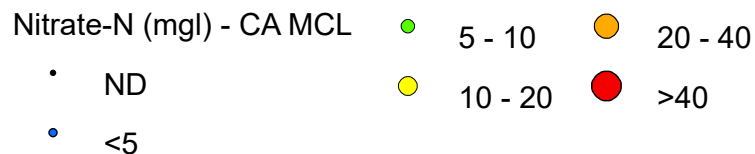
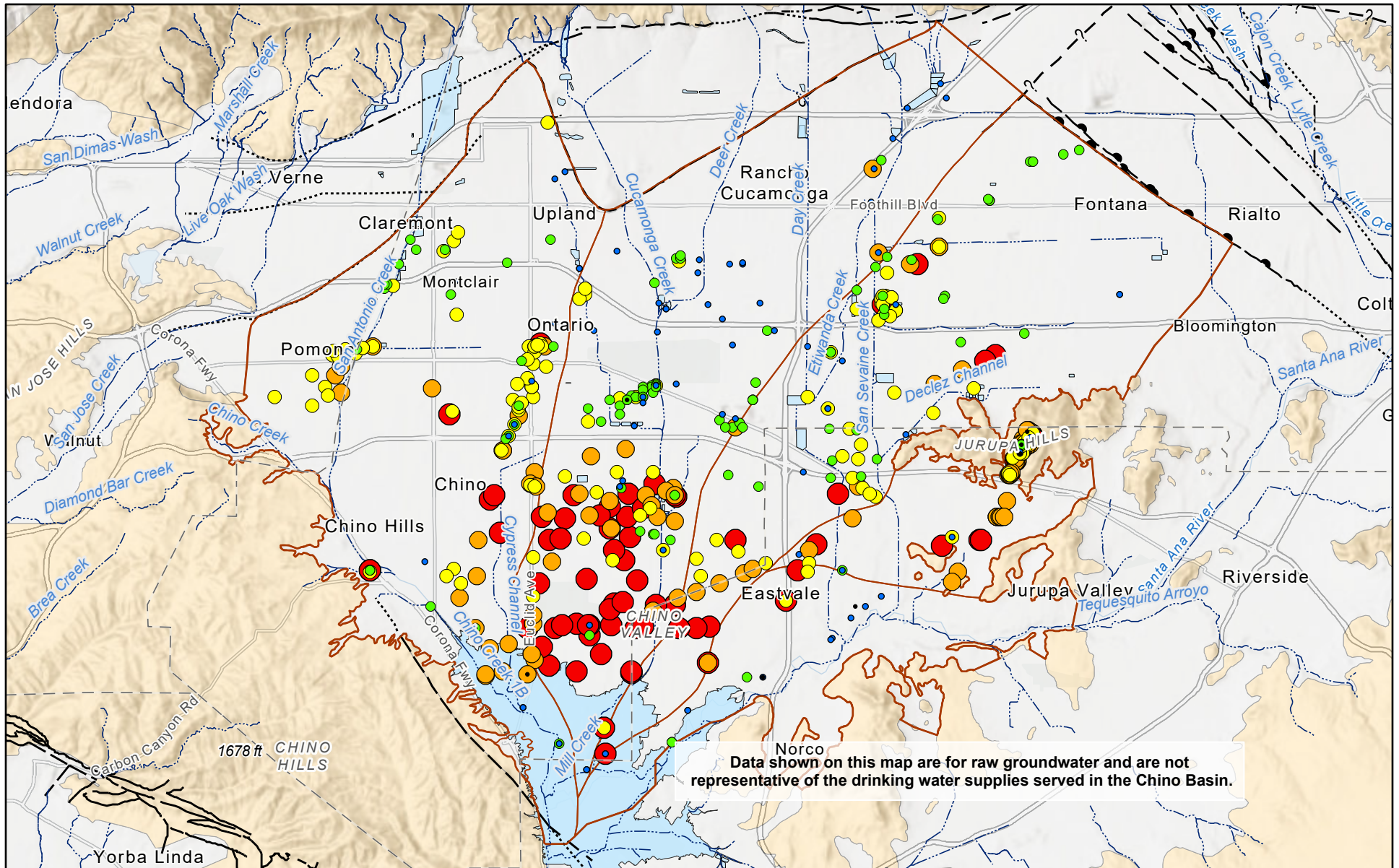
Nitrate-N (mg/l)

Nitrate-N (mg/l)



California Primary MCL = 10 mg/l

Drinking Water Contaminants in the Chino Basin - Nitrate as Nitrogen



Nitrate-nitrogen (nitrate) is a common contaminant in groundwater. It forms naturally and is synthesized in the industrial manufacturing of fertilizers. Nitrate presence in groundwater is generally associated with septic systems, confined animal operations, and fertilizer use. In 1987, the California Legislature directed the DDW to investigate nitrate contamination, identifying agriculture as a major contributor. The DDW adopted the MCL for nitrate in 1997 and practices have since been implemented to manage the impact of agriculture on groundwater and surface water quality.

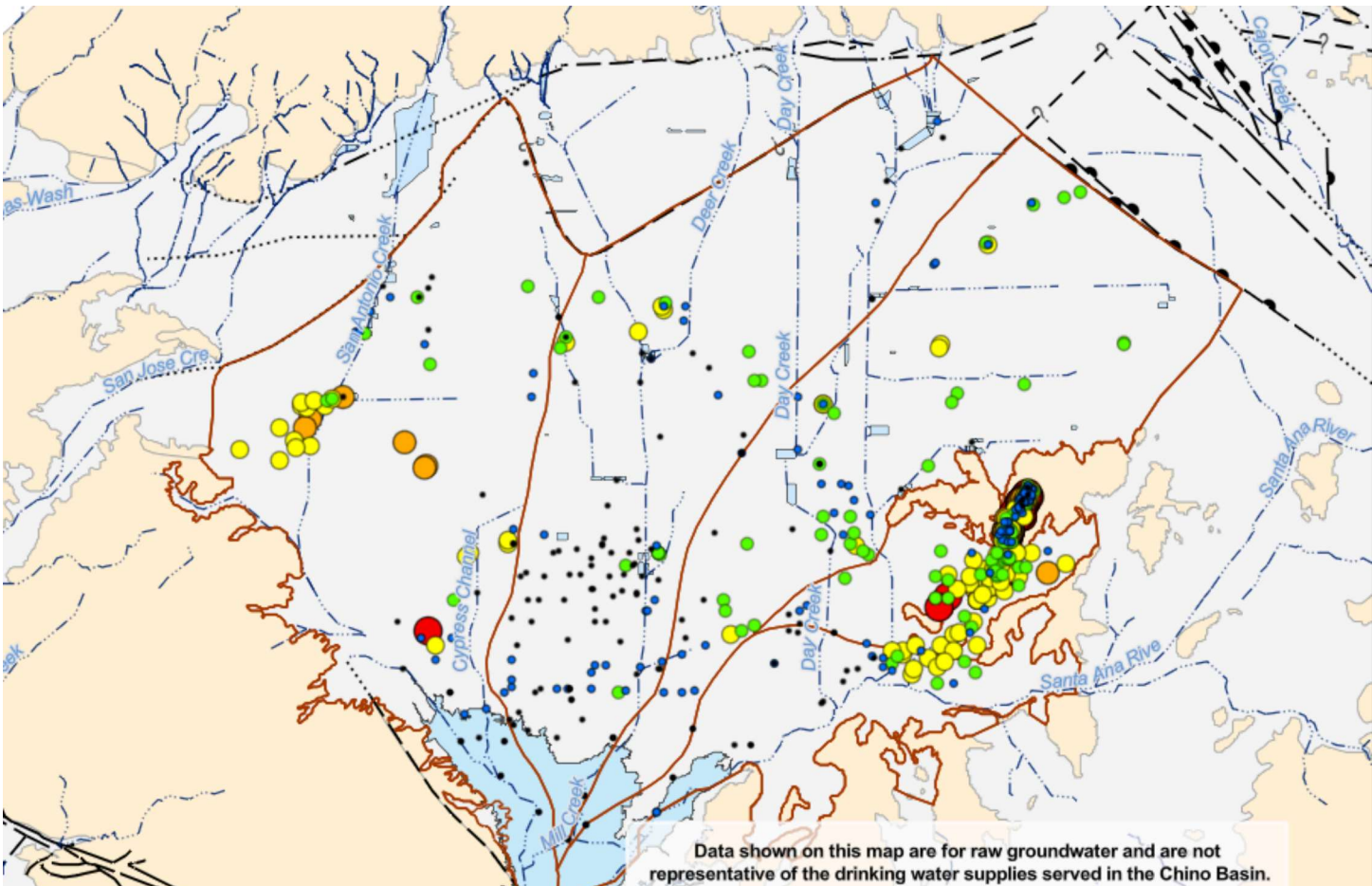
The wells with the highest nitrate concentrations in the Chino Basin are predominantly located south of Highway 60, where historical agricultural land uses progressively converted from irrigated agricultural to dairies.

Perchlorate (µg/l)

Perchlorate (µg/l)

- ND
- <3
- 3 - 6
- 6 - 12
- 12 - 24
- >24

California Primary MCL = 6 µg/l



West Yost (2025). Optimum Basin Management Program State of the Basin...

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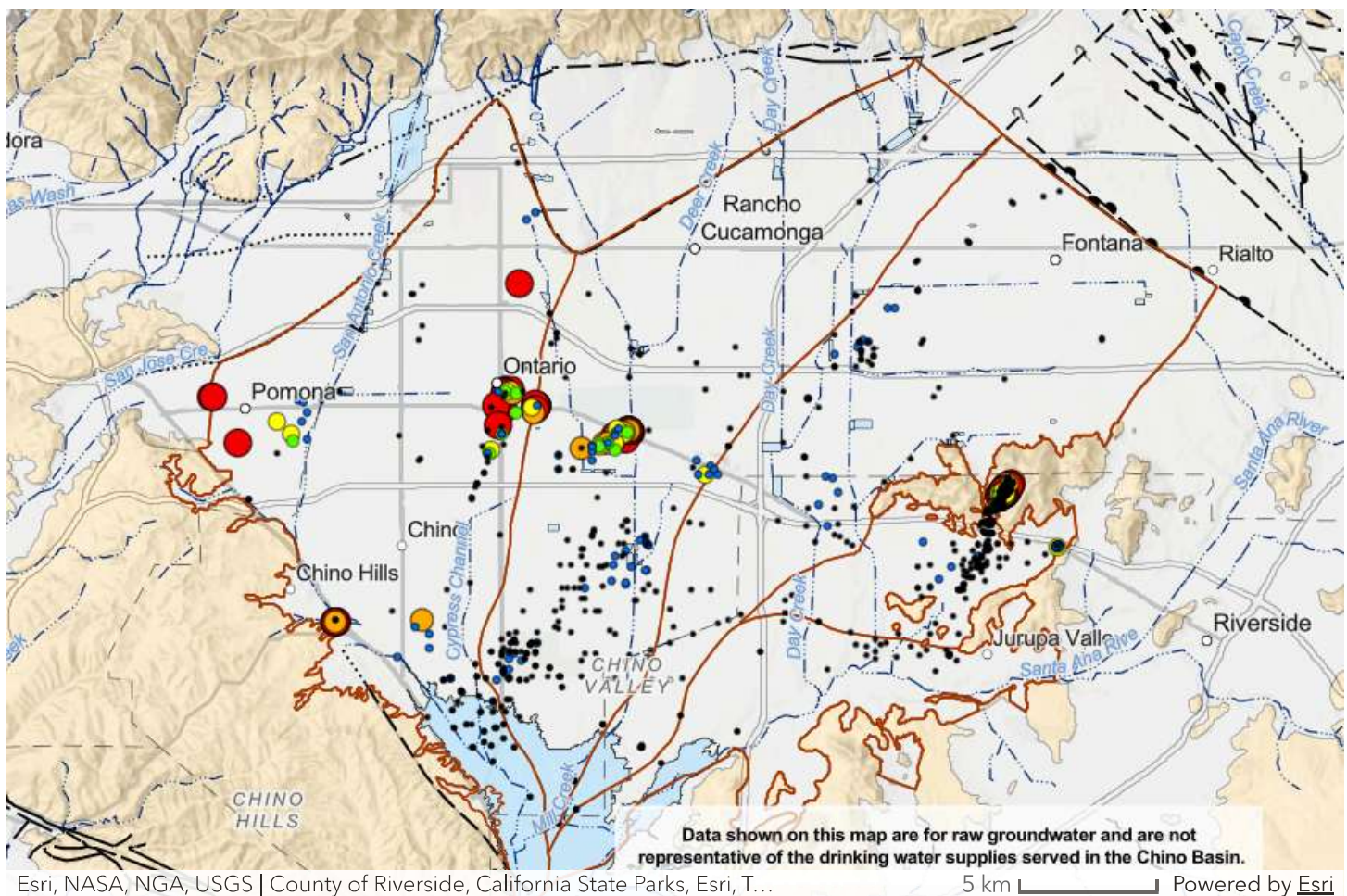
Perchlorate in groundwater can originate from synthetic and natural sources. Synthetic perchlorate is used to manufacture solid propellants for rockets, missiles, and fireworks. Natural perchlorate can be derived from Chilean caliche, which was used as a fertilizer in the early 1900s by the citrus industry. In 2015, the California Office of Environmental Health Hazard Assessment lowered the public health goal for perchlorate from 6 µg/l to 1 µg/l, prompting the DDW to initiate a process to evaluate the current MCL of 6 µg/l. Because the detection limit for reporting (DLR) at the time was 4 µg/l, the State Water Board approved a July 2017 DDW recommendation to lower the DLR and collect state-wide data to determine if a revision to the MCL was warranted. On July 1, 2021, the DLR decreased from 4 µg/l to 2 µg/l and on January 1, 2024, the DLR decreased from 2 µg/l to 1 µg/l.

The majority of the wells with highest perchlorate concentrations in the Chino Basin are associated with Pomona and Stringfellow NPL sites.

PCE (µg/l)



California Primary MCL = 5 µg/l



Tetrachloroethene (PCE) is a synthetic volatile organic compound (VOC) that has been widely used in dry cleaning and metal degreasing operations. PCE has been a significant groundwater contaminant due to decades of improper disposal and leaks from dry cleaning facilities and industrial sites. Once in groundwater, PCE can degrade into other harmful compounds like trichloroethylene (TCE) and vinyl chloride, both of which are also carcinogenic. The persistence and toxicity of PCE have made it a priority for groundwater monitoring and cleanup efforts.

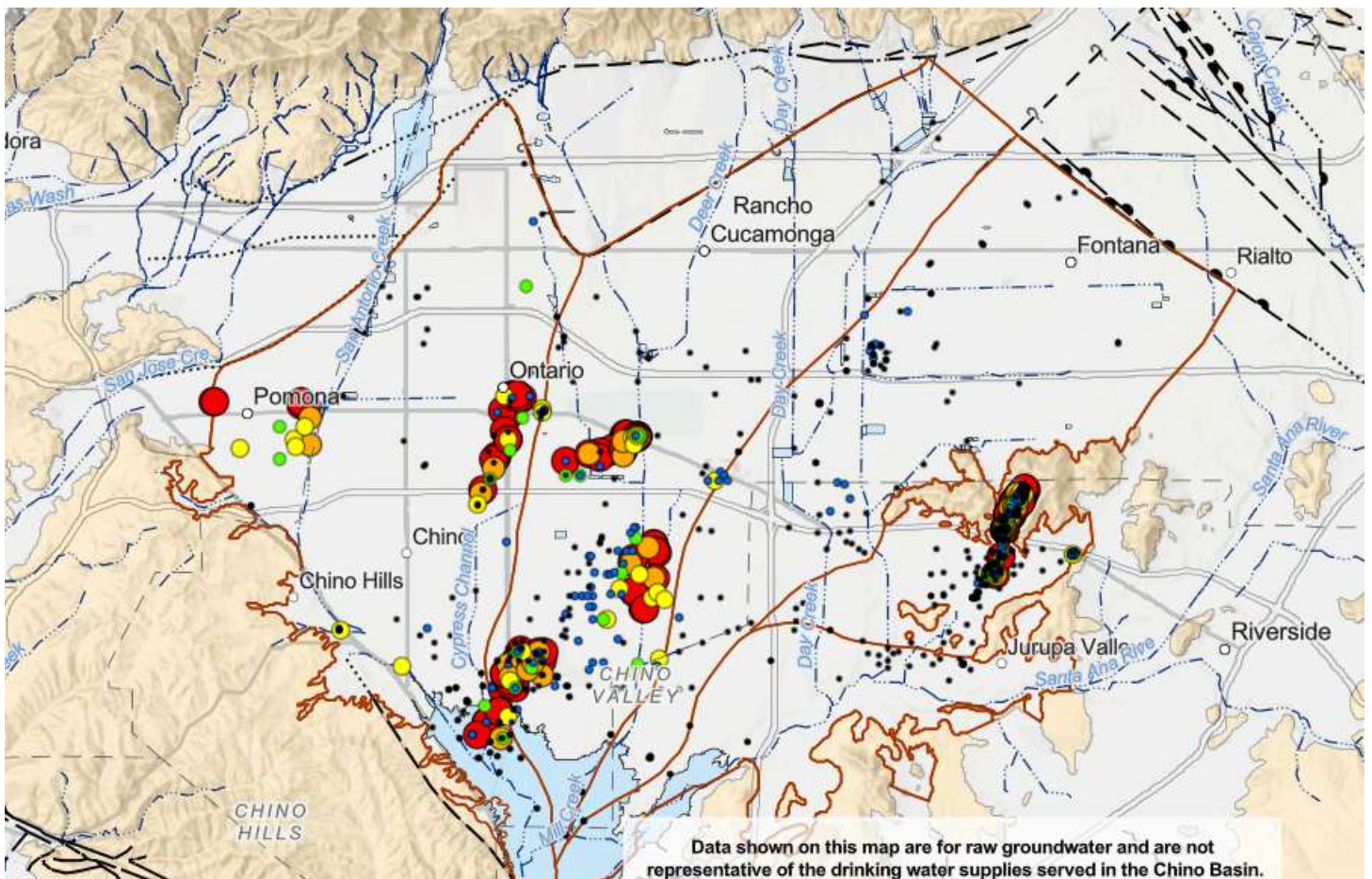
Wells with concentrations of PCE above the MCL occur predominantly in monitoring wells associated with the following VOC contaminant plumes: GE Flatiron, GE Test Cell, former Alger Manufacturing, and the Stringfellow National Priorities List site.

TCE (µg/l)

TCE (µg/l)

- ND
- <2.5
- 2.5 - 5
- 5 - 10
- 10 - 20
- >20

California Primary MCL = 5 µg/l



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Trichloroethene (TCE) is a synthetic, chlorinated solvent that has been widely used as a metal degreaser and as a chemical intermediate. Its widespread industrial use led to significant groundwater contamination, particularly in areas like Los Angeles, Orange County, and San Bernardino. TCE is classified as a human carcinogen and is not readily degradable in groundwater. Although some TCE degradation may occur naturally, it can degrade into compounds that are also toxic such as dichloroethylene and vinyl chloride.

From 2007 to 2017, TCE was detected above the MCL in 186 public water wells across California, with the majority of detections in Los Angeles and San Bernardino Counties. Sites such as former aerospace and printing facilities have been major sources of contamination, often requiring long-term remediation efforts.

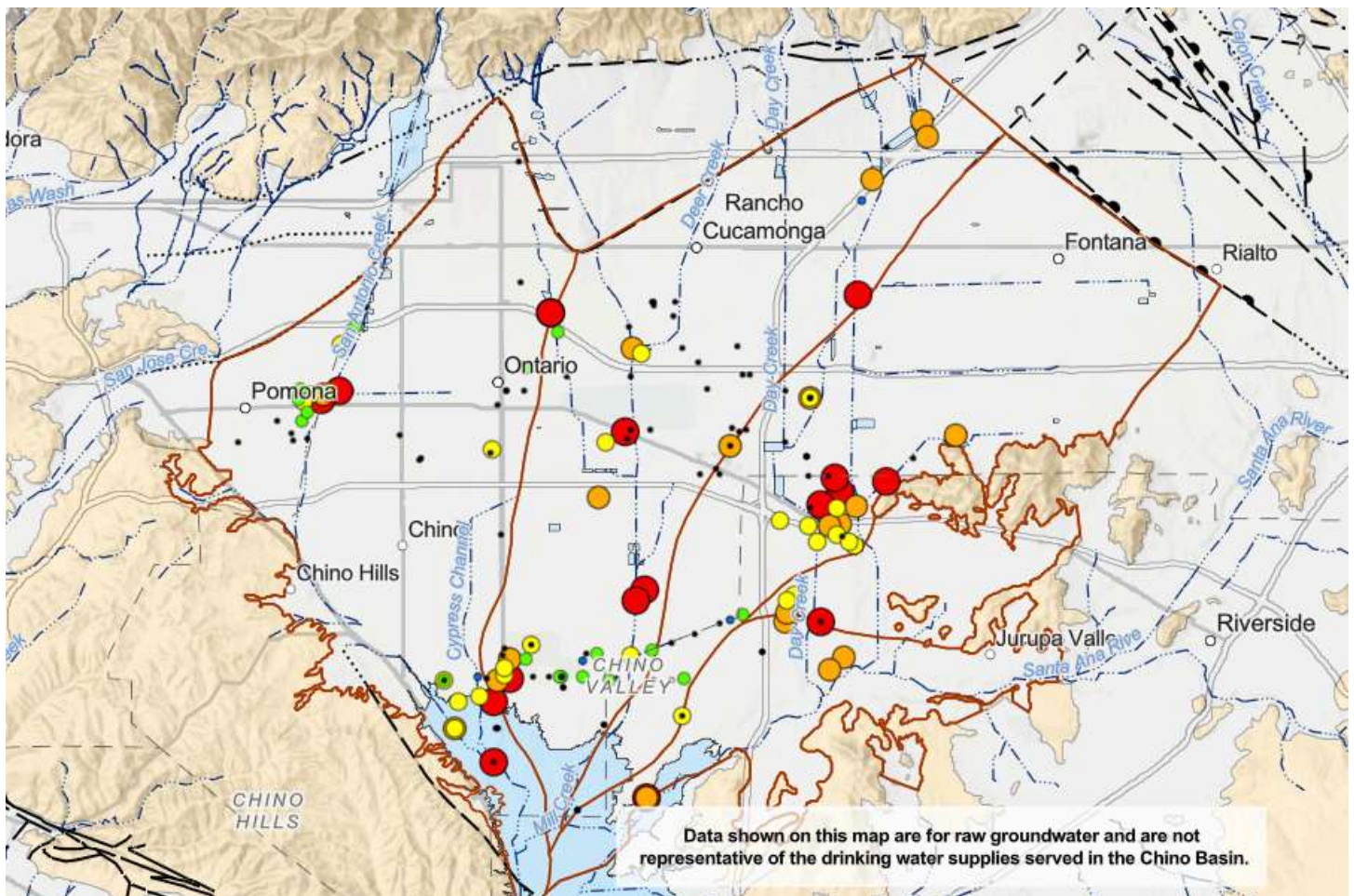
Wells with concentrations of TCE above the MCL occur predominantly in monitoring wells associated with the following volatile organic compound contaminant plumes: GE Flatiron, GE Test Cell, South Archibald plume, Chino Airport, Pomona, and Stringfellow National Priorities List site.

PFOA (ngl)

PFOA (ngl)

- ND
- <2
- 2 - 4
- 4 - 8
- 8 - 16
- >16

US EPA Primary MCL = 4 ngl



Perfluorooctanoic acid (PFOA) is a synthetic chemical in the PFAS family that was widely used in products like non-stick cookware, stain-resistant fabrics, and firefighting foams. Due to its chemical stability and resistance to degradation, PFOA has become a persistent contaminant in groundwater, especially near industrial sites, airports, and military bases where it was manufactured, used, or disposed of. Although production of PFOA started to phase out in early 2000s and it is no longer manufactured in the United States, PFOA remains persistence in the environment and in biological organisms.

PFOA is associated with several health risks, including cancer, developmental issues, and immune system effects, and is listed under California's Proposition 65 as a chemical known to cause reproductive harm and cancer. In April 2024, the federal Environmental Protection Agency (EPA) announced a federal MCL of 4 ngl for PFOA with public water systems required to complete initial monitoring by 2027. Also in April 2024, the California Office of Environmental Health Hazard Assessment established a public health goal (PHG) of 0.007 ngl, which represents the level of PFOA in drinking water that does not pose a significant health risk. Although the PHG is not an enforceable standard, the DDW can use the PHG to guide the establishment of a state MCL.

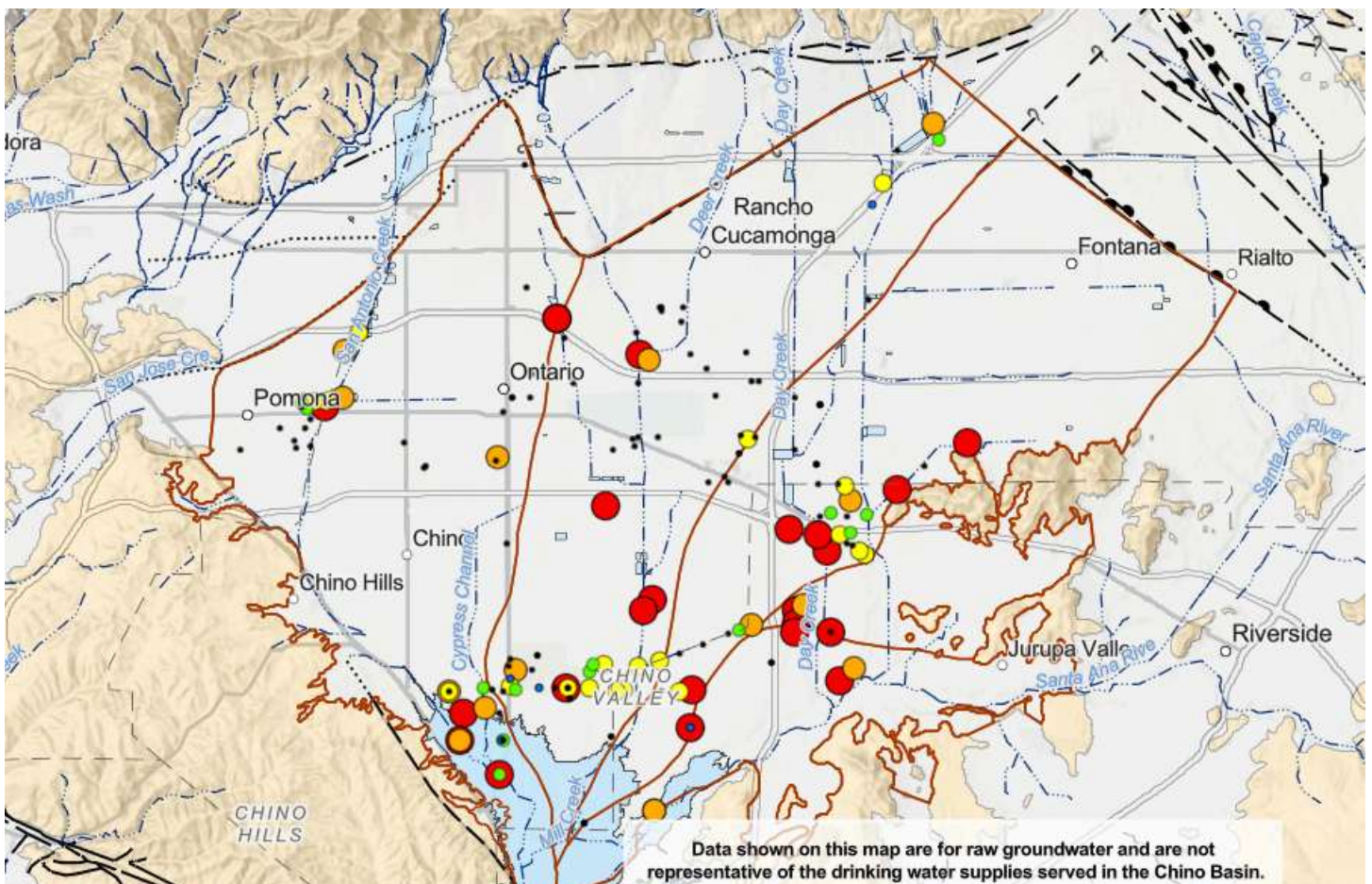
By 2029, public water systems must implement solutions to reduce PFAS concentrations that exceed the MCLs and any public water systems with PFAS in drinking water sources that exceeds the MCLs must notify the public of the exceedances.

PFOS (ngl)

PFOS (ngl)

- ND
- <2
- 2 - 4
- 4 - 8
- 8 - 16
- >16

US EPA Primary MCL = 4 ngl



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Perfluorooctanesulfonic acid (PFOS) is a synthetic chemical in the PFAS family that was widely used in products like stain-resistant fabrics, firefighting foams, and industrial surfactants. PFOS is highly persistent in the environment and does not break down easily, making it a long-term contaminant in groundwater, especially near airports, military bases, and industrial sites where it was heavily used. In Southern California, PFOS has been detected in numerous groundwater sources near facilities that used aqueous film-forming foam for firefighting training and emergency response. Although production of PFOS started to phase out in early 2000s and it is no longer manufactured in the United States, due to its chemical structure, it remains persistence in the environment and in biological organisms.

PFOS is listed under California's Proposition 65 due to its links to cancer and reproductive harm and in April 2024, the federal Environmental Protection Agency (EPA) announced a federal MCL of 4 ngl for PFOS. Also in April 2024, the California Office of Environmental Health Hazard Assessment established a public heal goal (PHG) of 1 ngl. Although the PHG is not an enforceable standard, the DDW can use the PHG to guide the establishment of a state MCL.

The EPA is requiring public water systems to complete initial monitoring for PFAS compounds by 2027. By 2029, the public water systems must implement solutions to reduce PFAS concentrations that exceed the MCLs. Additionally, starting in 2029, any public water systems with PFAS in drinking water sources that exceeded the MCLs must notify the public of the exceedances.

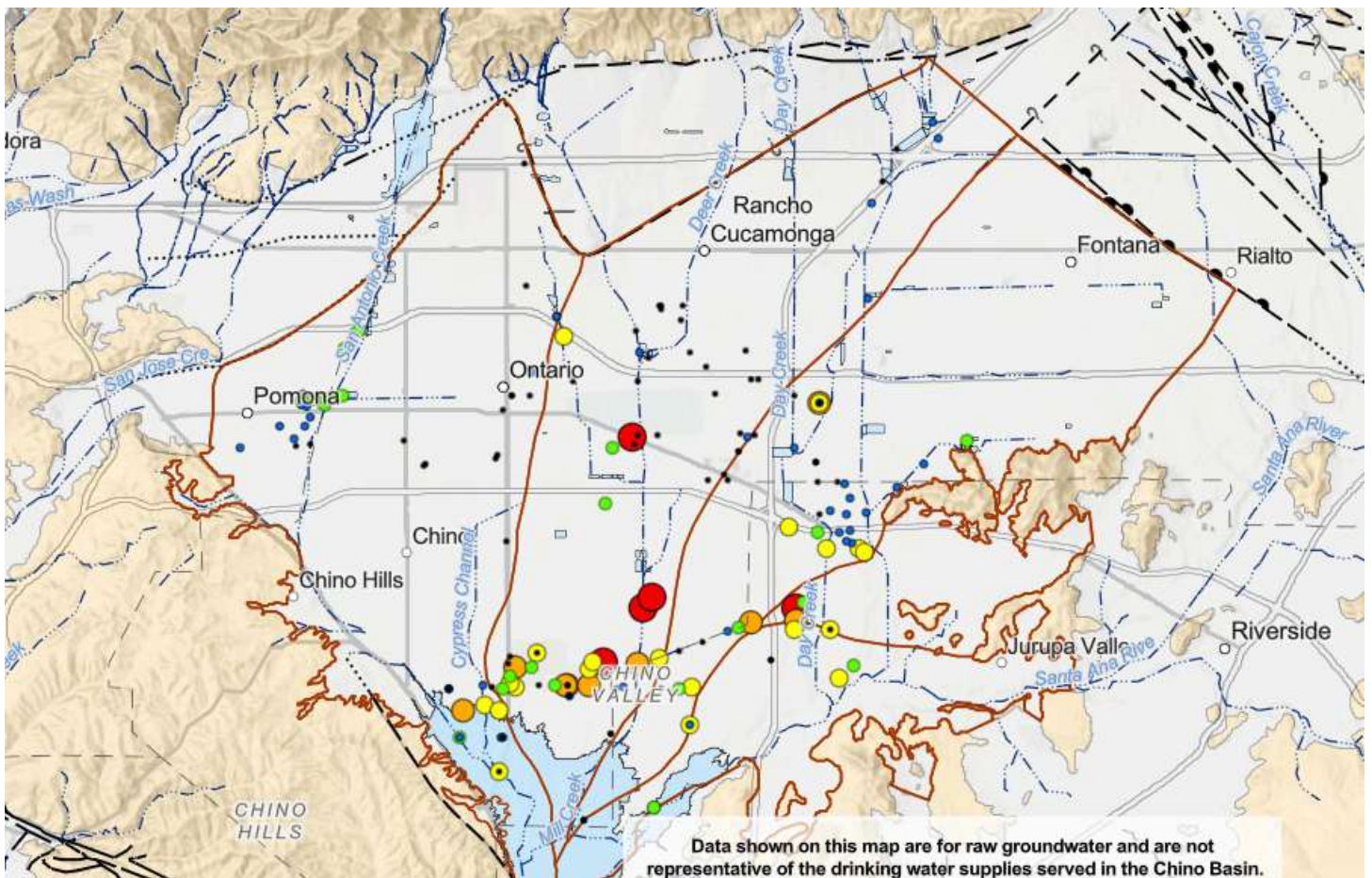
PFHxS (ngl)

PFHxS (ngl)

- ND
- <5
- 5 - 10
- 10 - 20
- 20 - 40
- >40

US EPA Primary MCL* = 10 ngl

* MCL was rescinded in May 2025



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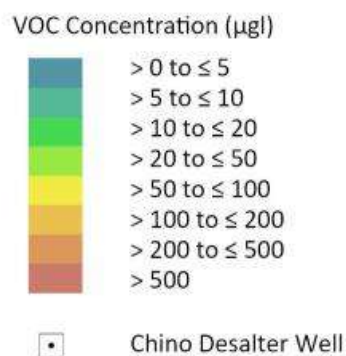
5 km Powered by Esri

Perfluorohexanesulfonic acid (PFHxS) is a synthetic chemical belonging to the PFAS family, known for their persistence in the environment and the human body. It is highly mobile in groundwater and has been shown to have adverse health effects. PFHxS has been detected in groundwater near military bases, airports, and industrial sites, largely due to its historical use in aqueous film-forming foams for firefighting. It was also used in textile treatments, metal plating, and electronics manufacturing, contributing to its widespread environmental presence. The Minnesota Mining and Manufacturing was once a major manufacturer of PFHxS and products containing PFHxS, but production was phased out in 2002. Since then, PFHxS production has been phased out nationwide.

In 2020, the DDW requested the Office of Environmental Health Hazard Assessment (OEHHA) to develop notification level for PFHxS, along with other PFAS compounds. In October 2022, the DDW adopted a notification level of 3 ngl. In April 2024, the federal Environmental Protection Agency (EPA) announced a federal MCL of 10 ngl for PFHxS. The MCL was rescinded in May 2025, however, for further consideration. Shortly after the federal MCL was rescinded, the DDW requested that OEHHA establish a public health goal (PHG) for PFHxS in order to begin the process of establishing a state MCL.

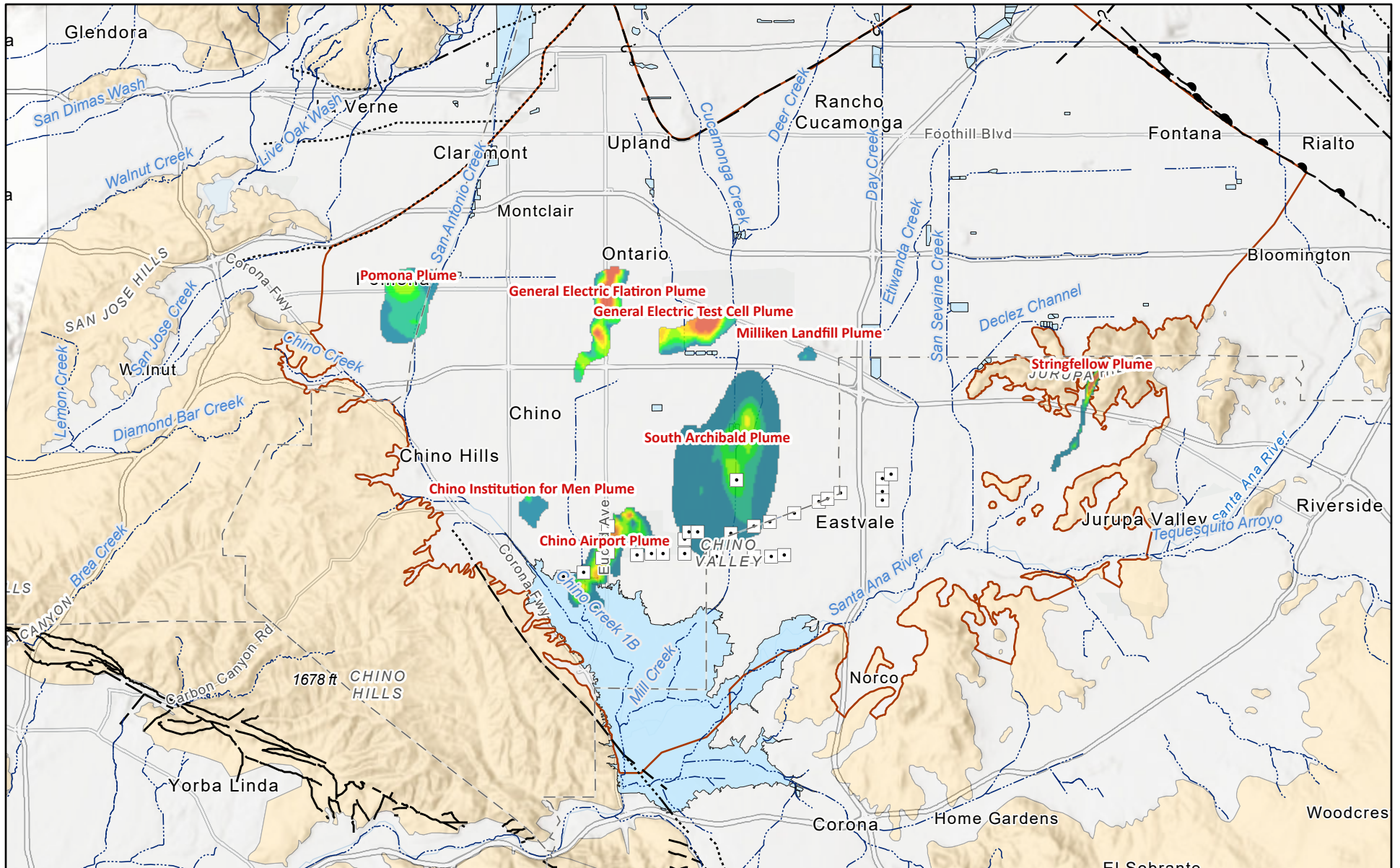
Point-Source Contamination Plumes

This map is showing the current delineation of the volatile organic compounds (VOC) plumes in the Chino Basin. Every two years, Watermaster uses the data collected as part of its monitoring programs and other information to delineate the extent of contaminant plumes comprised of VOCs. The VOC plumes illustrated represent generalized depictions of the estimated spatial extent of the primary VOC contaminant based on the maximum concentrations measured at wells between July 2019 and June 2024. The primary VOC contaminant for the South Archibald, Chino Airport, General Electric (GE) Test Cell, GE Flatiron, Millikin Landfill, and Pomona plumes is TCE; and the primary VOC contaminant for the Chino Institution for Men (CIM) plume is PCE. Additionally, the Chino Airport plume has another primary contaminant of 1,2,3-TCP. Hence there are two plume delineations for the Chino Airport plume for TCE and 1,2,3-TCP. Watermaster also prepares semi-annual and annual status reports for all the plumes on the monitoring, remediation, and activities.



The spatial distribution of VOC concentrations was estimated using ordinary kriging. The delineated plume boundaries are based on observed concentration data.

Point-Source VOC Contamination Plumes in the Chino Basin

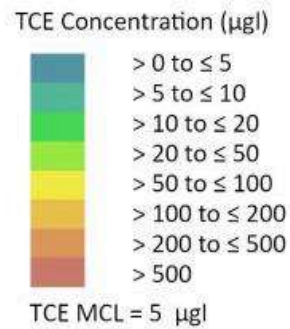


□ Chino Desalter Well (30 wells)

0 1.75 3.5 7 mi
0 2.75 5.5 11 km

Esri, NASA, NGA, USGS, Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community, West

South Archibald TCE Plume



5

Wells Labeled by Maximum TCE Concentration (µg/l)
from July 2019 to June 2024
ND = TCE was Non-Detect

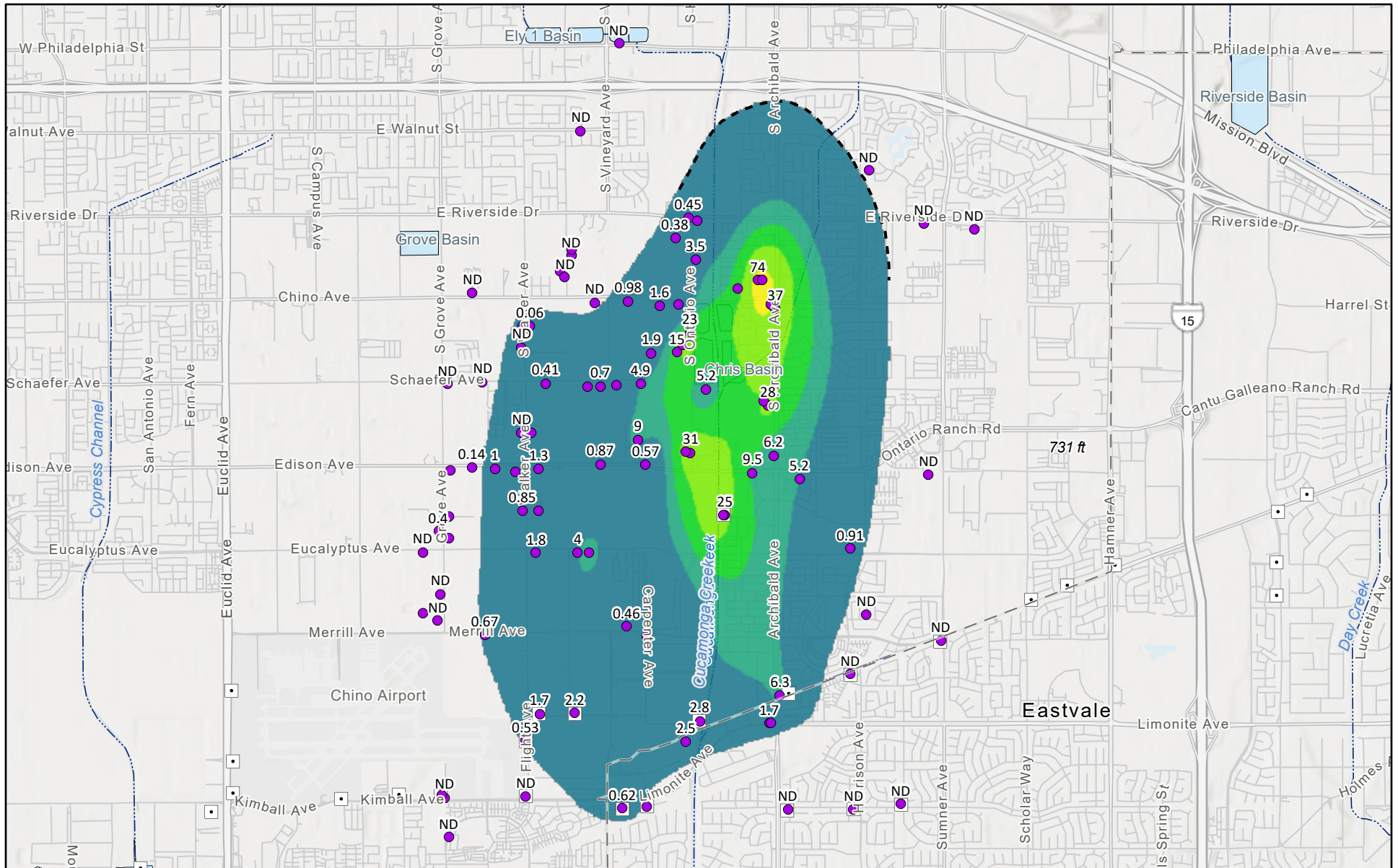


Chino Desalter Well



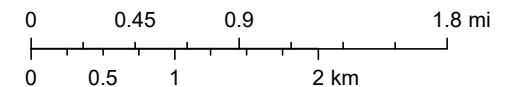
No data exist in the northern portion of the plume
for the analysis period so the approximate
location of the spatial extent and TCE
concentrations in the northern portion is unknown

South Archibald TCE Plume



- South Archibald Monitoring Wells (labeled by 5-year maximum concentration)
- - - Estimated Plume Boundary
- Chino Desalter Well (30 wells)

Appendix



Esri, NASA, NGA, USGS, FEMA, Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community

The South Archibald TCE Plume is located in the southern Chino Basin within the City of Ontario. Initial detections of TCE in the area date back to the 1980s, with formal regulatory actions beginning in 2005 when the Santa Ana Water Board issued draft Cleanup and Abatement Orders (CAOs) to several parties, including major aerospace and defense contractors who were tenants in the Ontario International Airport (OIA). On a voluntary basis, four of the six parties (Aerojet, Boeing, GE, and Lockheed Martin, collectively the ABGL Parties) worked together, along with the U.S. Department of Defense, to investigate the source of contamination. The investigation included collecting water-quality samples from private wells and taps at residences, as well as constructing and sampling four triple-nested monitoring wells. Alternative water supplies were provided at private residences in the area where groundwater was contaminated.

The Santa Ana Water Board continued its investigation into the probable sources of TCE contamination in the region. Through this research, the Board identified discharges of wastewater to the RP-1 treatment plant and its associated disposal areas as potential contributors. Several industrial operations—some former tenants of the OIA—were found to have used TCE-based solvents in the past. These industries are believed to have discharged waste into the municipal sewer systems of the Cities of Ontario and Upland tributary to the RP-1 treatment plant. In 2012, the Santa Ana Water Board issued another Draft CAO to the City of Ontario, City of Upland, and IEUA as the previous and current operators of the RP-1 treatment plant and disposal area (collectively the RP-1 Parties). Under the Santa Ana Water Board's oversight from 2007 to 2014, the ABGL and RP-1 Parties conducted sampling at private residential wells and taps approximately every two years.

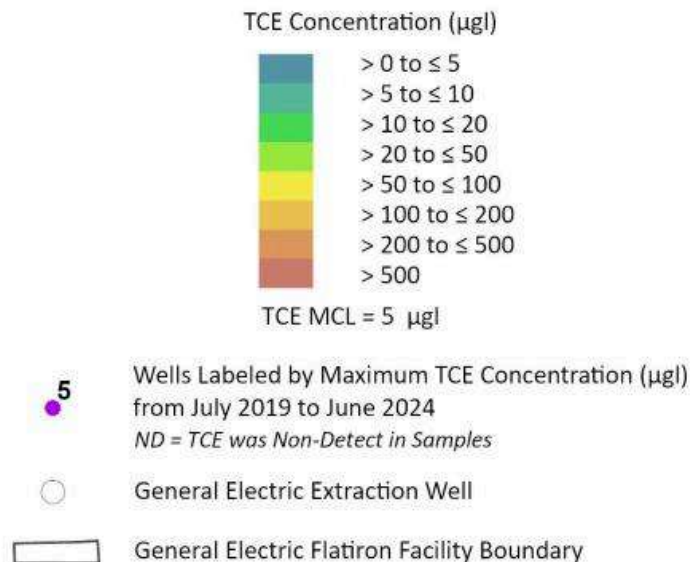
In September 2016, the Santa Ana Water Board issued the Final Stipulated Settlement and CAO (Stipulated CAO) collectively to the RP-1 Parties and ABGL Parties. A Stipulated CAO was

adopted in November 2016, approving the plume remedial action plan and domestic water supply plan. The plume remedial action plan includes the use and modification of CDA facilities, this includes: construction and operation of three new CDA wells (II-10, II-11, and II-12); a pipeline to convey groundwater produced from these wells to the Chino-II Desalter treatment facility; and replacement of existing decarbonators at Chino-II Desalter with an air stripping system to remove TCE and other VOCs from the water treated through the reverse osmosis trains.

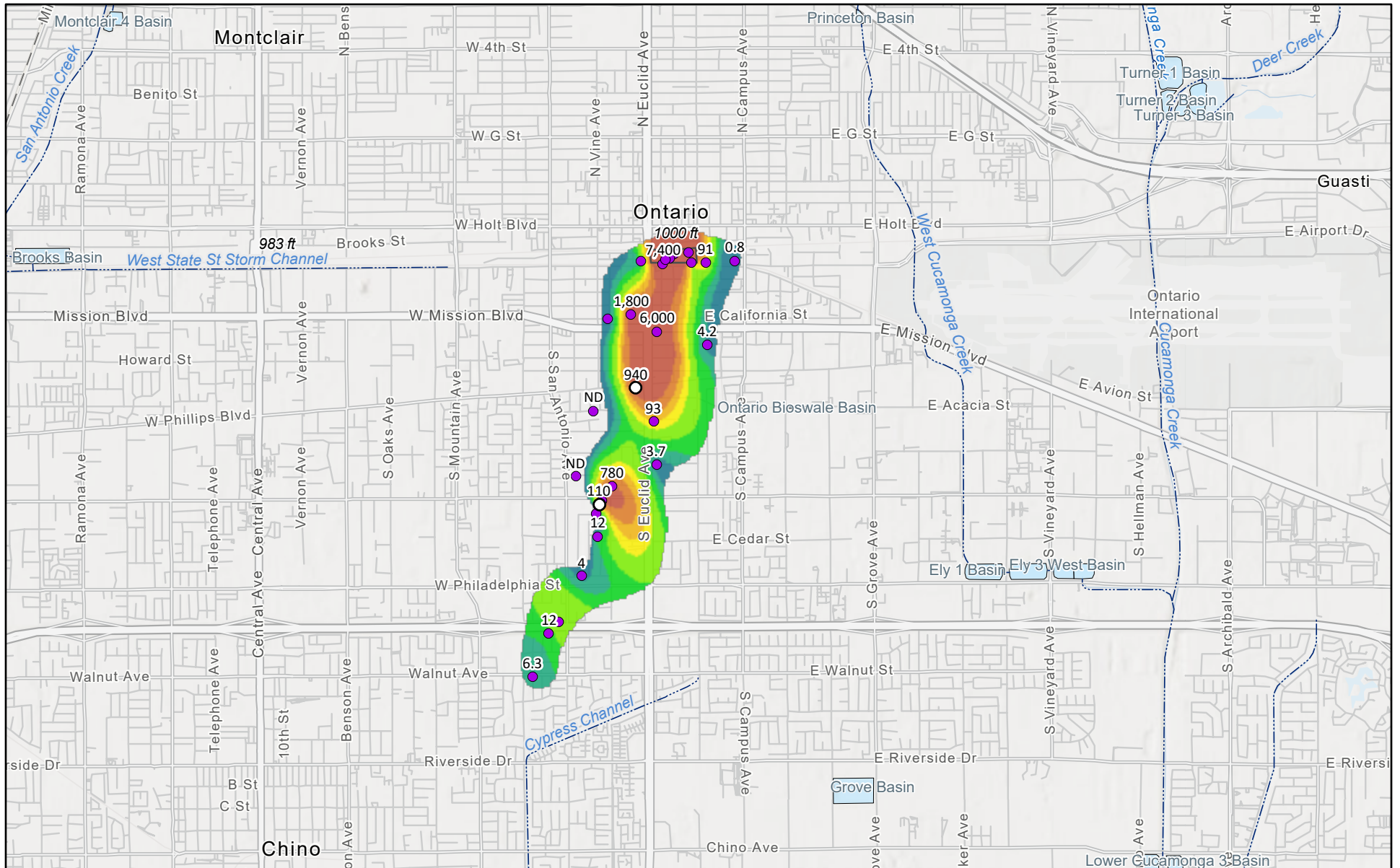
The domestic water supply plan includes the installation of tank systems, where water is delivered from the City of Ontario potable supply, and the installation of a pipeline to connect some residences to the City's potable water system.

The RP-1 Parties conduct annual sampling at approximately 50 to 60 private locations to monitor the plume's extent and identify residences requiring an alternative potable water supply under the domestic water supply plan. During the most recent sampling in late 2024, it was noted that the number of residences requiring alternative water has decreased due to redevelopment in the area and improvements in groundwater quality. Watermaster also routinely collects samples at private wells in the area.

GE Flatiron TCE Plume



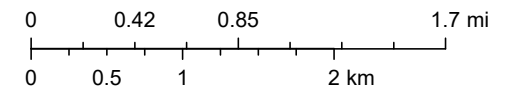
GE Flatiron TCE Plume



- GE Flatiron Extraction Wells
- GE Flatiron Monitoring Wells (labeled by 5-year maximum concentration)

— GE Flatiron Property Boundary

Appendix



Esri, NASA, NGA, USGS, FEMA, Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community

The GE Flatiron TCE plume is in the central Chino Basin within the City of Ontario. The responsible party is GE associated with their historical operations at the Flatiron Facility from the early 1900s to 1982. The primary contaminant of concern is TCE. Other contaminants of concern include PCE, total chromium, and hexavalent chromium.

Regulatory oversight began in the late 1980s, leading to multiple investigations and the implementation of remedial action that includes a pump-and-treat system using an ion exchange resin and liquid-phase GAC to remove TCE, chromium, and other VOCs in groundwater. Two extraction wells, EW-01 and EW-02, have been operating since 1996 and 2002, respectively, to contain and treat the plume.

Groundwater from the extraction wells is treated at GE Flatiron's groundwater treatment system and then was discharged initially to the Ely Basins. In 2005, the Ely Basins became fully dedicated for Watermaster and IEUA's groundwater recharge program, and the treated effluent could no longer be discharged into the Ely Basins. As an alternative, three injection wells (IW-01, IW-02, and IW-03) and conveyance pipelines were installed in 2011 to inject the treated water to the Chino Basin.

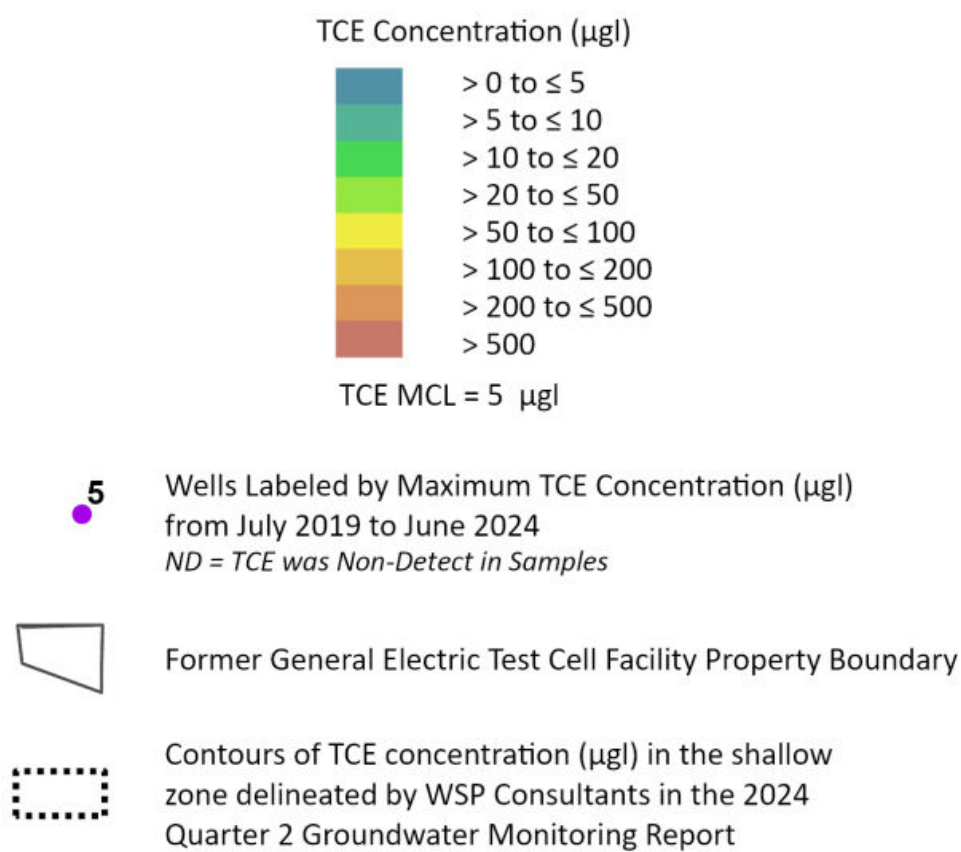
In addition to the pump-and-treat system, GE has also began operating a soil vapor extraction (SVE) system in 2003 to treat for VOCs in soil on the property. Between 2019 and 2020 GE expanded the treatment system to further limit potential offsite soil vapor migration and groundwater impacts and in 2024, GE submitted a workplan to further expand the SVE well network to extend the influence of the SVE system.

Between 2016 and 2022, the Santa Ana Water Board required the installation of three additional monitoring wells to assess groundwater conditions downgradient of the known plume boundary. The resulting data led to a redefinition of the plume's downgradient edge, which was found to extend south of Highway 60 and to include a municipal well operated by the City of Chino.

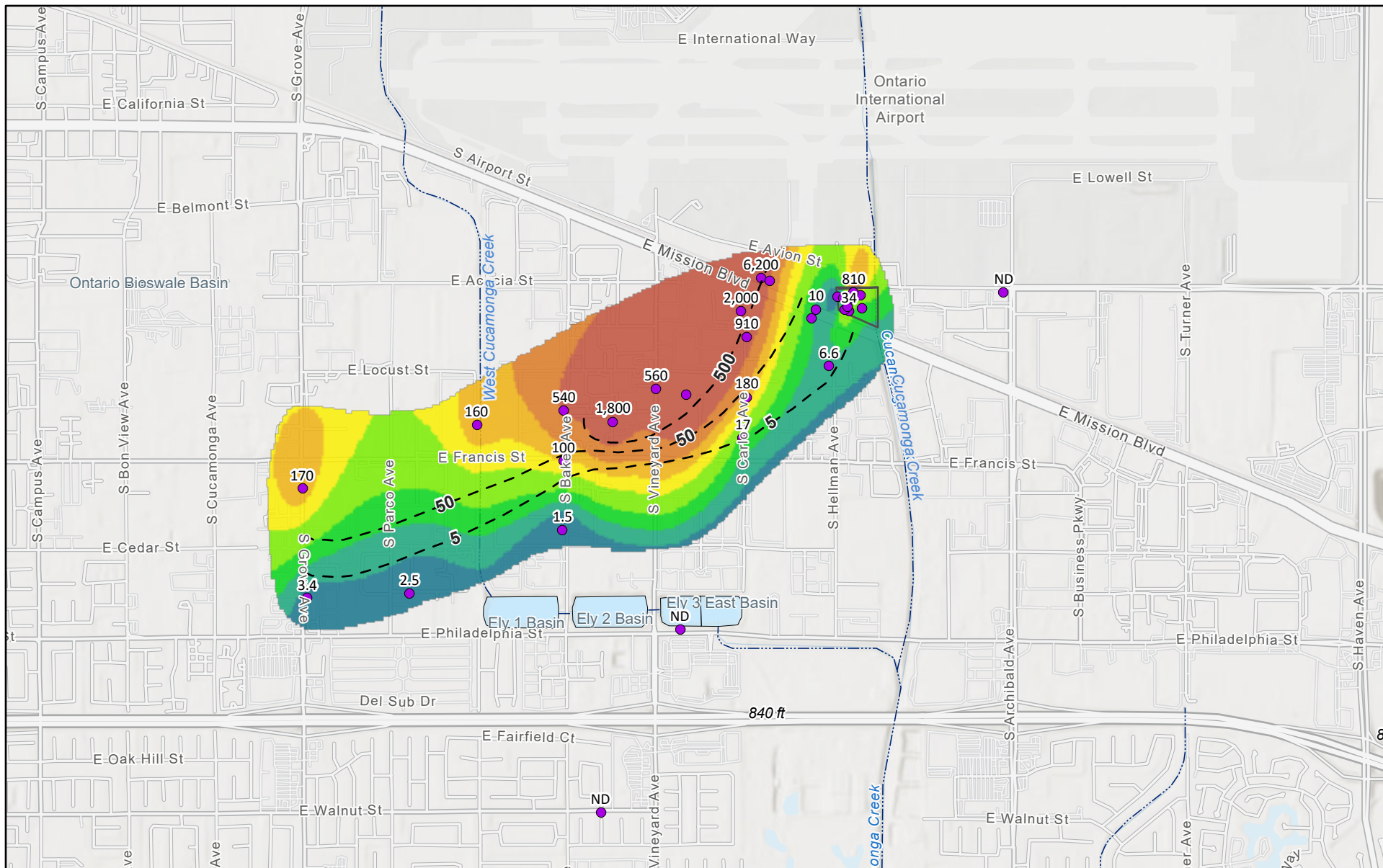
In 2022, GE began planning updates to the pump-and-treat system to enhance plume containment and cleanup, including the construction of a third extraction well (EW-03) and a fourth injection well (IW-04). In 2024, GE developed a site-specific groundwater flow model of the GE Flatiron and GE Test Cell areas to quantitatively assess and predict groundwater flow conditions under various groundwater extraction and injection rates. The results of the modeling will be used to optimize the pump-and-treat system.

GE conducts quarterly groundwater monitoring of groundwater levels and quality at a network of 39 monitoring wells and piezometers. All monitoring reports and other relevant documents/data can be found on the State Water Resources Control Board GeoTracker website linked here: [GeoTracker - GE Flatiron](#)

GE Test Cell TCE Plume



GE Test Cell TCE Plume



- TCE in the Shallow Zone delineated by WSP Consultants in the 2024 Quarter 2 Groundwater Monitoring Report
- GE Test Cell Monitoring Wells (labeled by 5-year maximum concentration)
- GE Test Cell Property Boundary

1:30,097

0 0.2 0.4 0.8 mi

0 0.33 0.65 1.3 km

Esri, NASA, NGA, USGS, FEMA, Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community

The GE Test Cell Plume is located in the central Chino Basin within the City of Ontario, south of the Ontario International Airport (OIA). The responsible party is GE associated with their historical operations at the former GE Engine Services Test Cell Facility. The primary contaminant of concern is TCE. Other contaminants include the VOCs: PCE, 1,1-dichloroethene, 1,2-dichloroethane, and cis-1,2-dichloroethene.

Regulatory oversight began in 1988 with a Consent Order requiring GE to investigate and remediate soil and groundwater contamination. Monitoring and plume characterization began in 1996. Soil remediation was conducted through a Soil Vapor Extraction System from 1996 to 2005, which was deemed successful and officially closed in 2009.

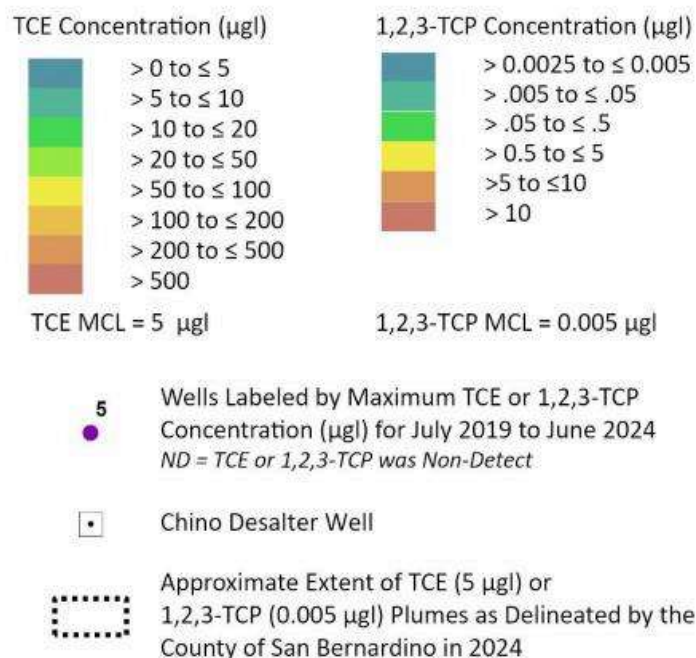
In 2006, GE submitted a draft remedial action plan that identified two groundwater remedial alternatives: (1) extraction and treatment of groundwater for areas that have VOC concentrations approximately ten times the MCL, and (2) monitored natural attenuation of groundwater for areas that have VOC concentrations less than ten times the MCL. Following the submittal of the draft remedial action plan, GE determined that either of the two remedial actions would reduce the TCE concentrations to levels at or below the MCL within the same 50-year time frame and in 2010, following the installation monitoring wells, GE proceeded with the sole remedial action of monitored natural attenuation.

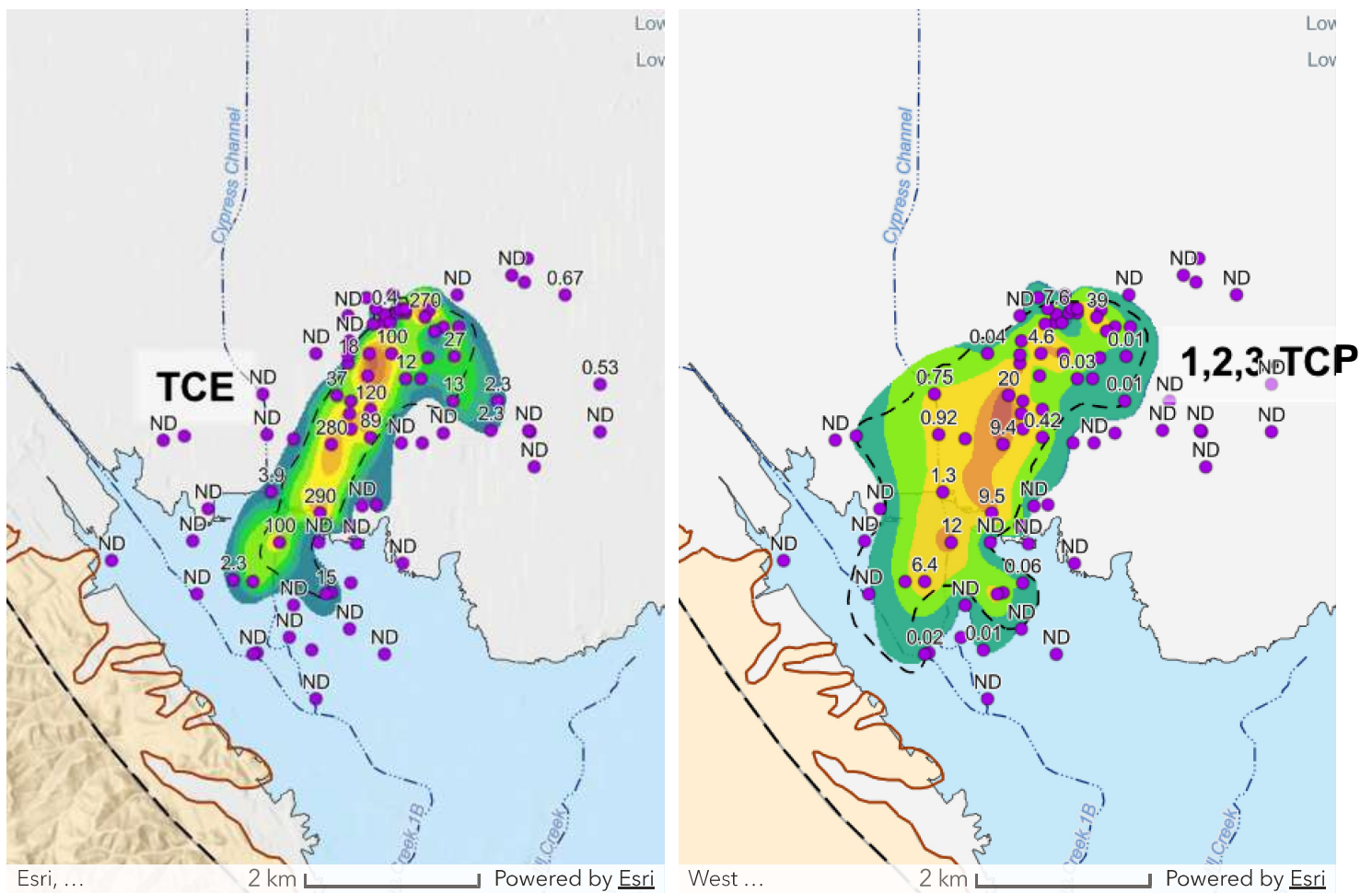
In 2019, the Santa Ana Water Board requested GE prepare a Conceptual Site Model to aid in determining whether monitored natural attenuation was suitable as the only remedial action. The findings in the 2019 Conceptual Site Model (CSM) showed that natural attenuation is occurring and has maintained a stable groundwater plume. This was supported by declining TCE concentrations near the source, consistently low levels of TCE in the most downgradient wells, and plume behavior consistent with displacement from increased recharge at the Ely Basins. However, the CSM also showed increasing TCE concentrations in the northern part of the plume.

In 2022, GE submitted a groundwater sampling plan to investigate the increasing TCE concentrations and a work plan for a plume migration control system. The investigation included the development of a site-specific groundwater flow model, backward particle tracking, and the installation of new monitoring wells. Results of the investigation showed that increased TCE concentrations in the northern part of the plume are from source/s at the OIA property that are distinct from the GE Test Cell facility and distinct to the attenuating TCE concentrations in groundwater downgradient from the facility. The implementation of a plume migration control system is thus pending further analysis of the plume and the additional sources.

GE conducts quarterly groundwater monitoring of groundwater levels and quality at a network of 54 monitoring wells and piezometers. All monitoring reports and other relevant documents/data can be found on the State Water Resources Control Board GeoTracker website linked here: [GeoTracker - GE Test Cell](#)

Chino Airport TCE and 1,2,3-TCP Plumes





The Chino Airport TCE and 1,2,3-TCP plumes are located in the southwestern portion of the Chino Basin within the City of Chino. The San Bernardino County Department of Airports (County) is identified as the responsible party for the Chino Airport plumes. The Santa Ana Water Board has issued multiple CAOs ordering the County to characterize the extent of the plume and prepare a remedial action plan. Since 2003, the County has constructed a total of 89 monitoring wells, 18 piezometers, and five extraction wells, and has conducted extensive investigations to characterize the soil and groundwater contamination on and offsite. In November 2020, a final interim remedial action plan was approved by the Santa Ana Water Board and the County submitted a Remedial Action Work Plan in July 2022.

The remedial action includes a groundwater pump-and-treat system consisting of 22 extraction wells located at 10 well clusters termed "County extraction wells". It also incorporates the existing CDA wells I-16, I-17, I-18, and potentially I-20 and I-21. Extracted groundwater will be conveyed to the influent line to the CDA Chino-I Desalter facility, where it will be treated for VOCs (including 1,2,3-TCP and TCE) at a newly constructed granular activated carbon (GAC) treatment system at the Chino-I Desalter facility (South GAC system). In April 2023, pumping began at CDA wells I-17 and I-18 and treatment of groundwater from these wells commenced at the South GAC System. The construction of 5 of the 10 County extraction well clusters and conveyance piping were completed in mid-2025 and it is anticipated that pumping will commence in late-2025. The construction of the remaining County extraction wells and conveyance piping will likely initiate in 2026.

Watermaster collects groundwater-quality samples from private wells in the plume area and at its HCMP-4 monitoring well. Additionally, the CDA collects groundwater-quality samples from the Chino Desalter wells.

Other Known Point-Sources of Contamination in Chino Basin (GeoTracker and EnviroStor Sites)

GeoTracker is the State Water Board's online data-management system for the compliance data collected from point-source discharge sites with confirmed or potential impacts to groundwater. This includes locations where there have been unauthorized discharges of waste to land or unauthorized releases of hazardous substances from underground storage tanks. EnviroStor is the DTSC's online data-management system for permitted hazardous waste facilities. In 2014, Watermaster performed a comprehensive review of the GeoTracker and EnviroStor databases to identify sites in the Chino Basin that may have an impact on groundwater quality but have not been previously tracked by Watermaster. Watermaster reviews the GeoTracker and EnviroStor databases annually to track the status of previously identified sites, identify new sites with potential or confirmed impacts to groundwater, and add new data to Watermaster's database. Click the link below to go to GeoTracker's online web map and explore cleanup sites in the Chino Basin.

GeoTracker Map



GROUND LEVEL MONITORING

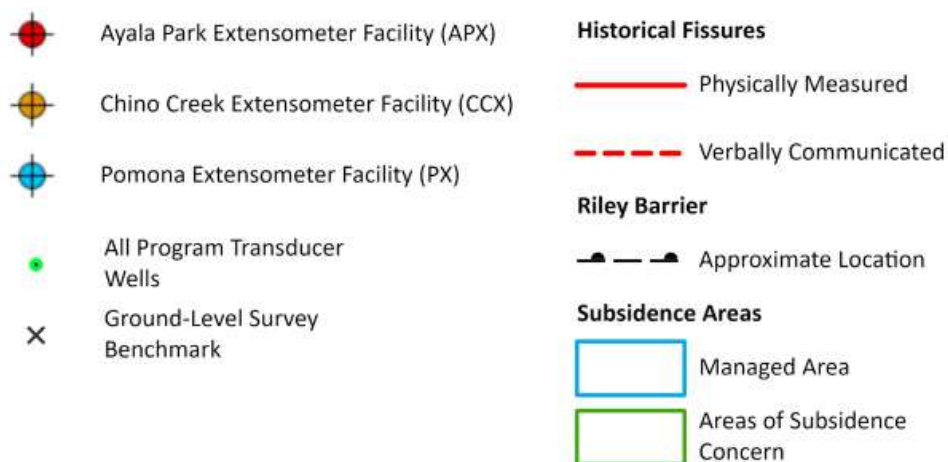
Ground Level Monitoring

Dating back to 1970s, land subsidence and ground fissuring have been an adverse impact caused by historical pumping and drawdown of groundwater levels in the Chino Basin. Pursuant to the OBMP Implementation Plan in the Peace Agreement, Watermaster has developed and implemented an adaptive Subsidence Management Plan that includes guidance criteria for groundwater pumpers and managers to minimize or abate the future occurrence of land subsidence.

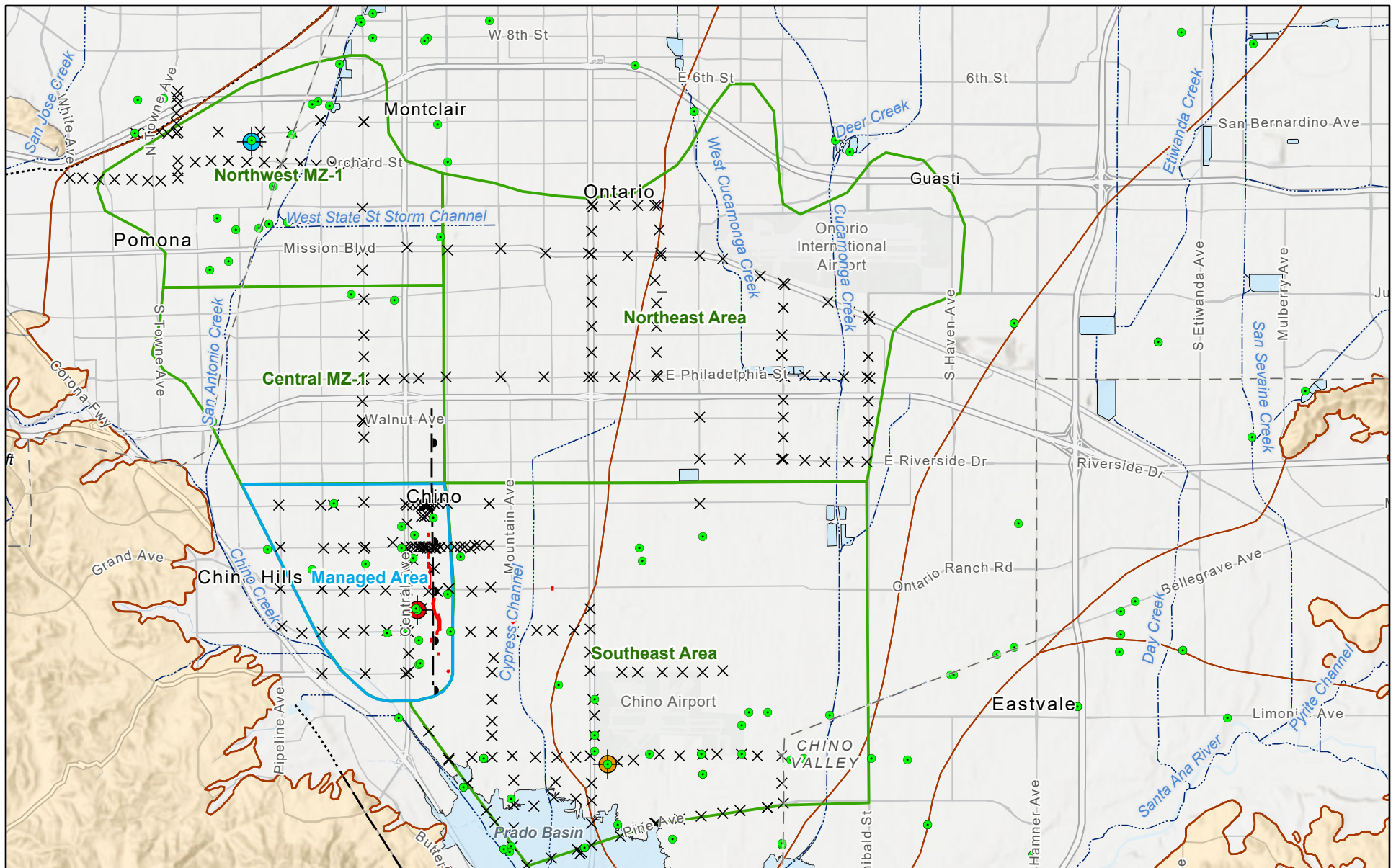
Ground Level Monitoring Program

A fundamental component of this adaptive management plan is a monitoring and reporting program called the Ground-Level Monitoring Program (GLMP). The objectives of the GLMP are to track land subsidence and ground fissuring, understand all factors that control the extent and rate of land subsidence in the Chino Basin, and develop recommendations for adjustments to the GLMP or Subsidence Management Plan itself.

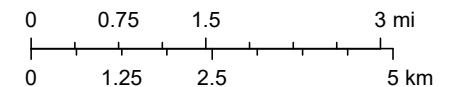
Legend



Ground-Level Monitoring Program



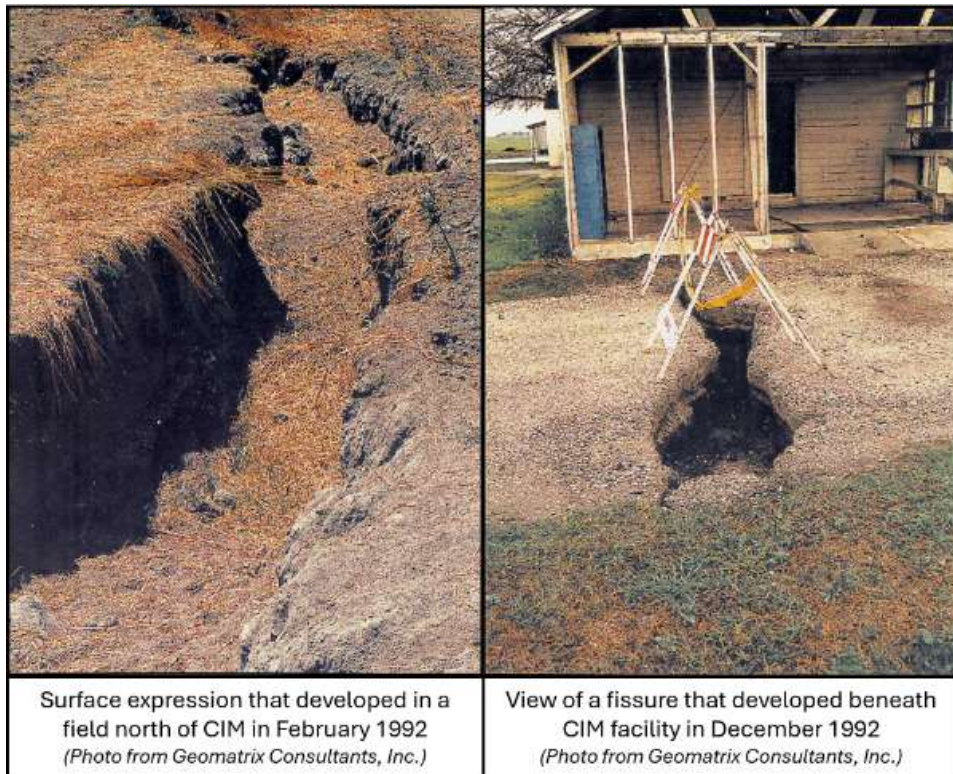
- | | | |
|--------------------------------|---------------------------------|---|
| ● All Program Transducer Wells | ⊕ Pomona (PX) | --- Verbally Communicated |
| ● Ayala Park (APX) | × Ground-Level Survey Benchmark | — Approximate Location of the Riley Barrier |
| ● Chino Creek (CCX) | Historical Fissures | ▭ Areas of Subsidence Concern |
| | — Physically Measured | |



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'Areas of Subsidence Concern' across the western Chino Basin are outlined as green polygons and indicate areas where land subsidence and ground fissuring pose significant risks to surface land uses and infrastructure.

The locations of historical ground fissures that formed in the 1990s due to differential land subsidence are depicted as red lines on the map and shown in the photographs below.



The map also depicts the GLMP monitoring network.

1. Wells equipped with transducers that record changes in hydraulic heads every 15 minutes.
2. Extensometer facilities that measure vertical aquifer-system deformation, including the:
 - Ayala Park Extensometer (APX),
 - Chino Creek Extensometer (CCX),
 - Pomona Extensometer (PX)
3. Benchmark monuments for periodic surveys of ground elevation, and in selected areas where ground fissuring is a threat, horizontal displacement via electronic distance measurements (EDM).

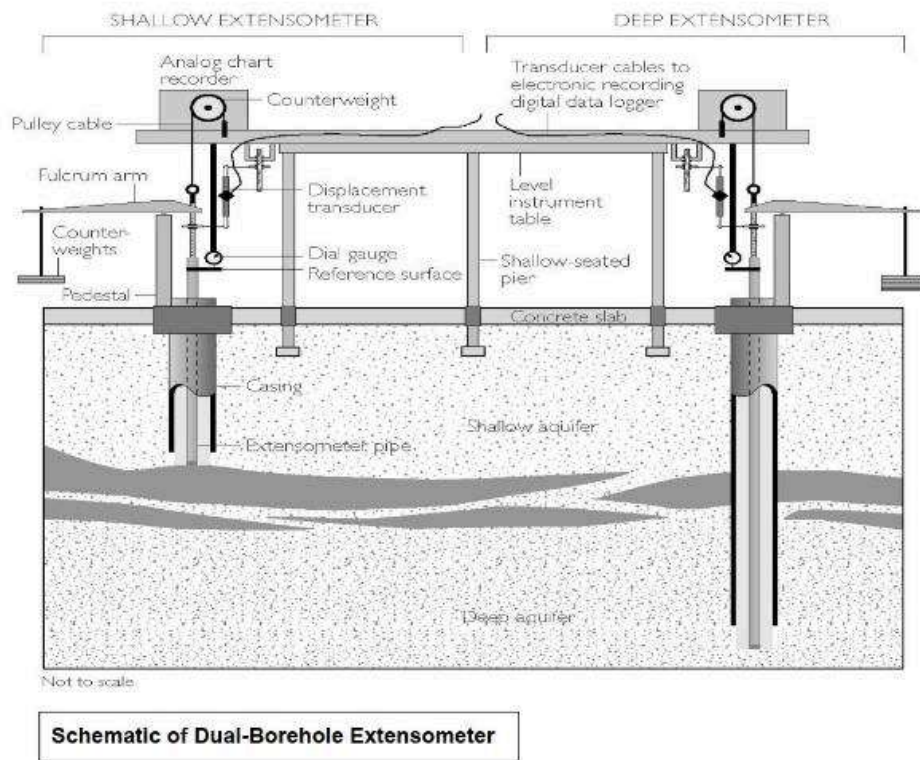
Transducer Wells



Image of a Transducer Well access vault in the Chino Basin

Monitoring of changes in hydraulic heads is important because these changes influence aquifer-system deformation and land subsidence. Watermaster monitors hydraulic heads once every 15 minutes at about 77 wells equipped with transducers across western Chino Basin.

Extensometers



Conceptual Schematic of a Dual-Nested Cable Extensometer in the Chino Basin

The diagram above shows a dual-nested borehole extensometer which is similar to the Ayala Park Extensometer (APX) facility. Two pipe extensometers are completed across two different aquifers. A linear potentiometer records the vertical displacement between the pipes and the conductor casings.

Watermaster measures depth-specific hydraulic heads and the vertical deformation of the aquifer system at three (3) borehole extensometer facilities:

Ayala Park Extensometer (APX)



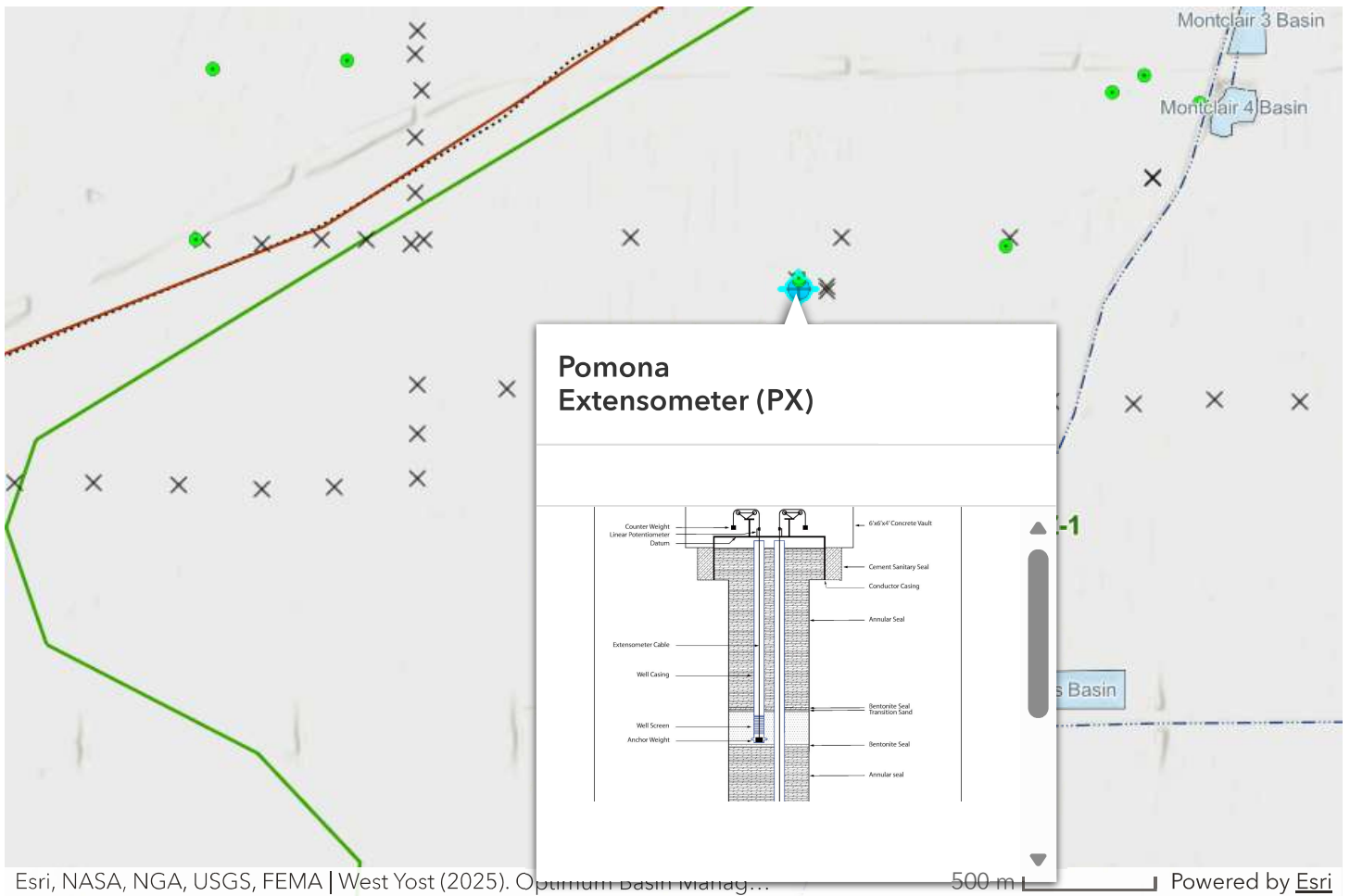
Image of the Ayala Park Extensometer (APX) access vault

Installed in 2003, APX was constructed in the City of Chino to monitor land subsidence near the historical fissures.

Chino Creek Extensometer (CCX)

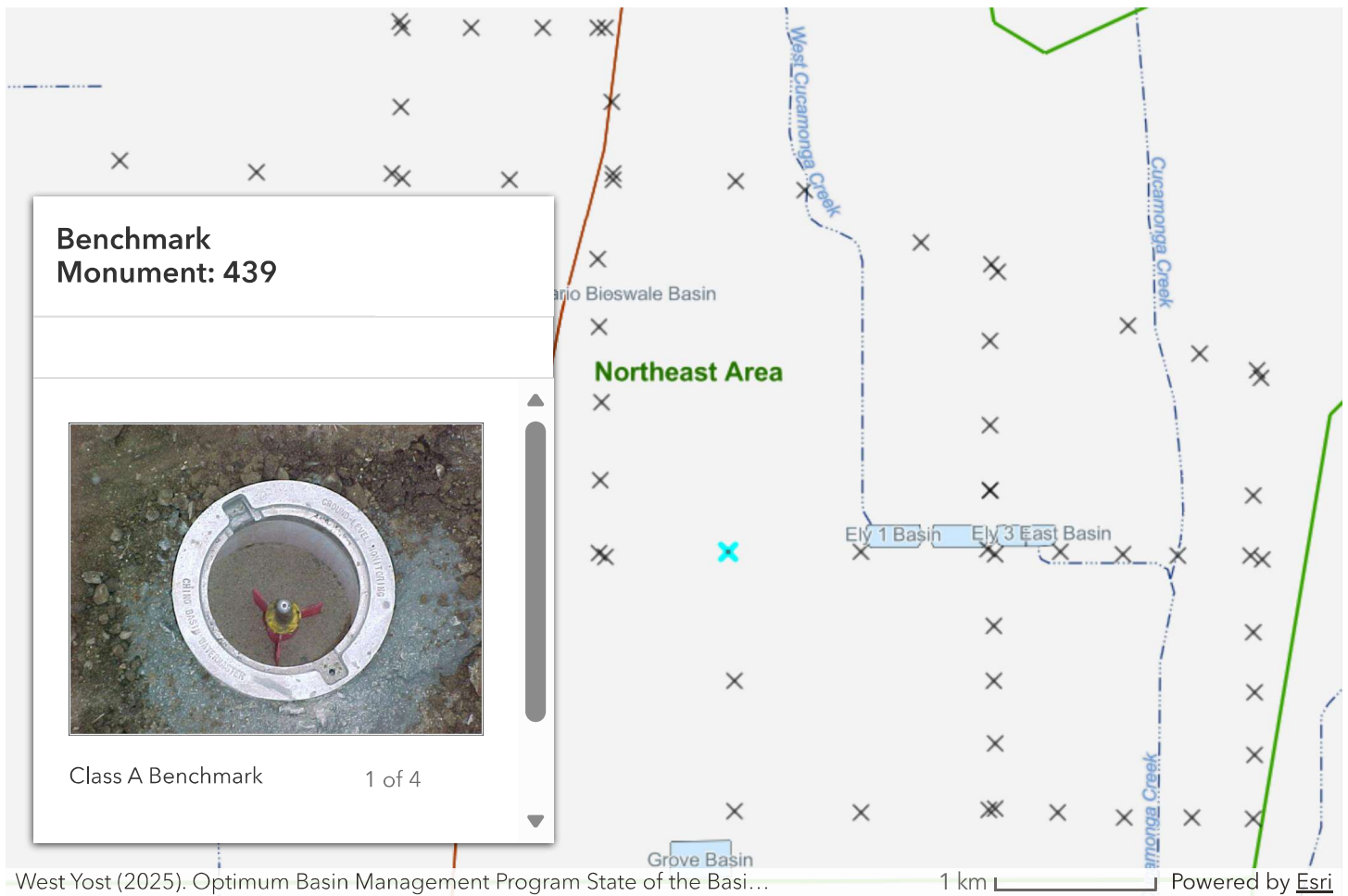
Installed in 2012, CCX was constructed in the City of Chino to study the effects of groundwater pumping on land subsidence near the Chino Creek Desalter Well Field.

Pomona Extensometer (PX)



Installed in 2019, PX was constructed in the City of Pomona to aid in developing a Subsidence Management Plan for Northwest MZ-1.

Benchmarks



Watermaster monitors vertical ground motion through traditional leveling surveys at benchmark monuments. These surveys typically occur annually in Northwest MZ1 and every five to ten years in the other Areas of Subsidence Concern.

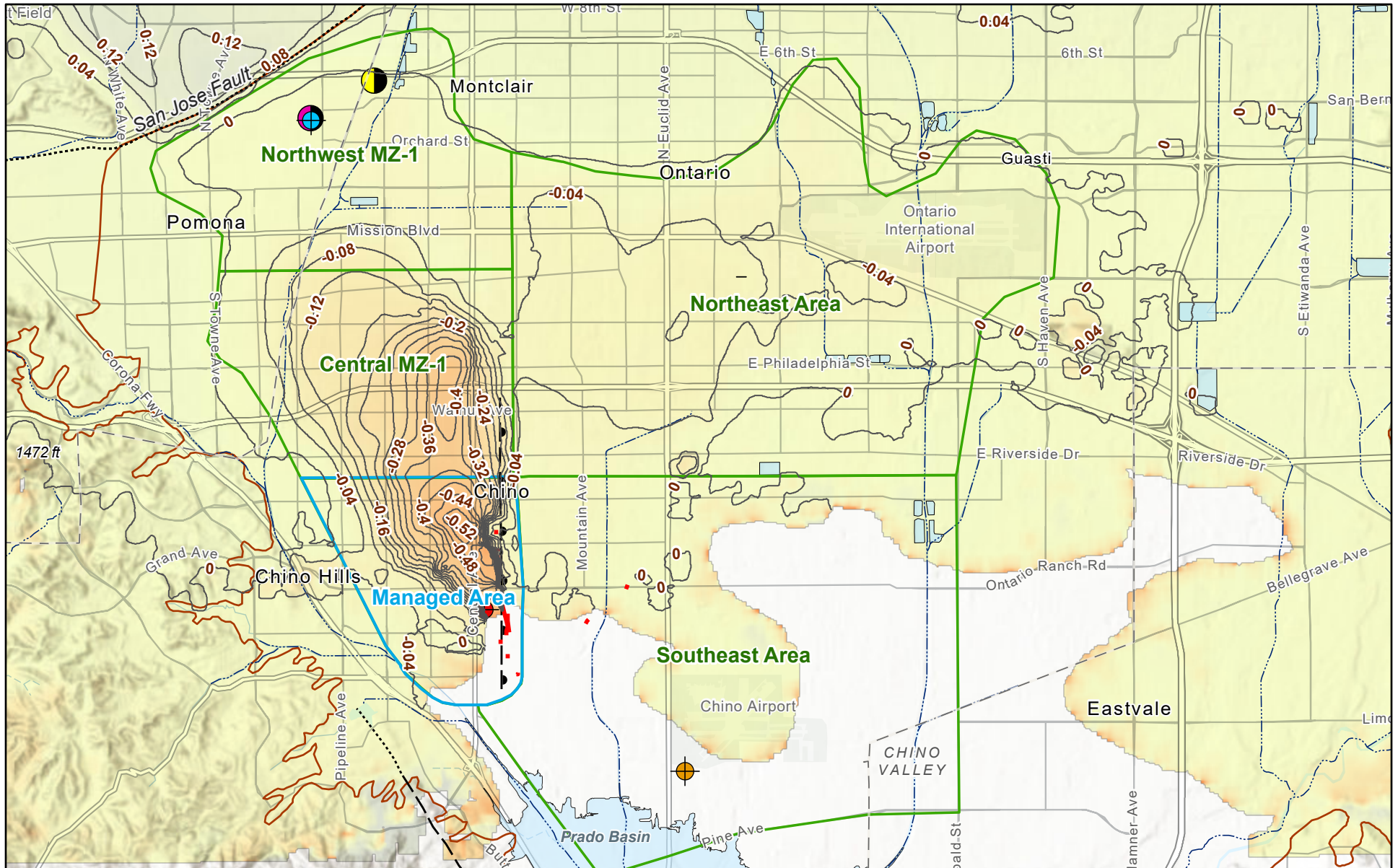
Watermaster also monitors horizontal ground motion in areas experiencing differential land subsidence to understand potential threats for ground fissuring. Electronic distance measurements (EDM) between benchmark monuments are conducted in the historical fissuring zone in the MZ1 Managed Area and the San Jose Fault Zone in Northwest MZ1. Prior San Jose Fault Zone EDM surveys (2013-2021) showed elastic behavior in horizontal strain, indicating that less frequent EDM surveys are needed.

Interferometric Synthetic Aperture Radar (InSAR)

Interferometric Synthetic Aperture Radar (InSAR) data are used to compare vertical ground motion between individual SAR images that are collected approximately every two months. These datasets indicate land subsidence has primarily occurred across the western portion the Chino Basin.

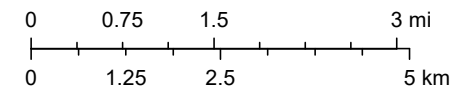
The maps below show historical vertical ground motion, as measured by InSAR, during the 1990s and the latest measurements from 2011 to 2024.

InSAR of Change in Ground-Level from 1993 to 1995



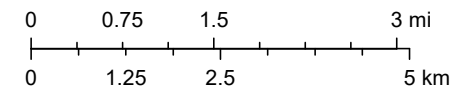
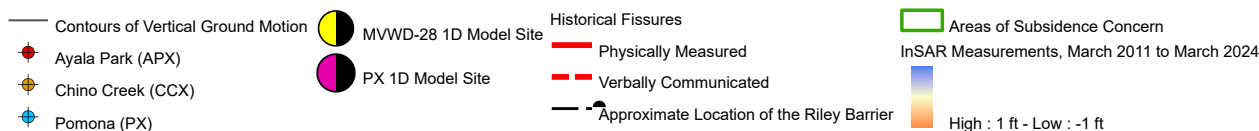
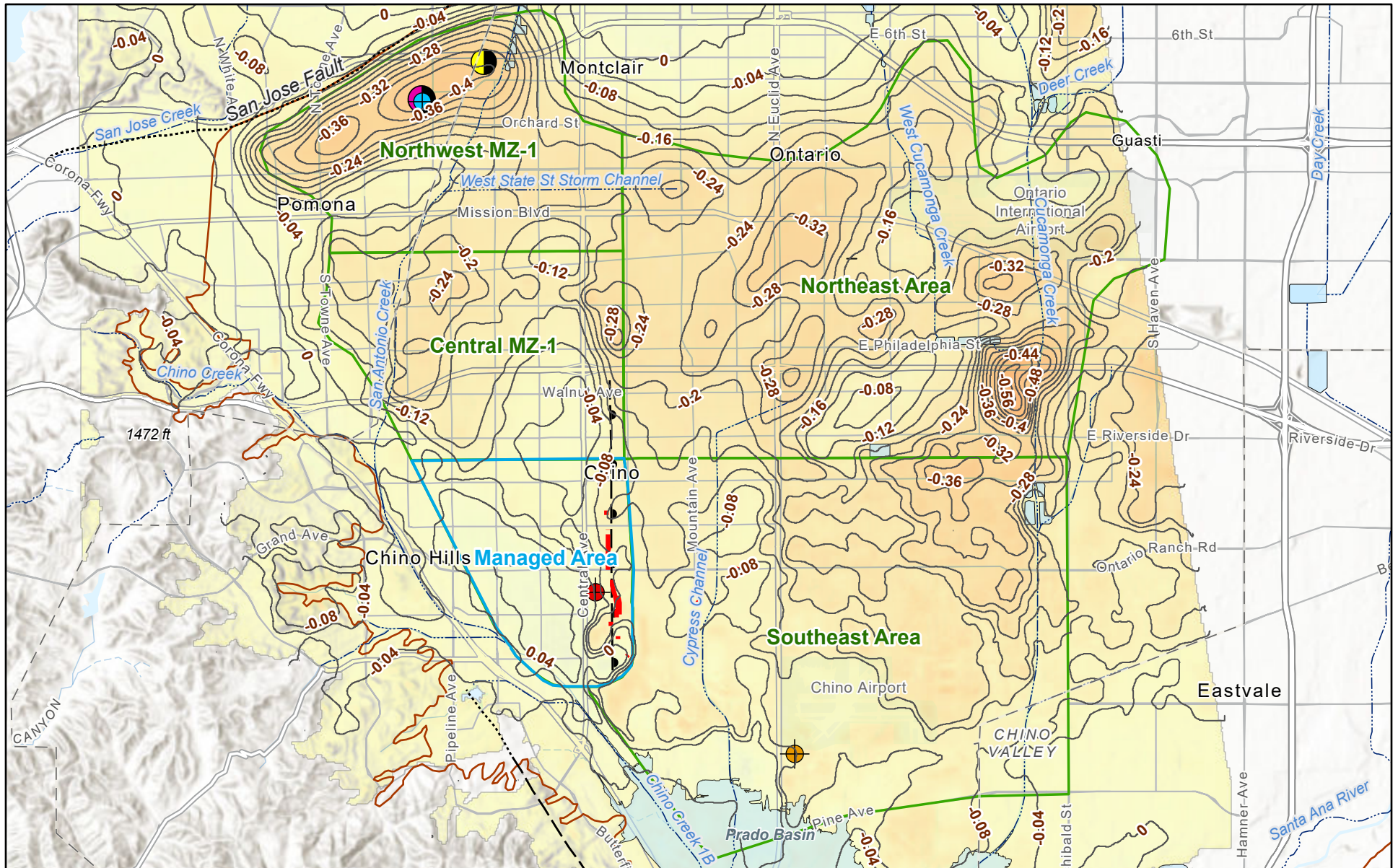
- Contours of Ground Surface Motion (ft), 1993 to 1995
- PX 1D Model Site
- Ayala Park (APX)
- Chino Creek (CCX)
- Pomona (PX)
- MVWD-28 1D Model Site
- Historical Fissures
- Physically Measured
- Verbally Communicated
- Approximate Location of the Riley Barrier

Areas of Subsidence Concern
InSAR Measurements, October 1993 to December 1995
High : 1 ft - Low : -1 ft



Esri, NASA, NGA, USGS, Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community, West

InSAR of Change in Ground-Level from 2011 to 2024



Esri, NASA, NGA, USGS, Sources: Esri, TomTom, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community, West

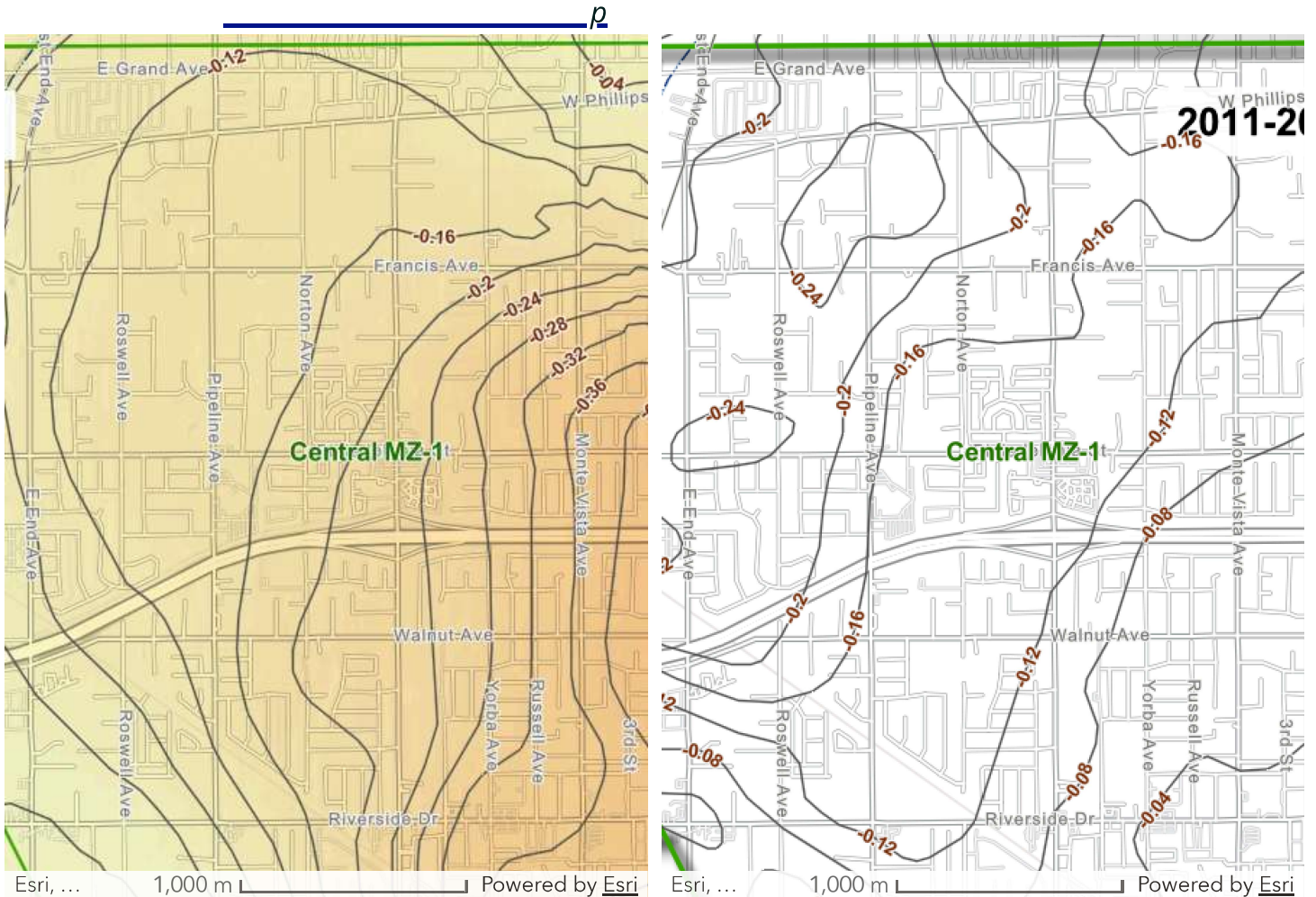
MZ-1 Managed Area

- Pumping from the confined, deep aquifer system in this area during the 1990s caused hydraulic heads to decline coinciding with high rates of land subsidence. About 2.5 feet of subsidence occurred from 1987 to 1999 (as measured by the benchmark surveys), and ground fissures appeared within the City of Chino. Additionally, InSAR data from 1993 to 1995 indicated about 0.56 feet of subsidence during that period.
- Since the early 2000s, groundwater pumping decreased, hydraulic heads in the deep aquifer system recovered, and the rate of land subsidence declined significantly within the Managed Area.
- Direct use of recycled water, beginning in 1997, may have contributed to decreased groundwater pumping in the Managed Area, which in turn, may have contributed to observed increases in hydraulic heads.
- The InSAR from 2011 through 2024 shows minor land subsidence occurred across most of the Managed Area (approximately -0.04 feet), which indicates that subsidence is being successfully managed in this area.

Southeast Area

- The InSAR data collected during the 1990s is somewhat incoherent across much of the Southeast Area, primarily due to the agricultural land cover at the time, which lacked stable, consistent radar reflectors. However, increased urbanization in this area and advancements in InSAR filtering techniques have significantly enhanced data quality and processing capabilities in data collected between 2011 and 2024.
- From 2011 to 2024, maximum downward ground motion of about 0.4 feet was estimated by InSAR in the northeastern part of the area. This gradual downward ground motion most likely represents the delayed drainage and compaction of aquitards due to the historical head declines that occurred prior to the Judgment.
- In general, the aquifer system deformation recorded at the CCX is minor and elastic, which is consistent with the estimates of vertical ground motion as measured by InSAR and traditional ground level surveys.

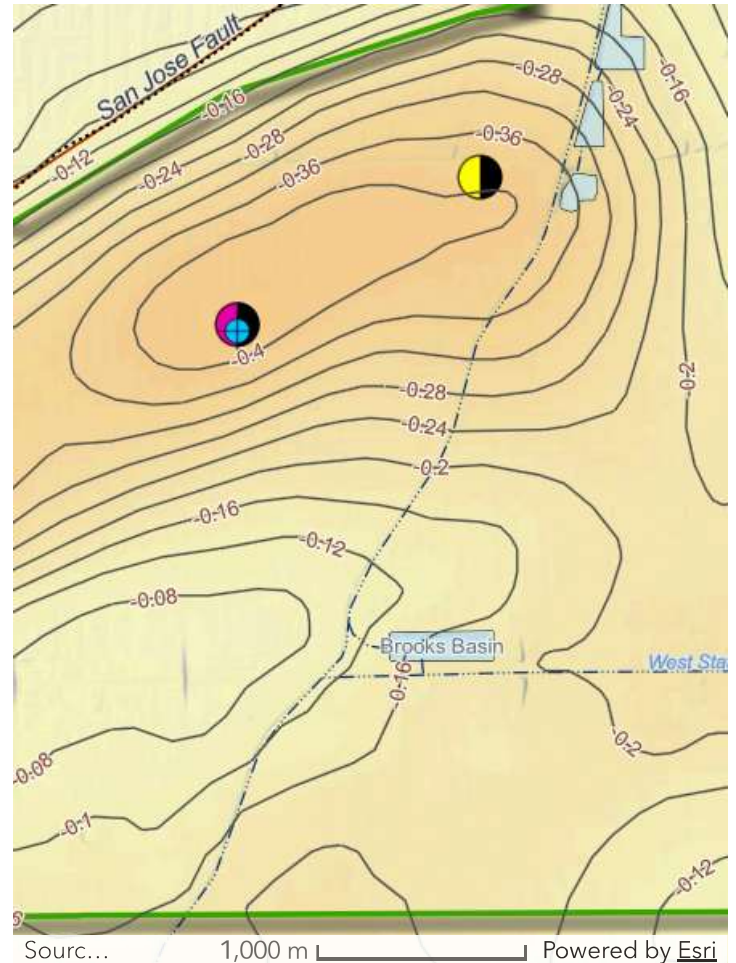
Central MZ-1 Area



- During the development of the Interim Management Plan, a previously unidentified barrier to groundwater flow—now referred to as the Riley Barrier and shown as a dashed black line on the map—was discovered within the deep aquifer system. This barrier aligns with the historical fissuring zone in the Managed Area.
- InSAR ground motion estimates suggest that the Riley Barrier may extend from the Managed Area northward into Central MZ-1. This inference is supported by a steep subsidence gradient observed along Central Avenue, where InSAR data from the 1990s indicates approximately 0.4 feet of subsidence.

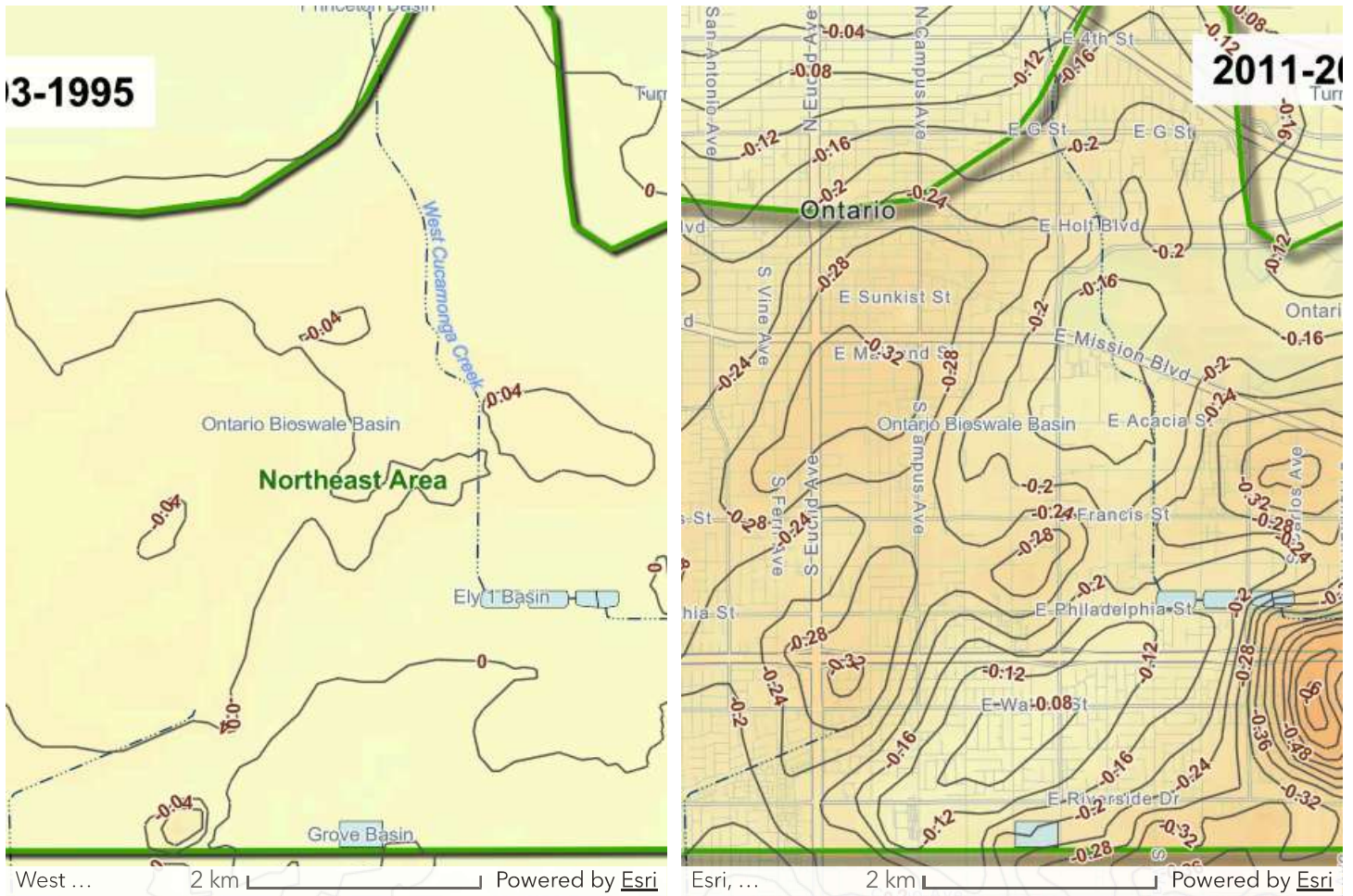
- To mitigate differential subsidence and reduce the risk of ground fissuring along the Riley Barrier, pumping from the deep aquifer system within the Managed Area was restricted following the implementation of an adaptive Subsidence Management Plan.
- This management strategy is supported by InSAR data from 2011 to 2024, which shows the greatest magnitude of subsidence—approximately 0.25 feet, or an average of 0.02 feet per year—occurring away from the Riley Barrier, in the western portion of Central MZ-1. During this period, hydraulic heads in the area remained stable, suggesting that the observed subsidence was largely permanent and likely resulted from delayed aquitard drainage in response to historical declines in hydraulic head between 1930 and 1978.

Northwest MZ-1 Area



- Geologic faults in the aquifer system can act as barriers to groundwater flow, leading to differential subsidence. InSAR data shows a steep gradient of subsidence across the San Jose Fault in the City of Pomona, indicating horizontal strain in shallow sediments, which can lead to ground fissuring and threaten the overlying infrastructure.
- From 1992 to 2024, a maximum of about 1.4 feet of subsidence occurred in this area—an average rate of about -0.04 feet/year. More recently, from 2011 to 2024, subsidence rates have gradually been reduced as hydraulic heads have remained relatively stable or increased. This persistent, but gradually reducing subsidence under stable or increasing heads, is likely due to the permanent compaction of thick, slow-draining aquitards in response to historical hydraulic head declines from 1930 to 1978.
- Since the subsidence has been occurring in a differential spatial pattern, groundwater fissuring is a concern, and hence, the Watermaster has been implementing a multi-year effort to develop a Subsidence Management Plan for Northwest MZ1. This effort has involved installation of the Pomona Extensometer monitoring facility, the construction and calibration of 1D compaction models, and the use of the 1D models to develop guidance criteria for heads in the deeper portions of the underlying aquifer system to minimize or abate future subsidence. This work is ongoing and is anticipated to be complete in 2027.

Northeast Area



- InSAR data from the 1990s indicates minimal subsidence in the Northeast Area. In contrast, between 2011 and 2024, InSAR measurements show approximately -0.24 feet of vertical ground motion in this region. A notable exception is the area between Vineyard and Archibald Avenues, where subsidence reached up to -0.6 feet. This localized feature, known as the Whispering Lakes Subsidence Feature, is characterized by steep subsidence gradients along its edges, which may pose a threat for ground fissuring.

- A 2022 investigation of the Whispering Lakes Subsidence Feature documented historical land uses, including agriculture, sewage disposal, and recreational (golf courses and parks) activities. These uses could have disturbed and modified shallow soils, which could have resulted in gradual consolidation and subsidence. These observations strongly suggest that the golf course and/or its prior land uses are related to the subsidence feature, and that shallow soil consolidation is responsible for the land subsidence. If true, groundwater management will have no effect on the Whispering Lakes Subsidence Feature. Watermaster continues to collect high-resolution InSAR data and aims to expand groundwater level monitoring in this area to further understand the subsidence mechanism(s).

Land Subsidence and Groundwater Management in the Chino Basin

The largely urban land uses and sensitive infrastructure across the Chino Basin make the management of land subsidence a critical component of the OBMP. Groundwater pumping and artificial recharge are the main factors that affect hydraulic heads and aquifer-system compaction (i.e., land subsidence). The Watermaster's computer-simulation models, included the Chino Valley Model and the 1D compaction models, are key tools that are being used to better understand the potential for future subsidence and to develop groundwater management plans to minimize or abate the occurrence of future subsidence.

More information on the Ground-Level Monitoring Program can be found in annual reports prepared by the Watermaster Engineer.

Attachment A

Time-Series Charts

Groundwater Elevation, Production, and Managed Aquifer Recharge

Chino-5

Groundwater Elevation at Well Chino-5

Groundwater Elevation
(ft-amsl)

650
625
600
575
550

Groundwater Production
(afy by fiscal year)

0
20,000
40,000
60,000
80,000

Managed Recharge
(afy by fiscal year)

0
20,000
40,000
60,000

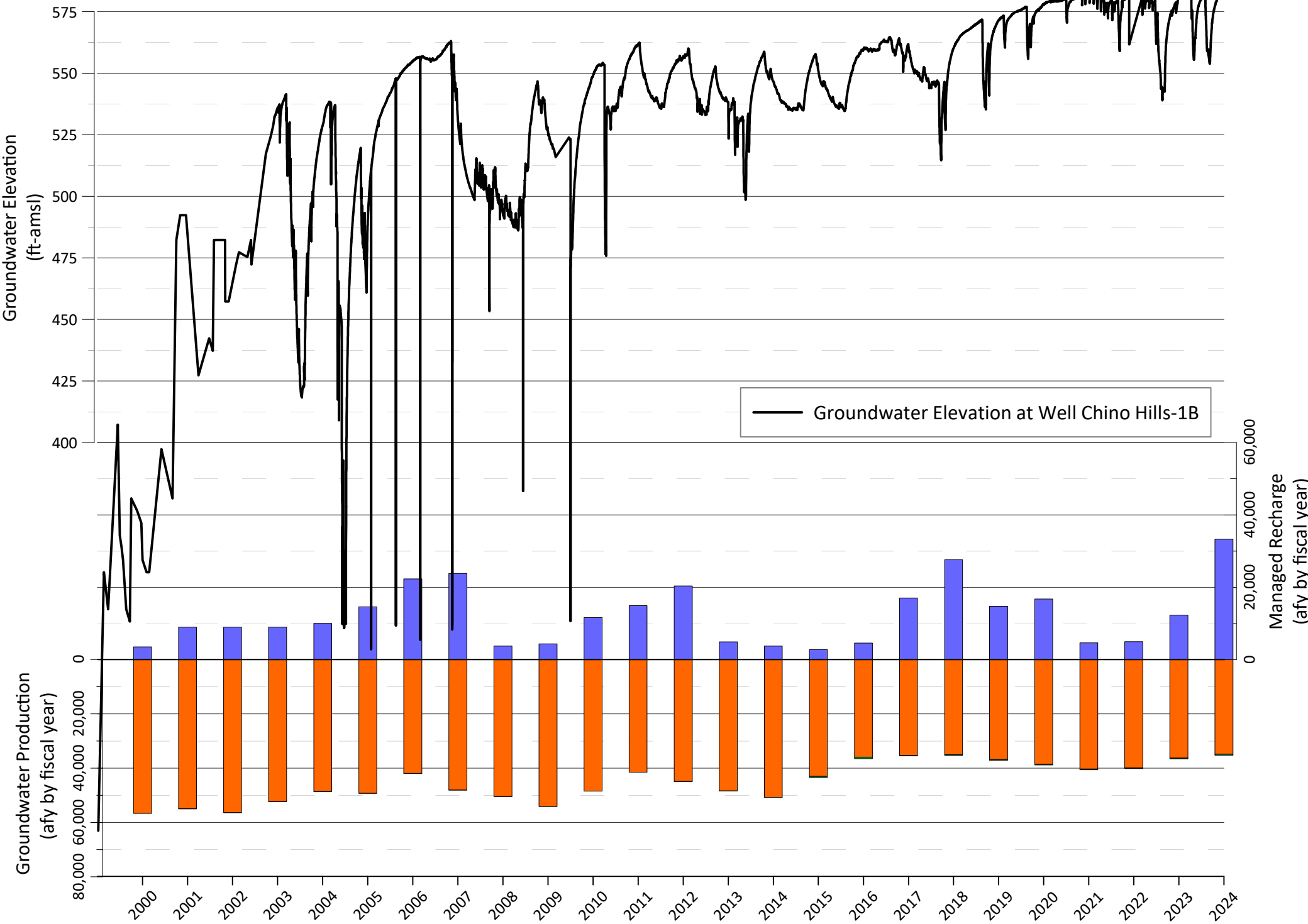
Managed Recharge in MZ-1

Groundwater Production in MZ-1

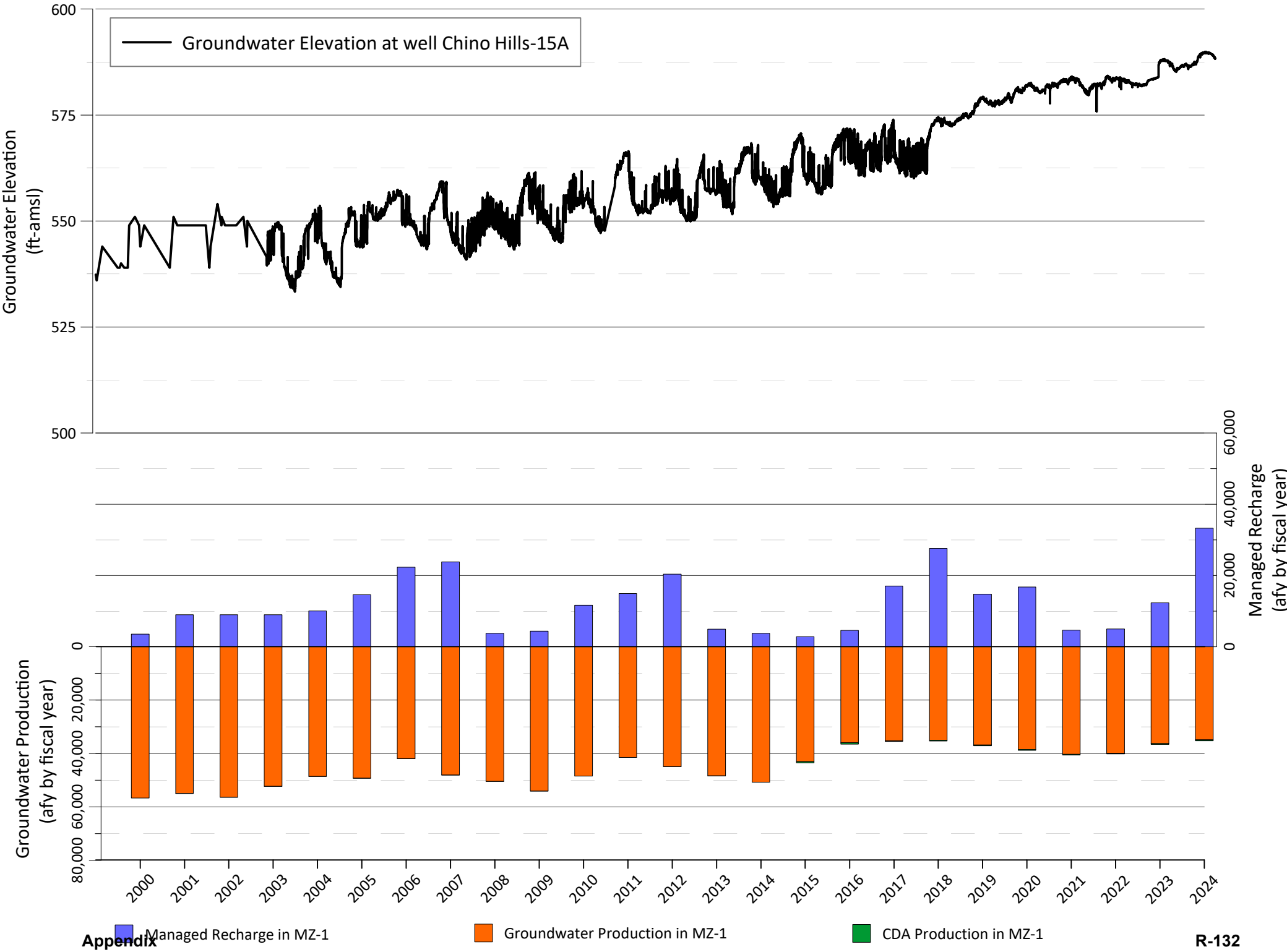
CDA Production in MZ-1

2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2024

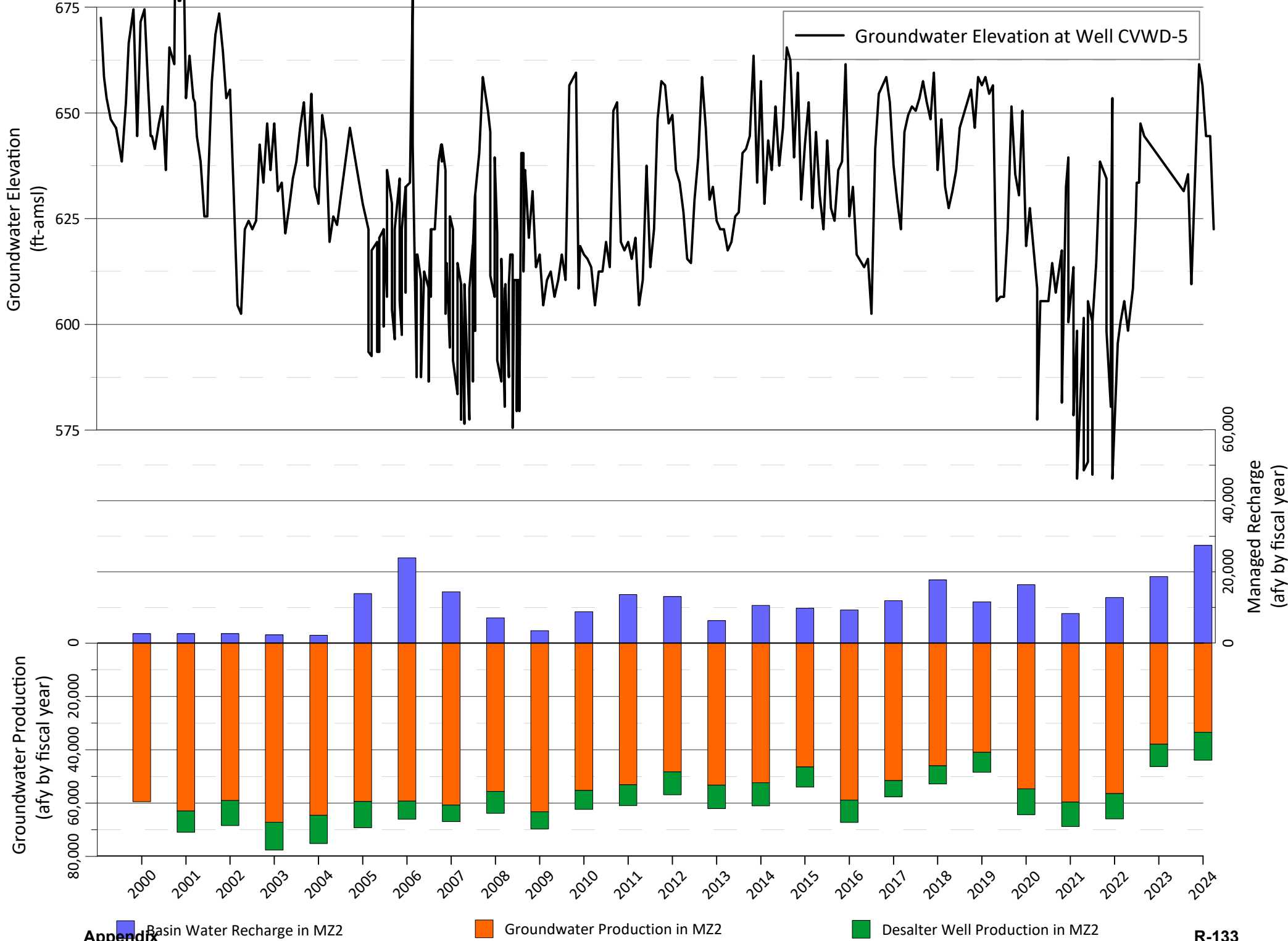
Chino Hills-1B



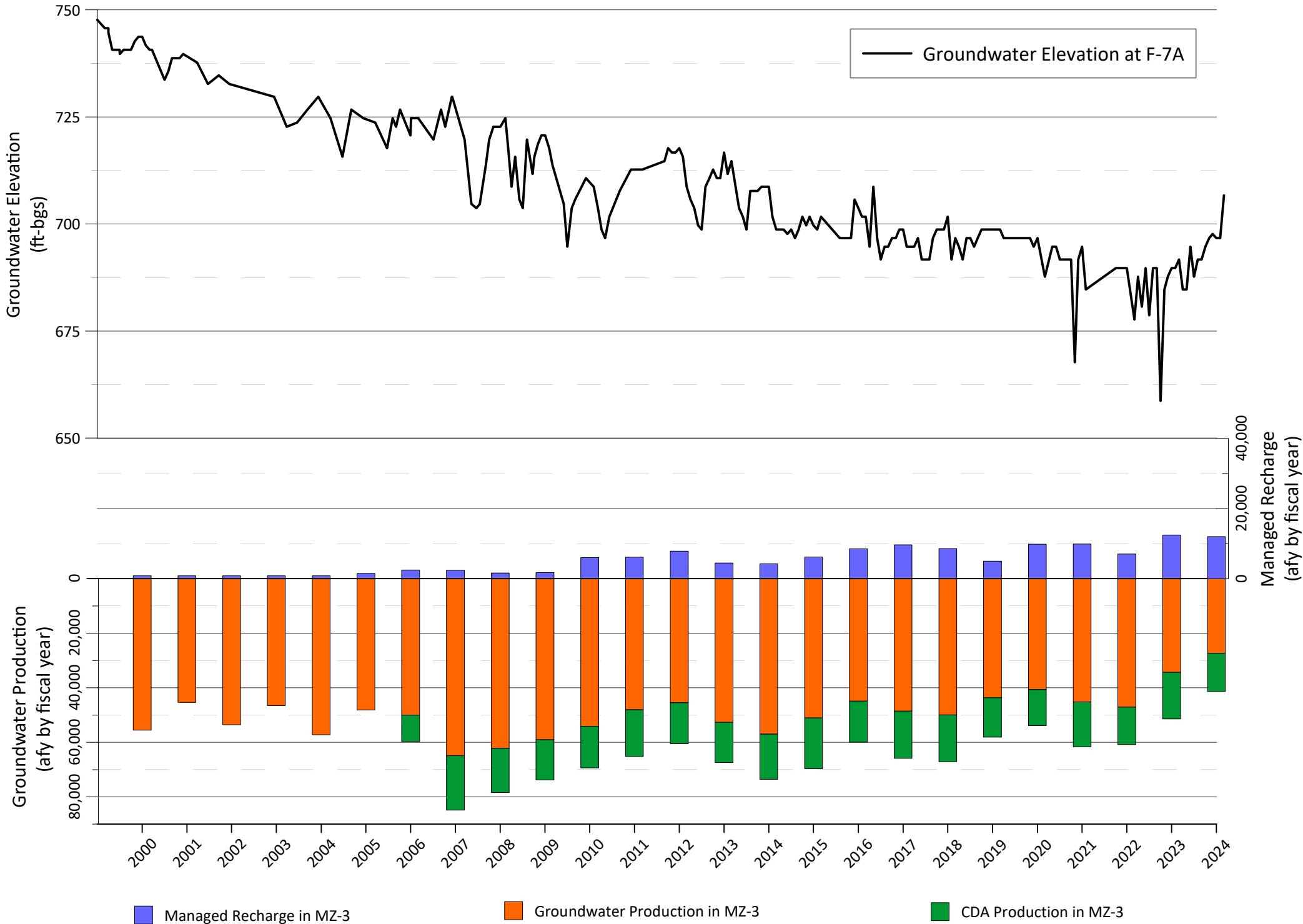
Chino Hills-15A



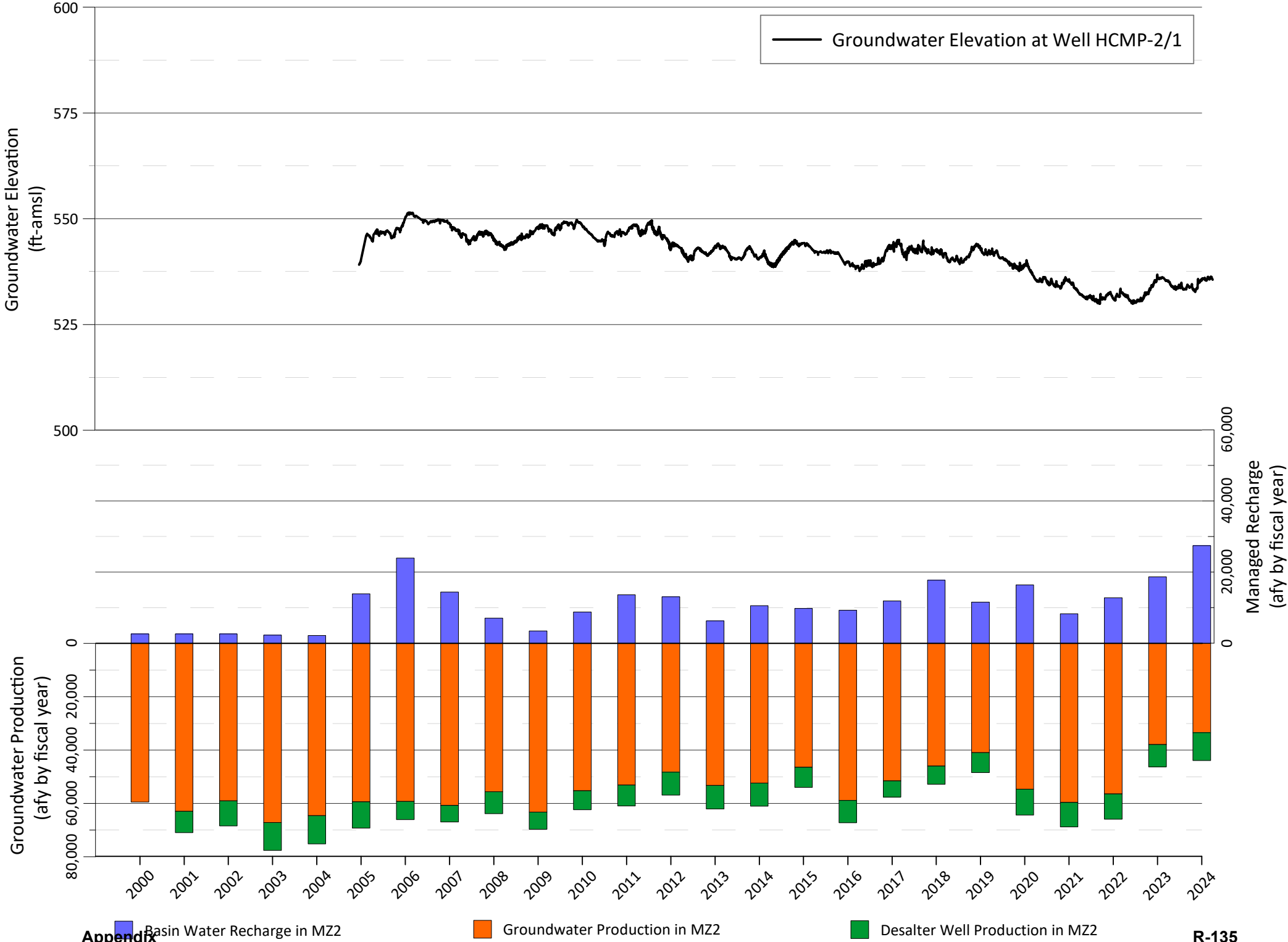
CVWD-5



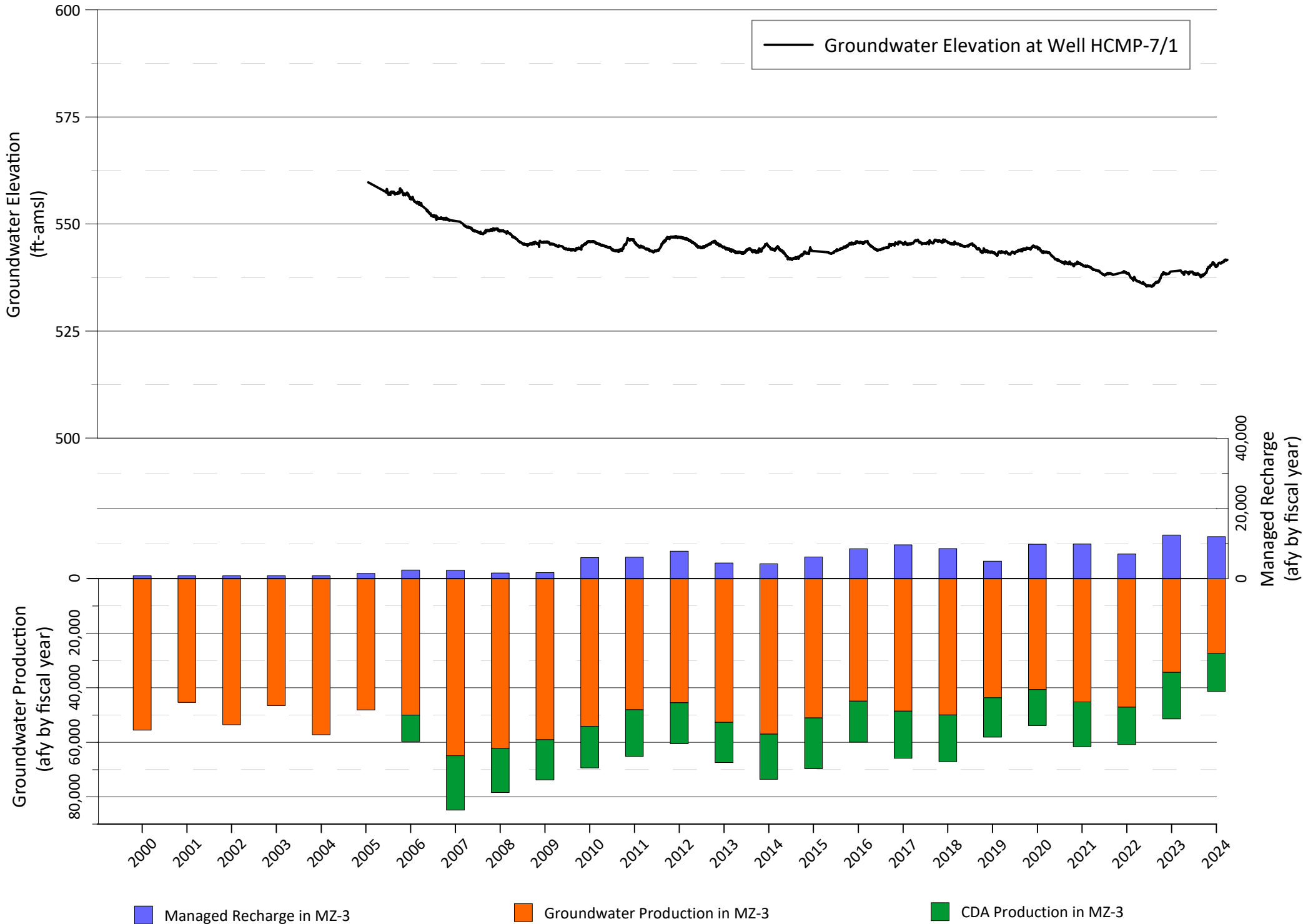
F-7A



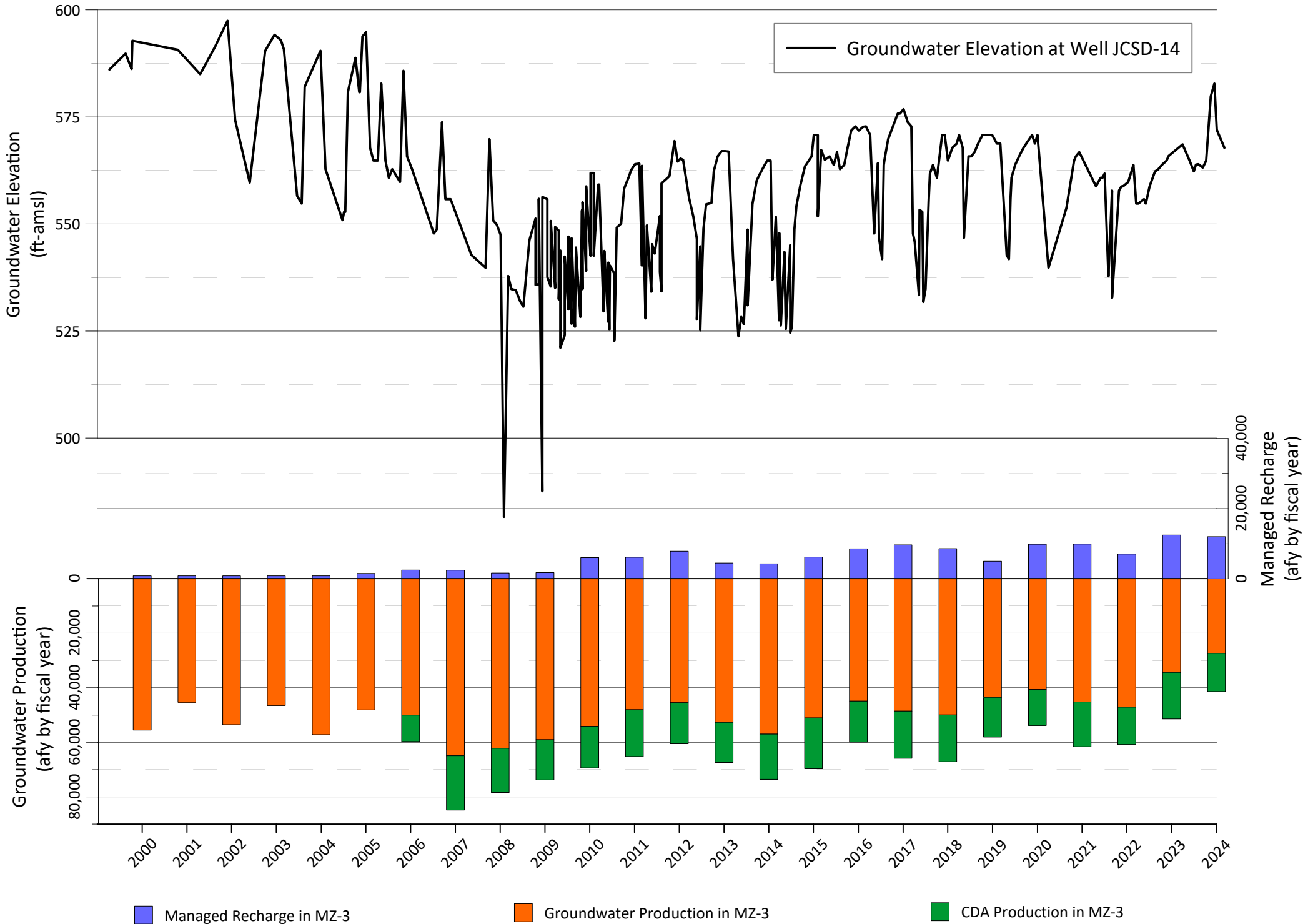
HCMP-2/1



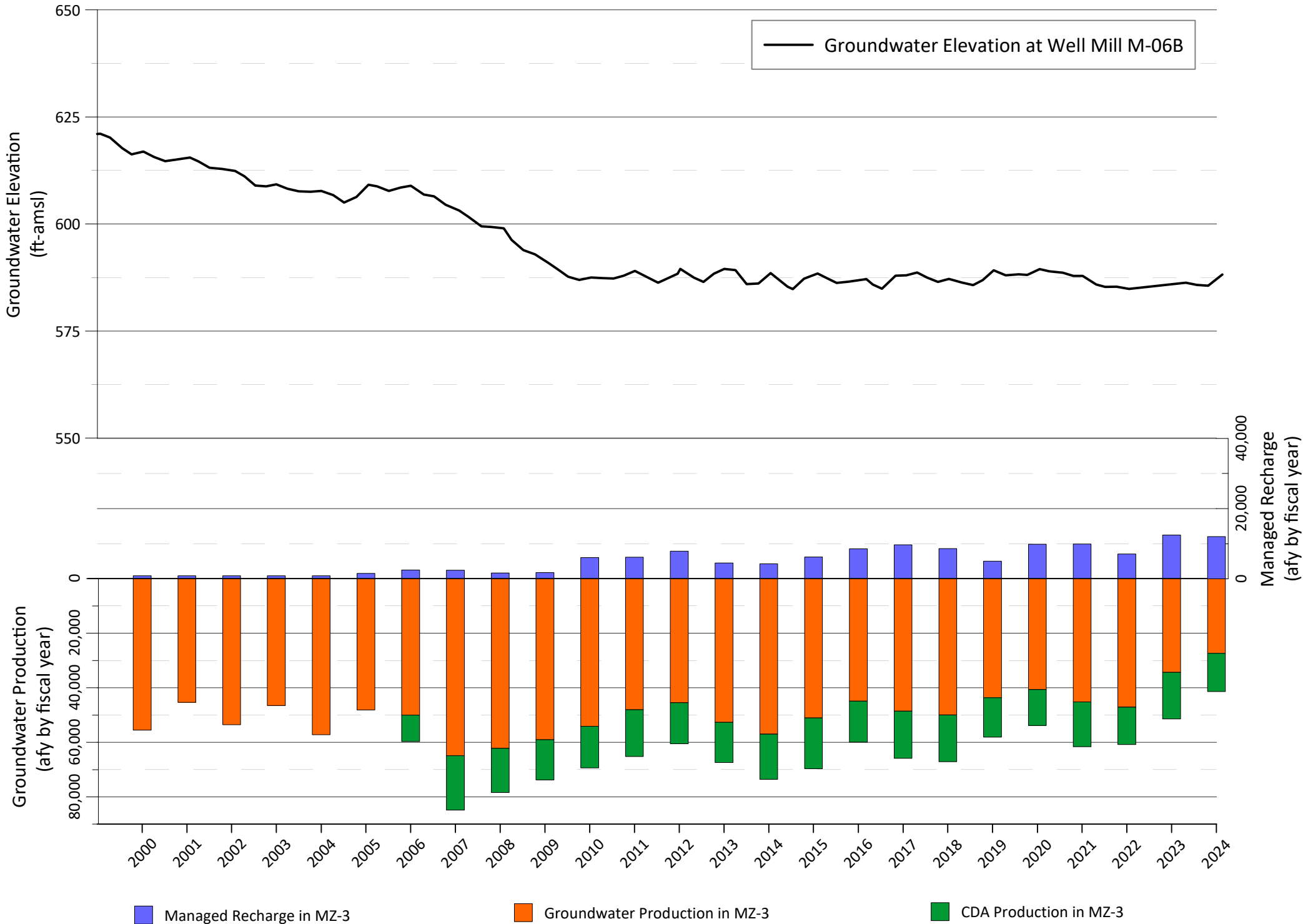
HCMP-7/1



JCSD-14



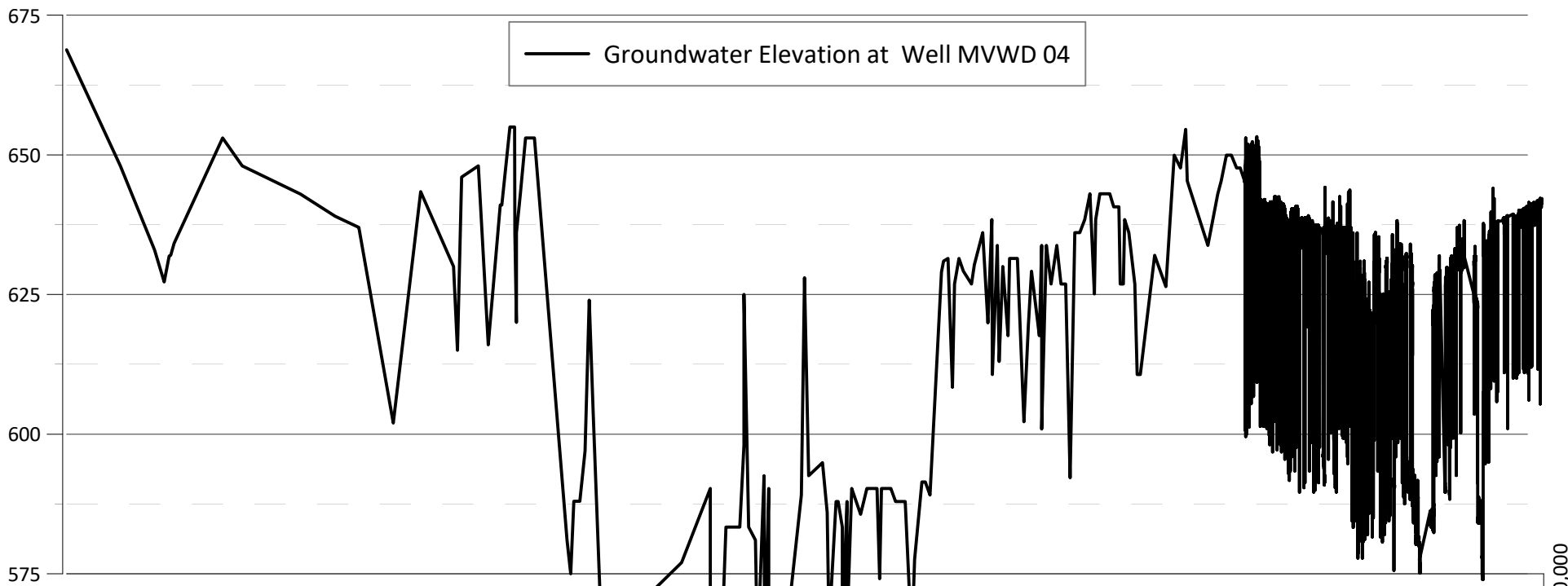
Mill M-06B



MVWD-04

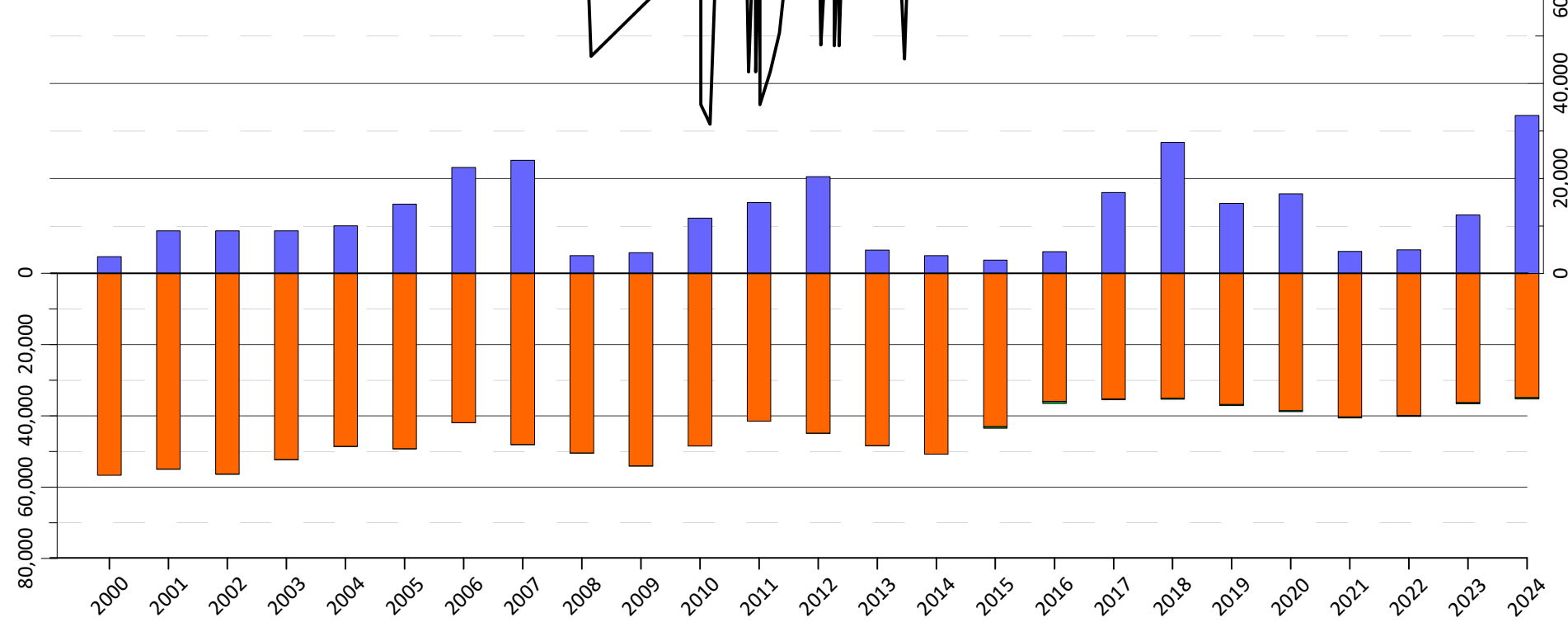
Groundwater Elevation at Well MVWD 04

Groundwater Elevation
(ft-amsl)



Groundwater Production
(afy by fiscal year)

Managed Recharge
(afy by fiscal year)

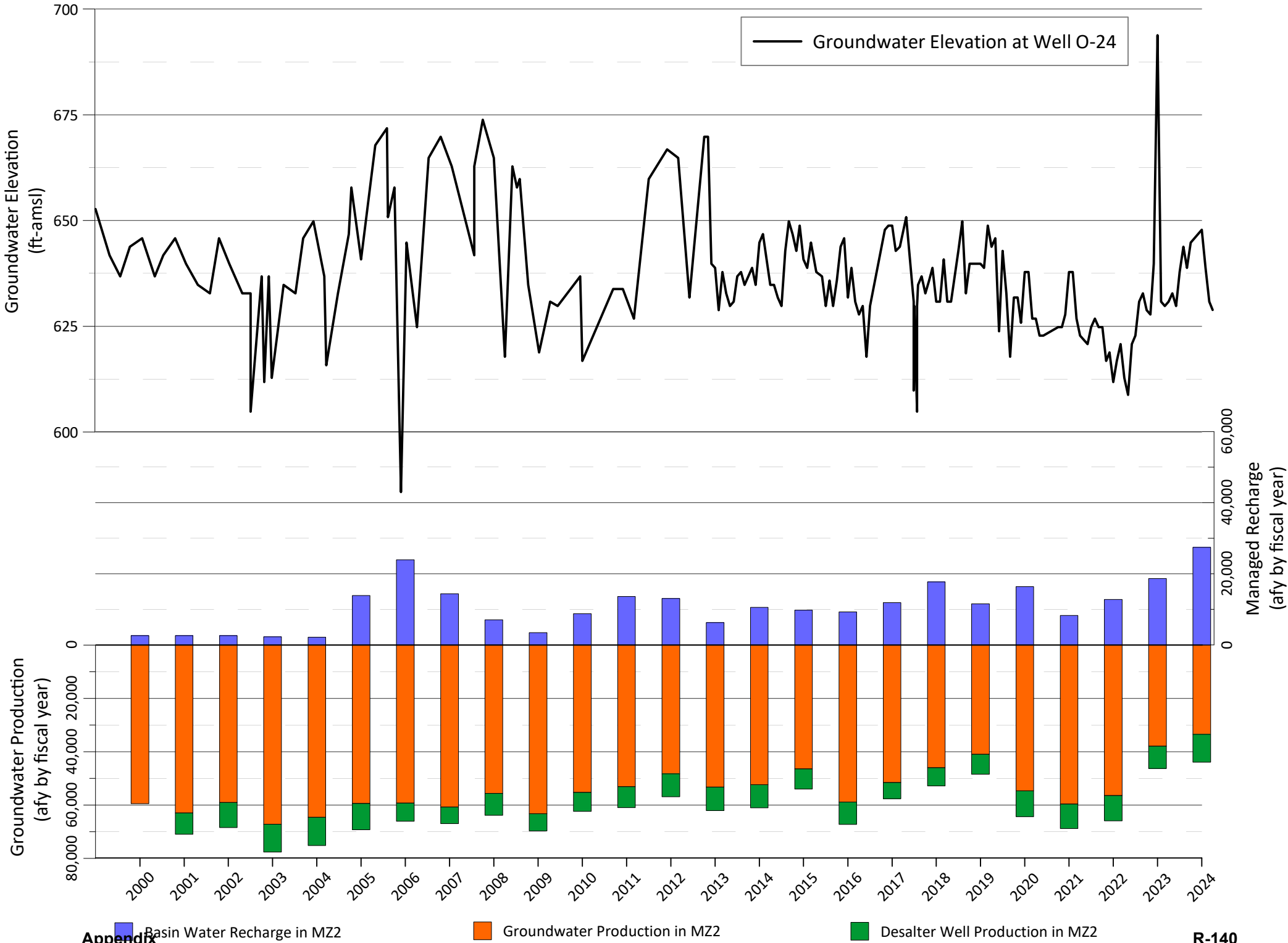


Managed Recharge in MZ-1

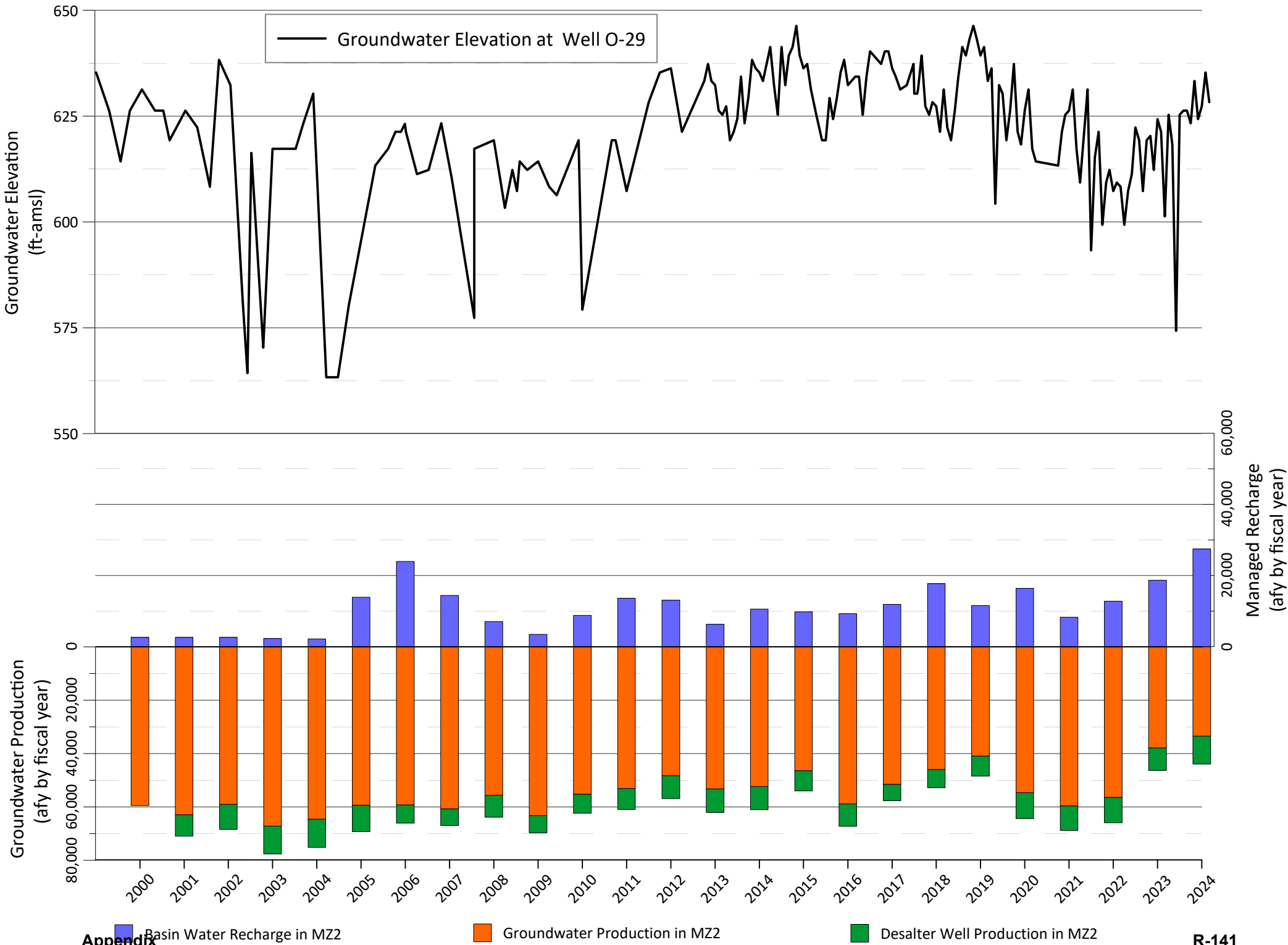
Groundwater Production in MZ-1

CDA Production in MZ-1

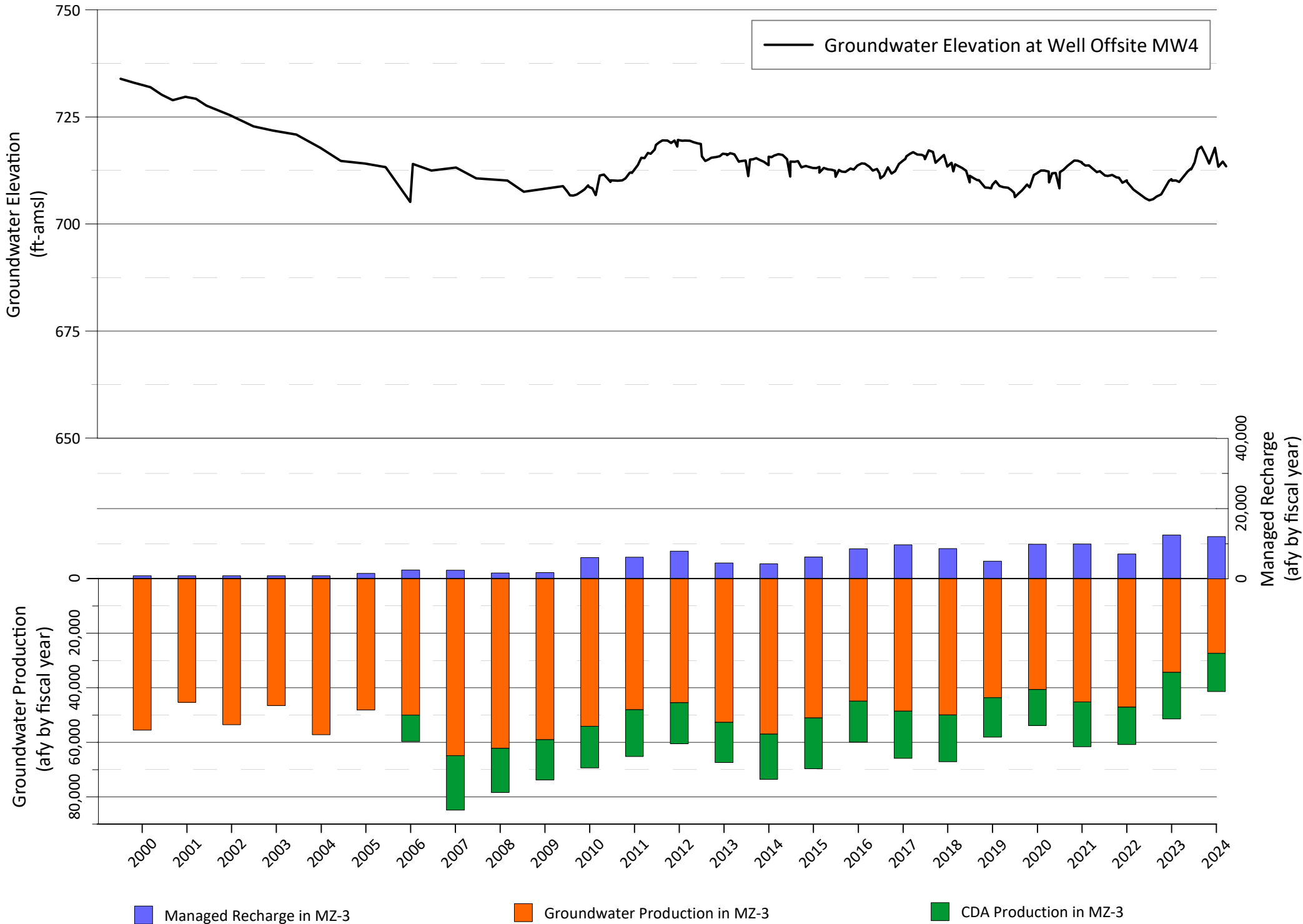
O-24



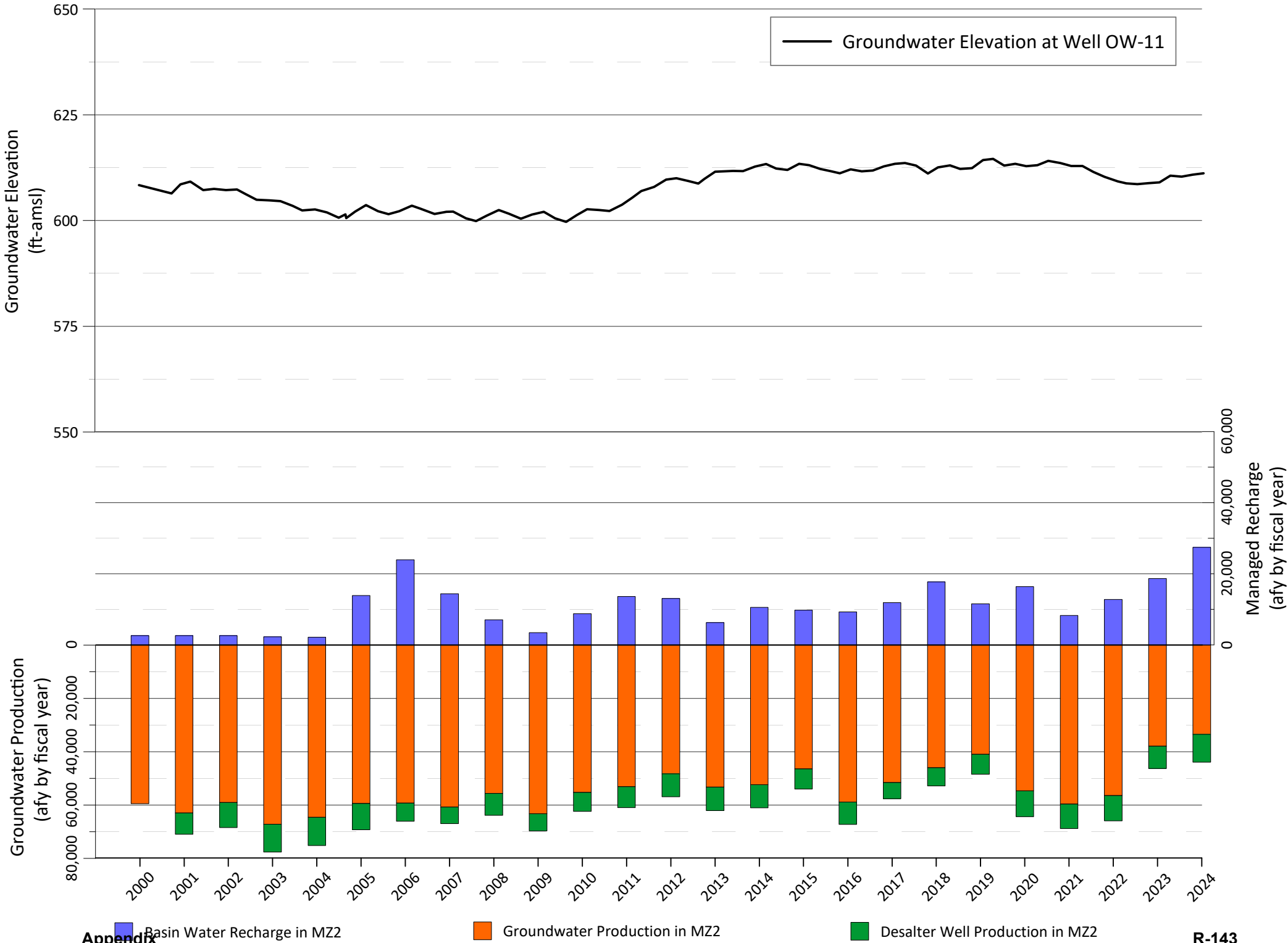
O-29



Offsite MW4



OW-11



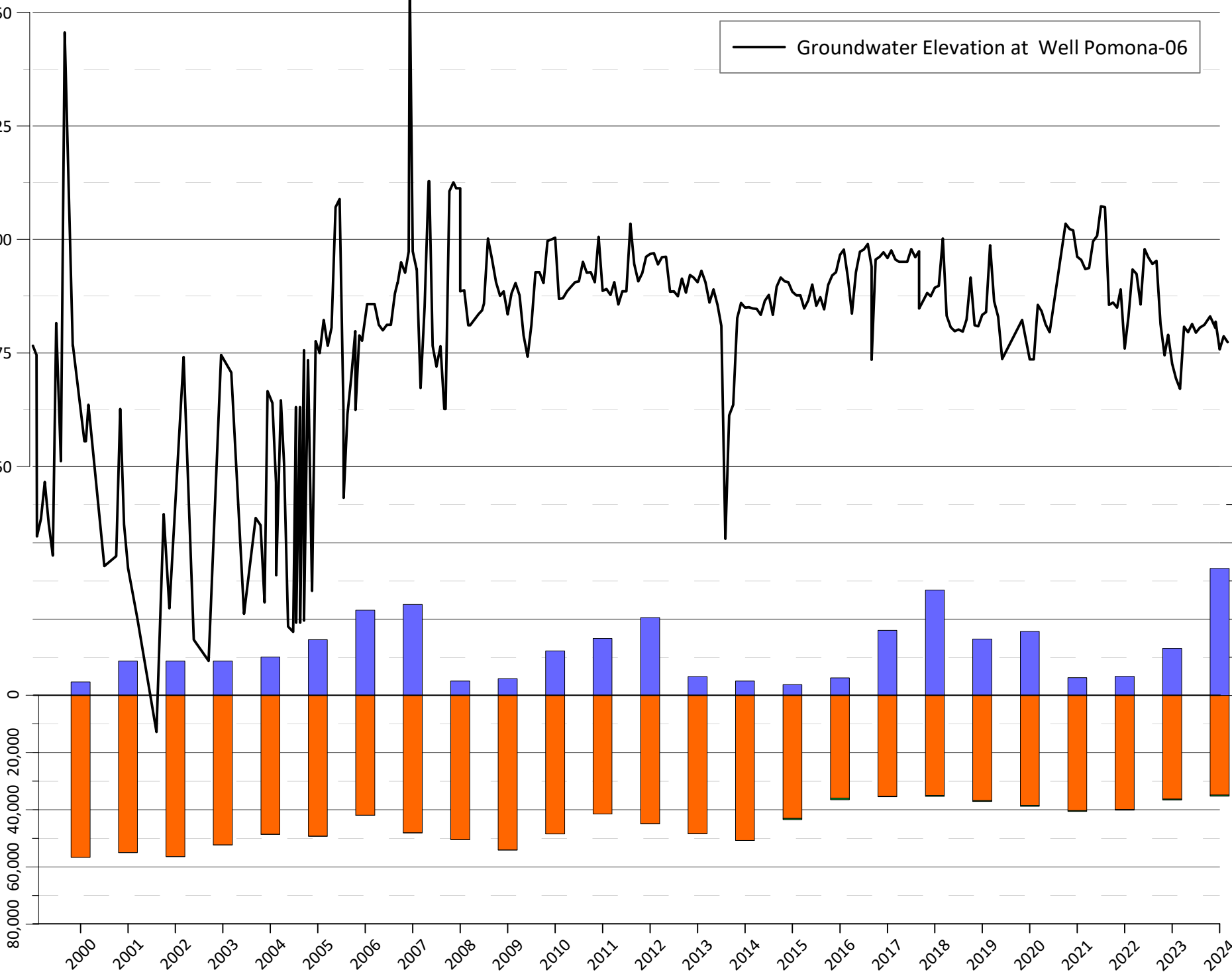
Pomona-06

Groundwater Elevation at Well Pomona-06

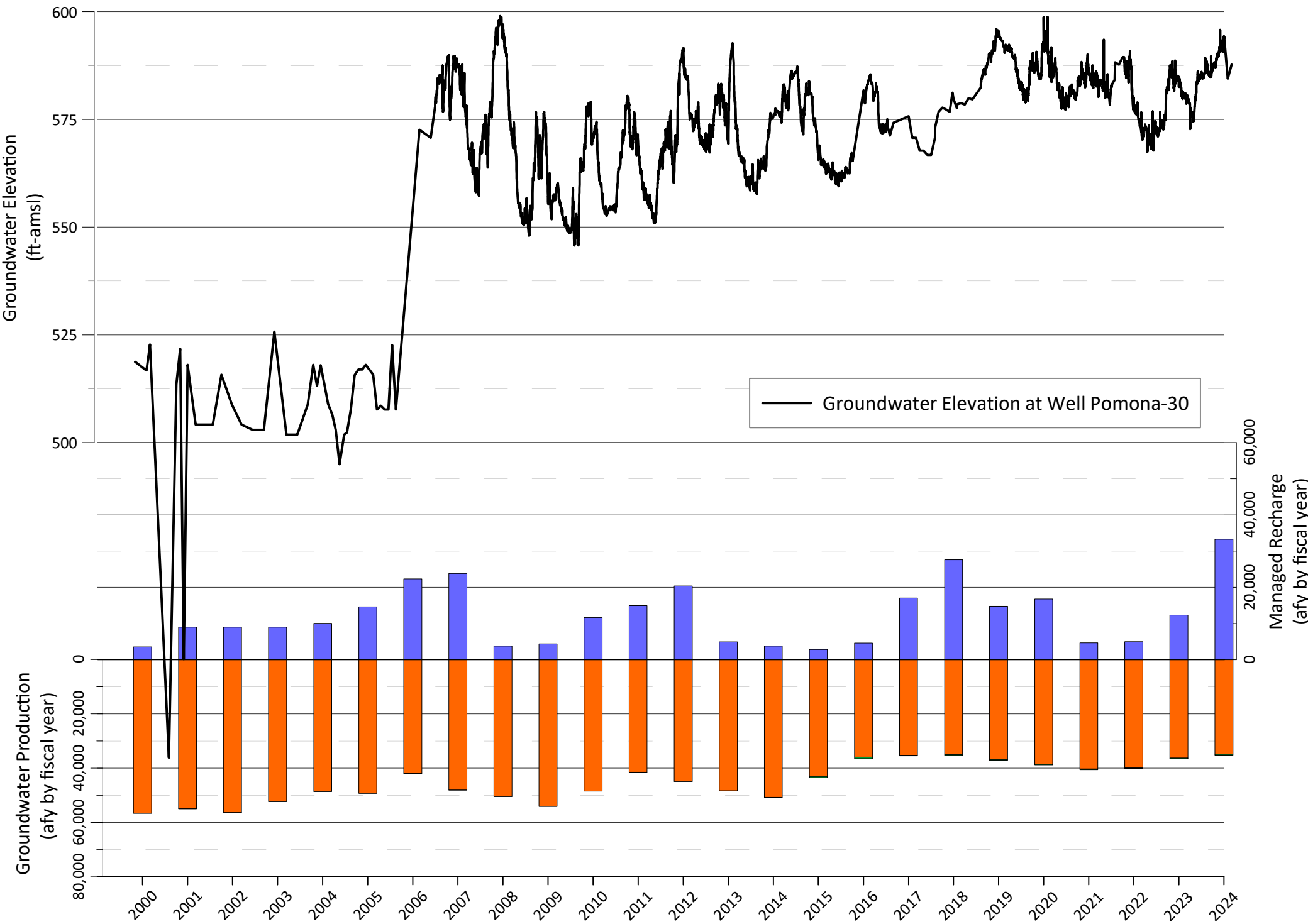
Groundwater Elevation
(ft-amsl)

Groundwater Production
(afy by fiscal year)

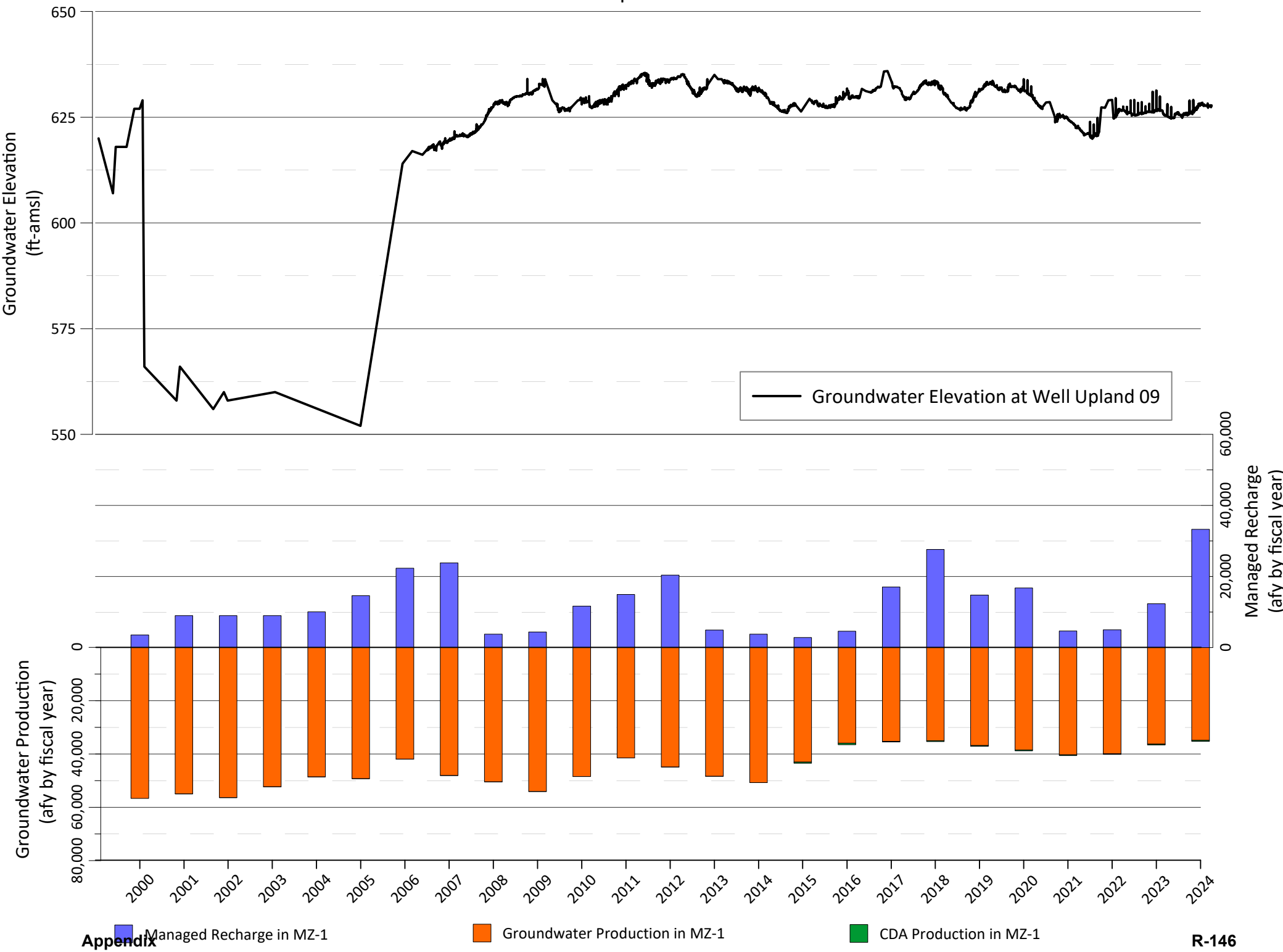
Managed Recharge
(afy by fiscal year)



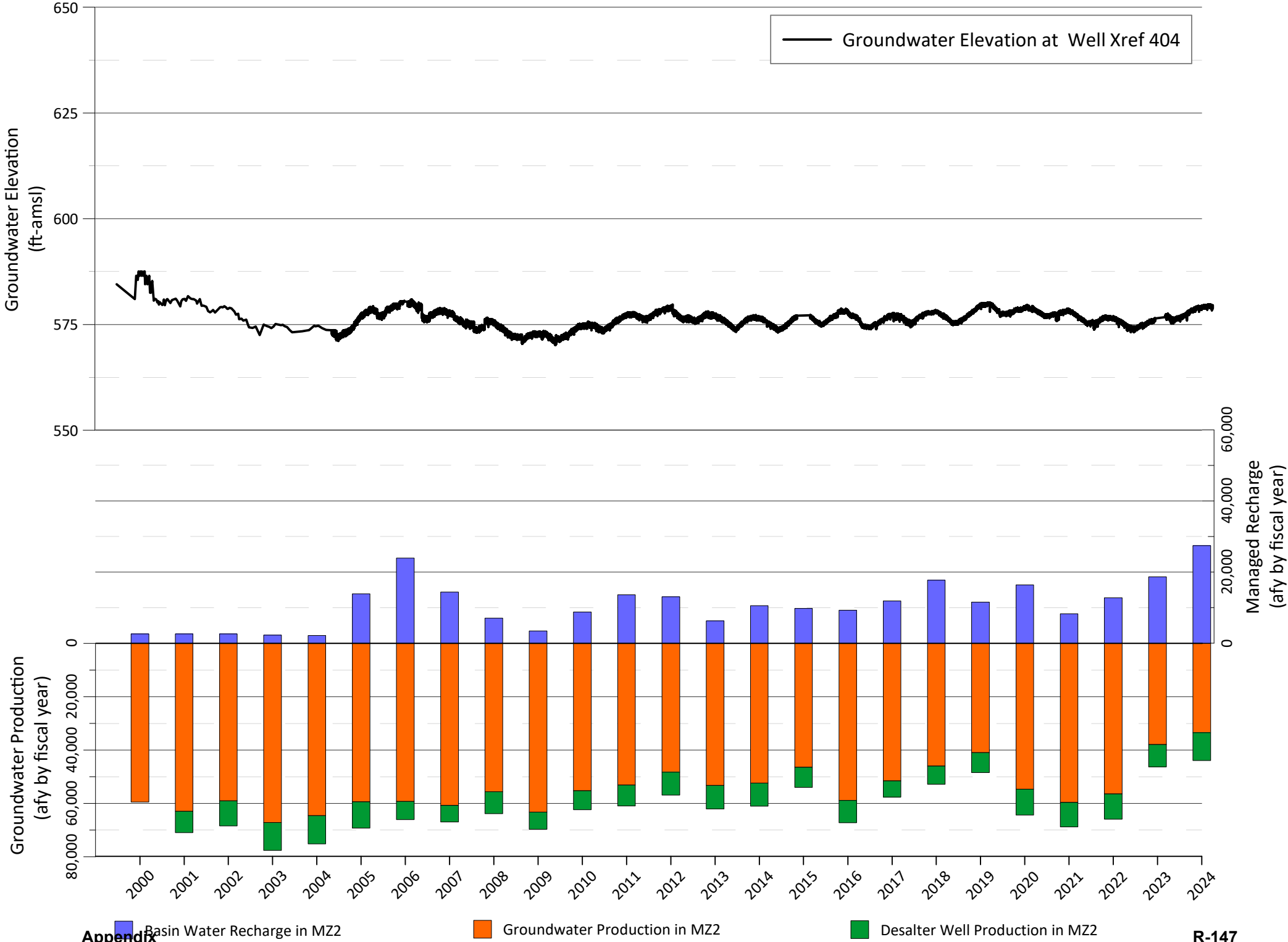
Pomona-30



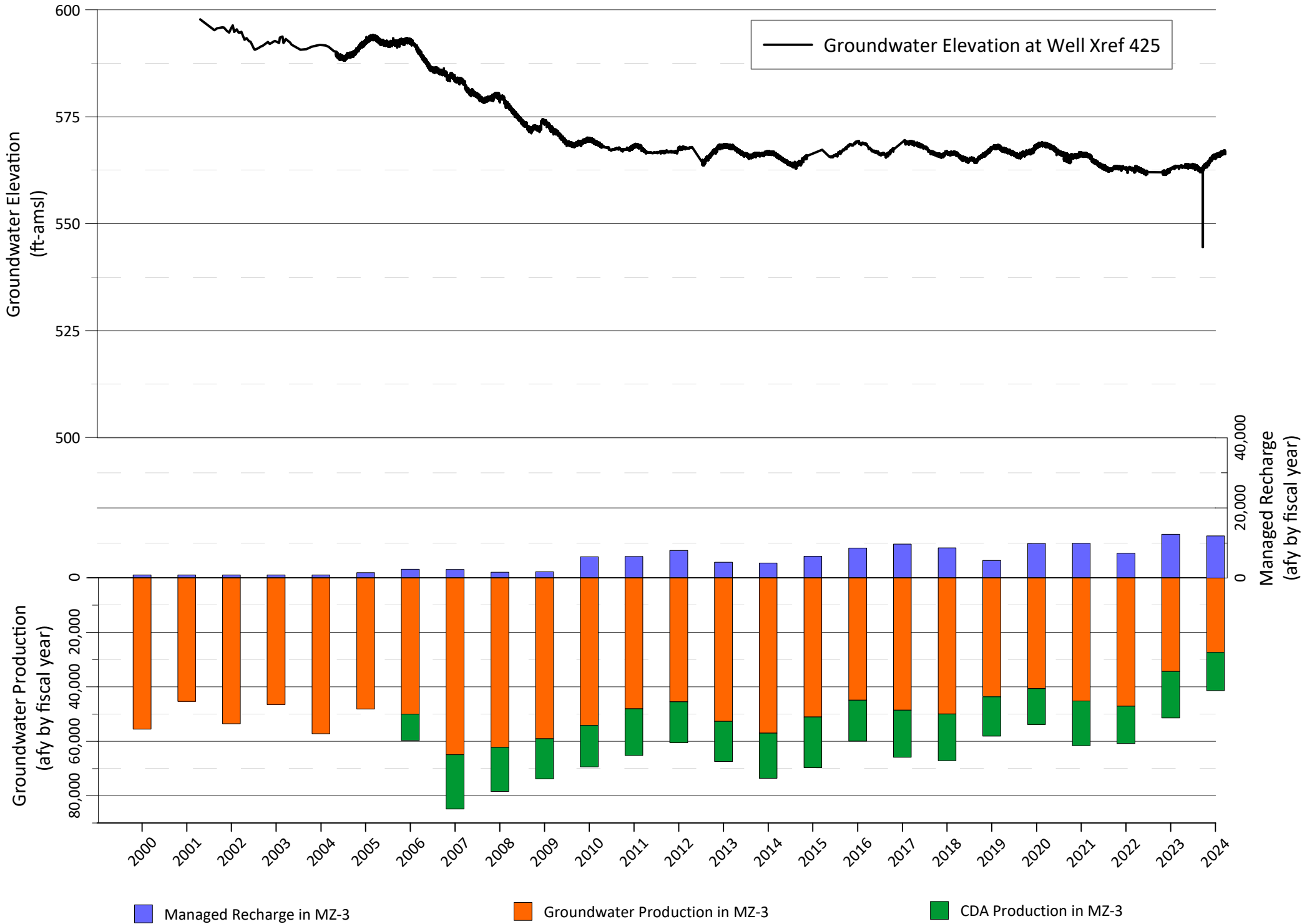
Upland-09



Xref 404



Xref 425

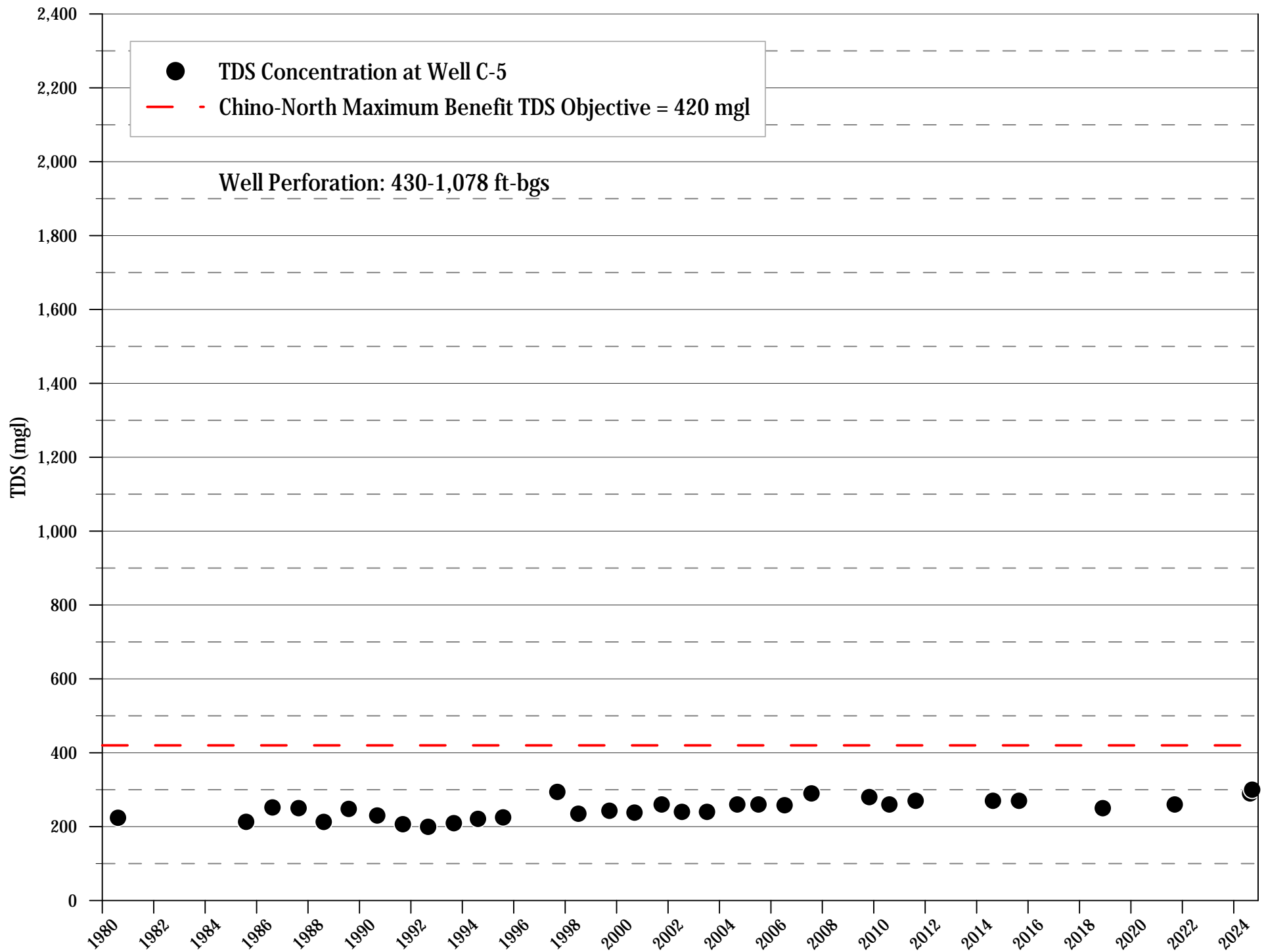


Attachment B

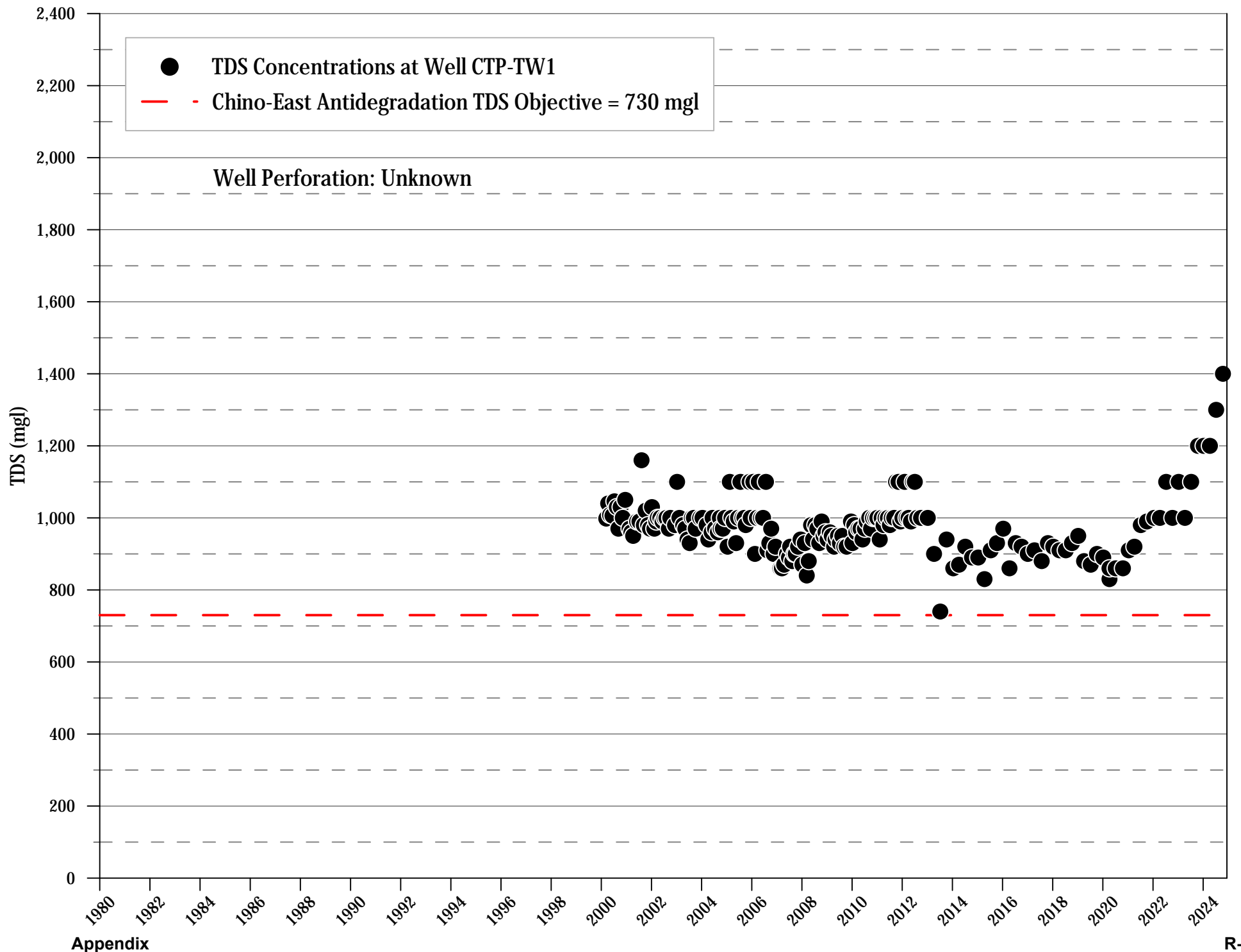
Time-Series Charts

TDS and Nitrate Concentrations

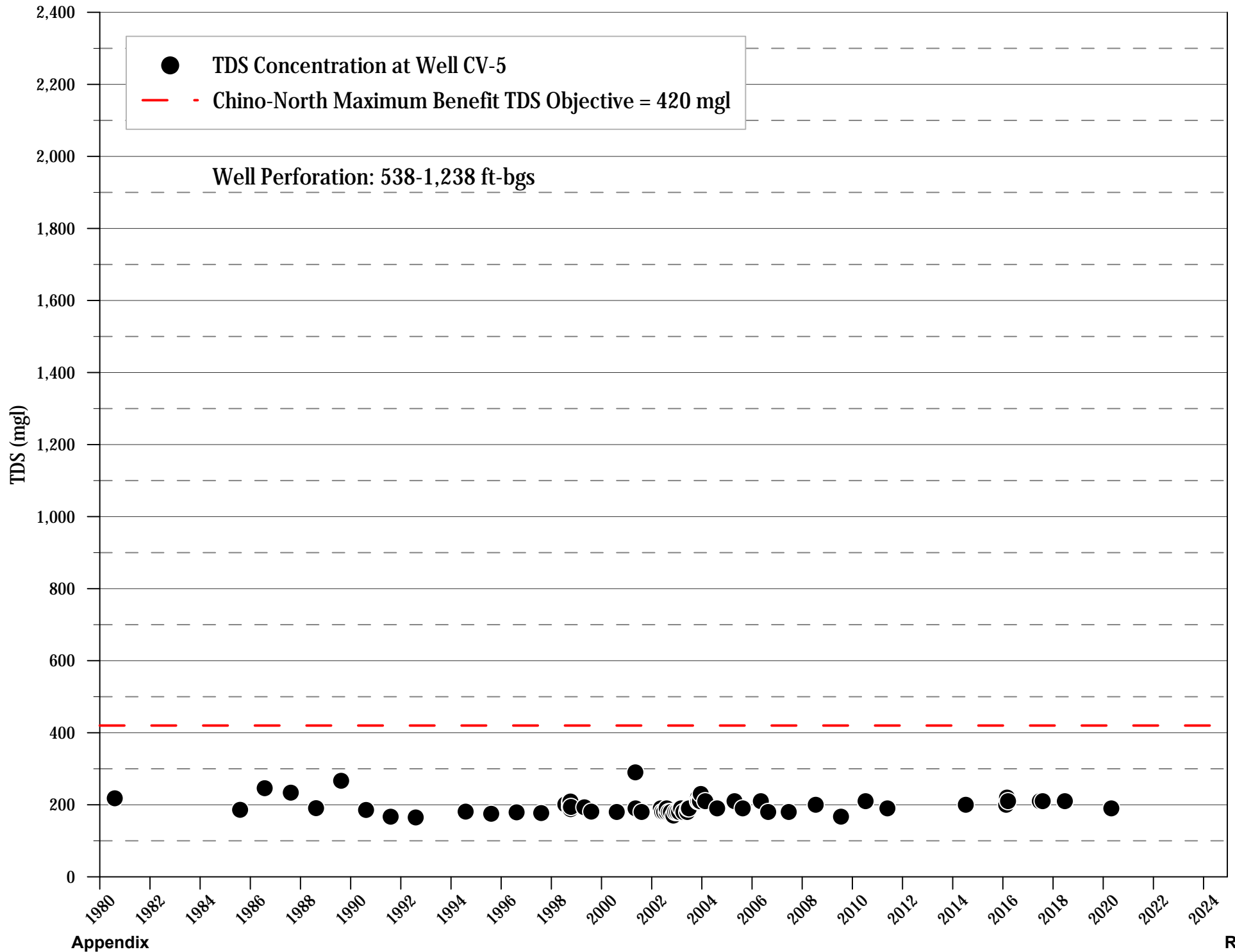
C-5



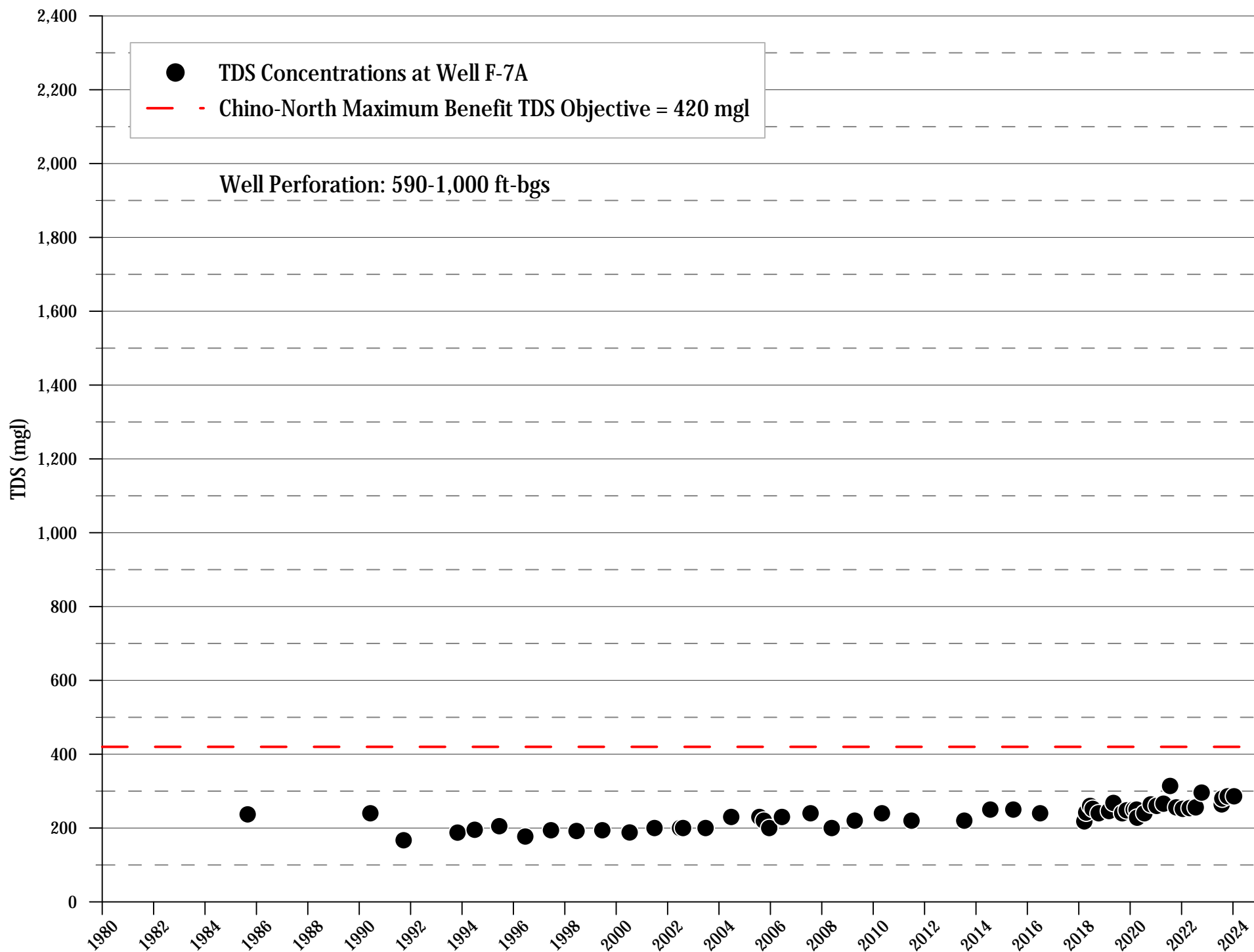
CTP-TW1



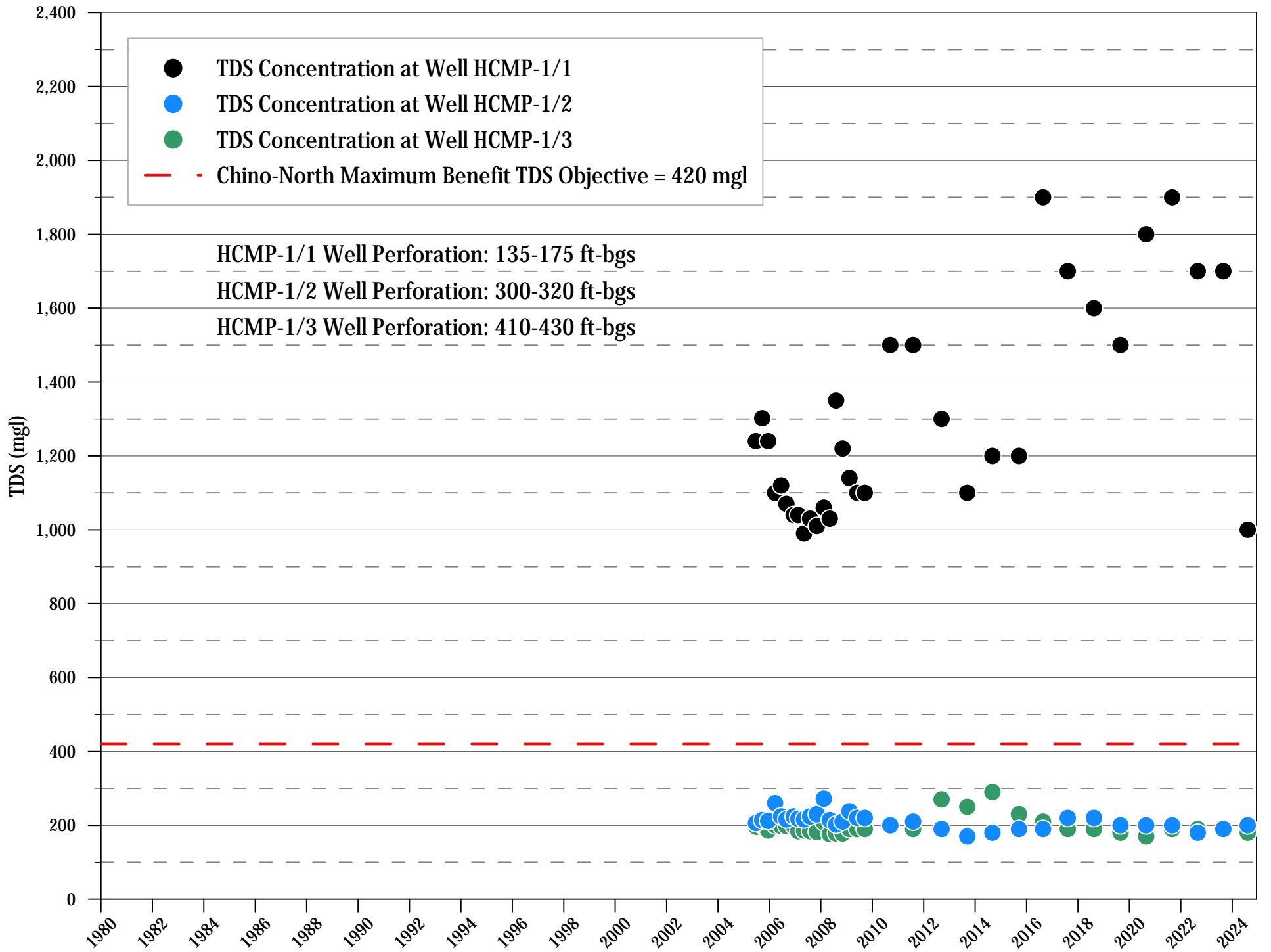
CV-5



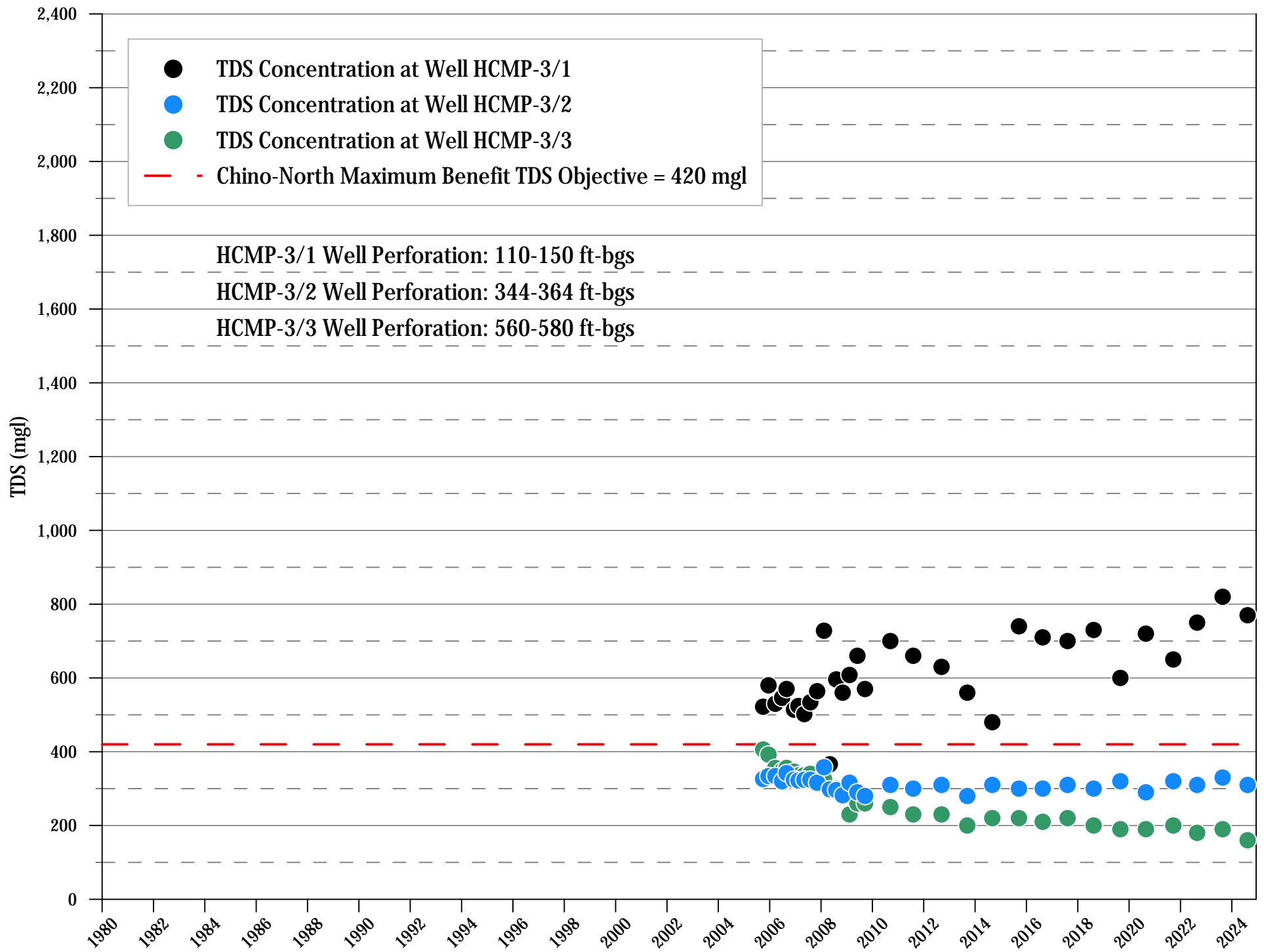
F-7A



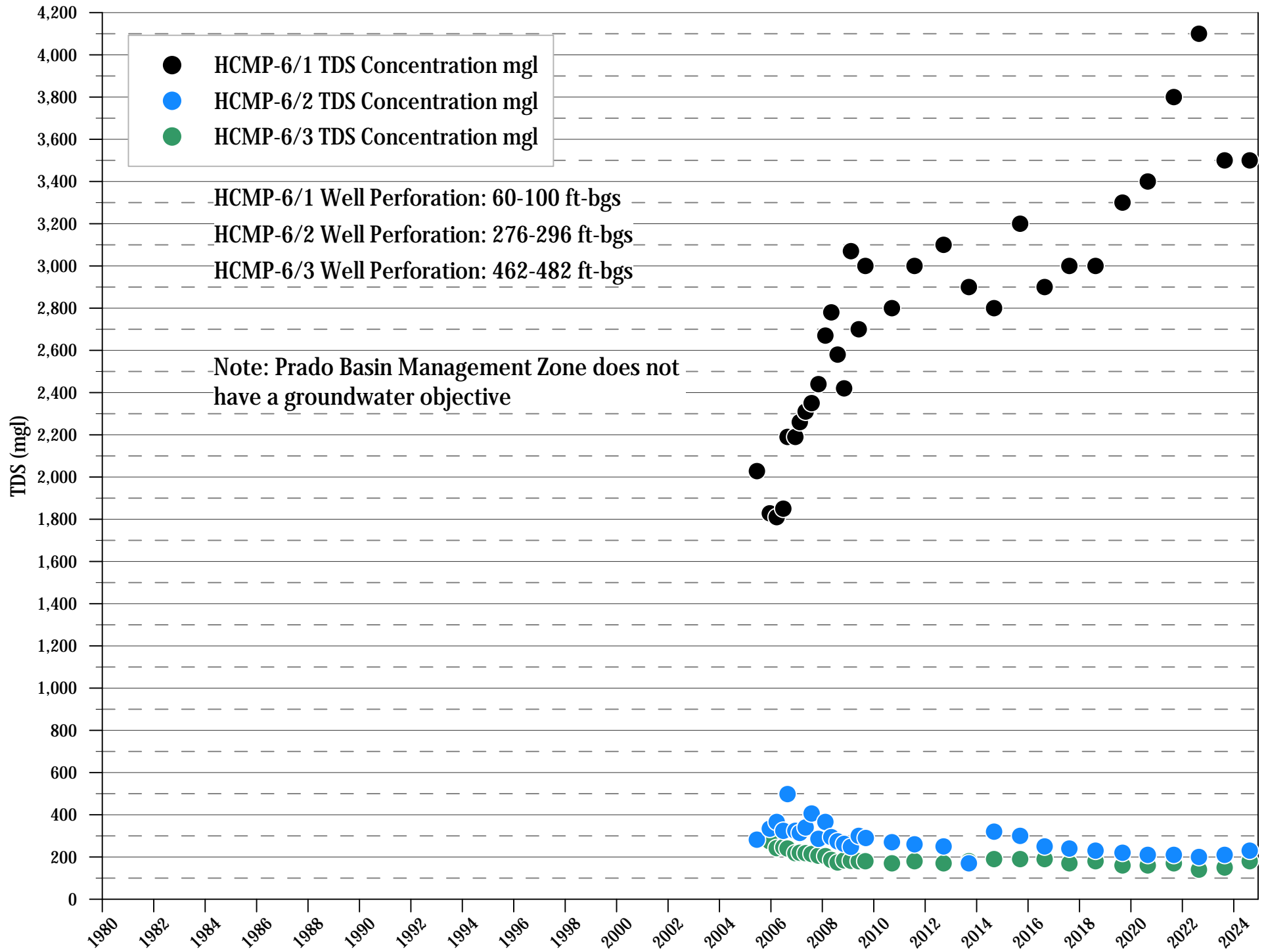
HCMP-1



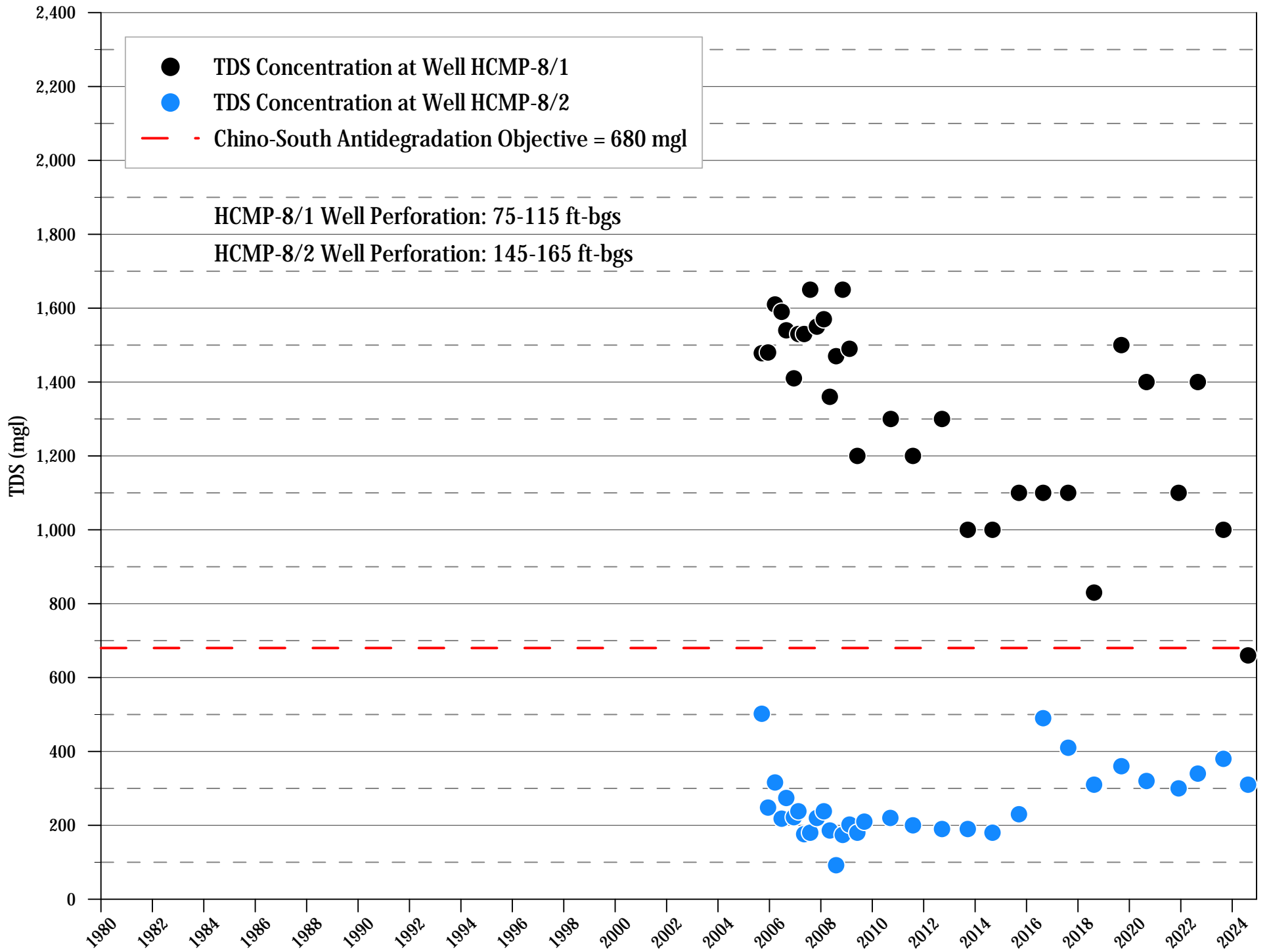
HCMP-3



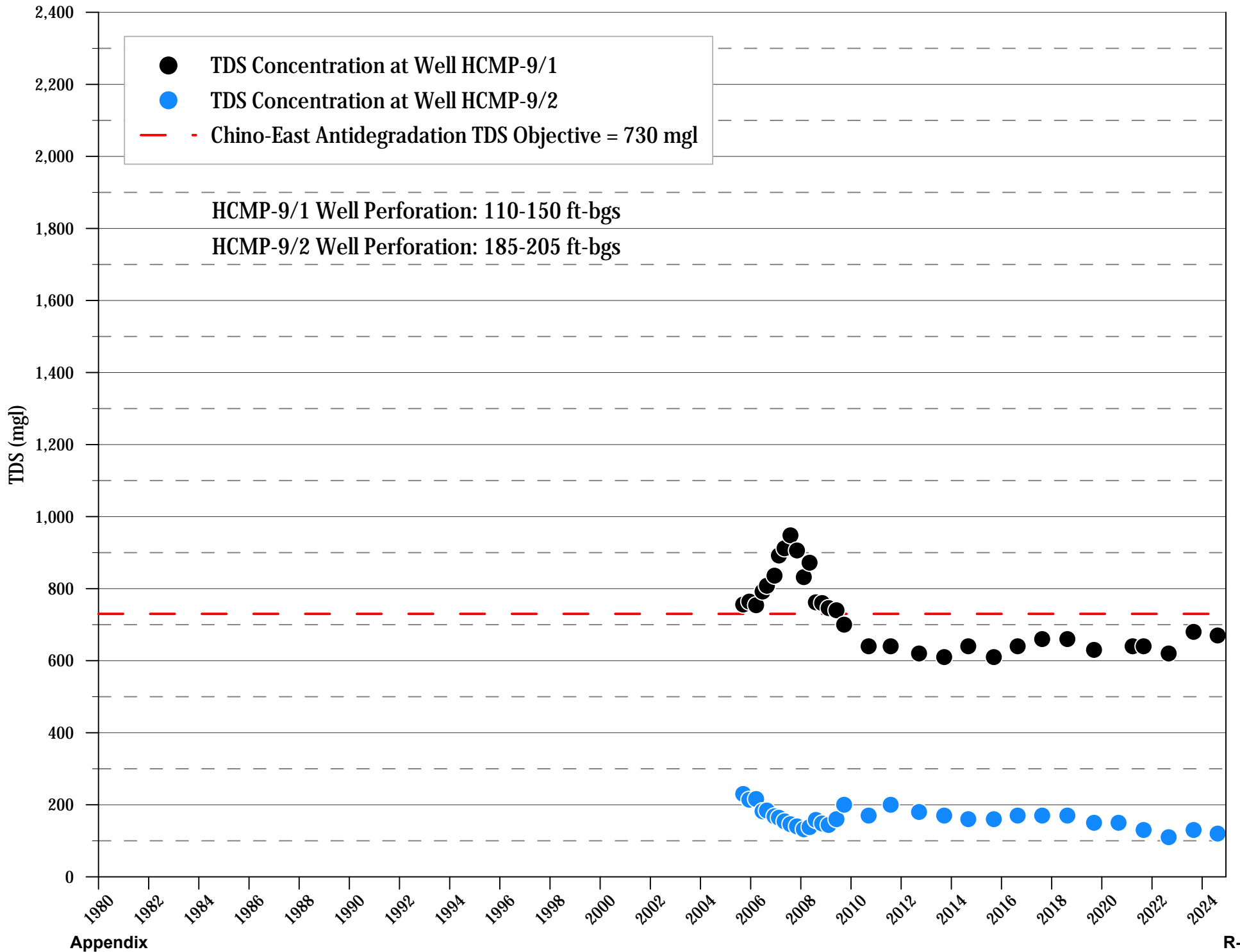
HCMP-6 TDS Concentrations

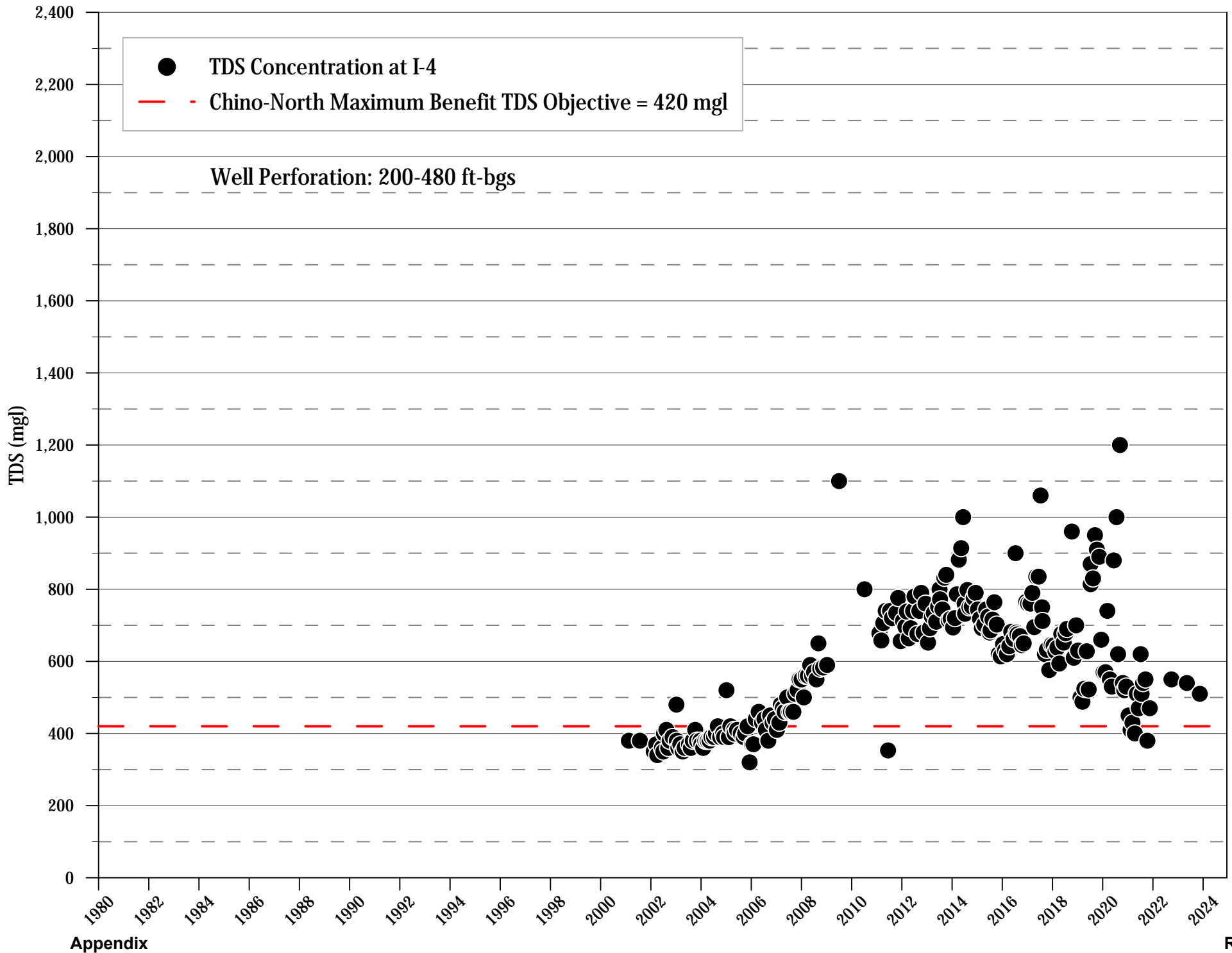


HCMP-8

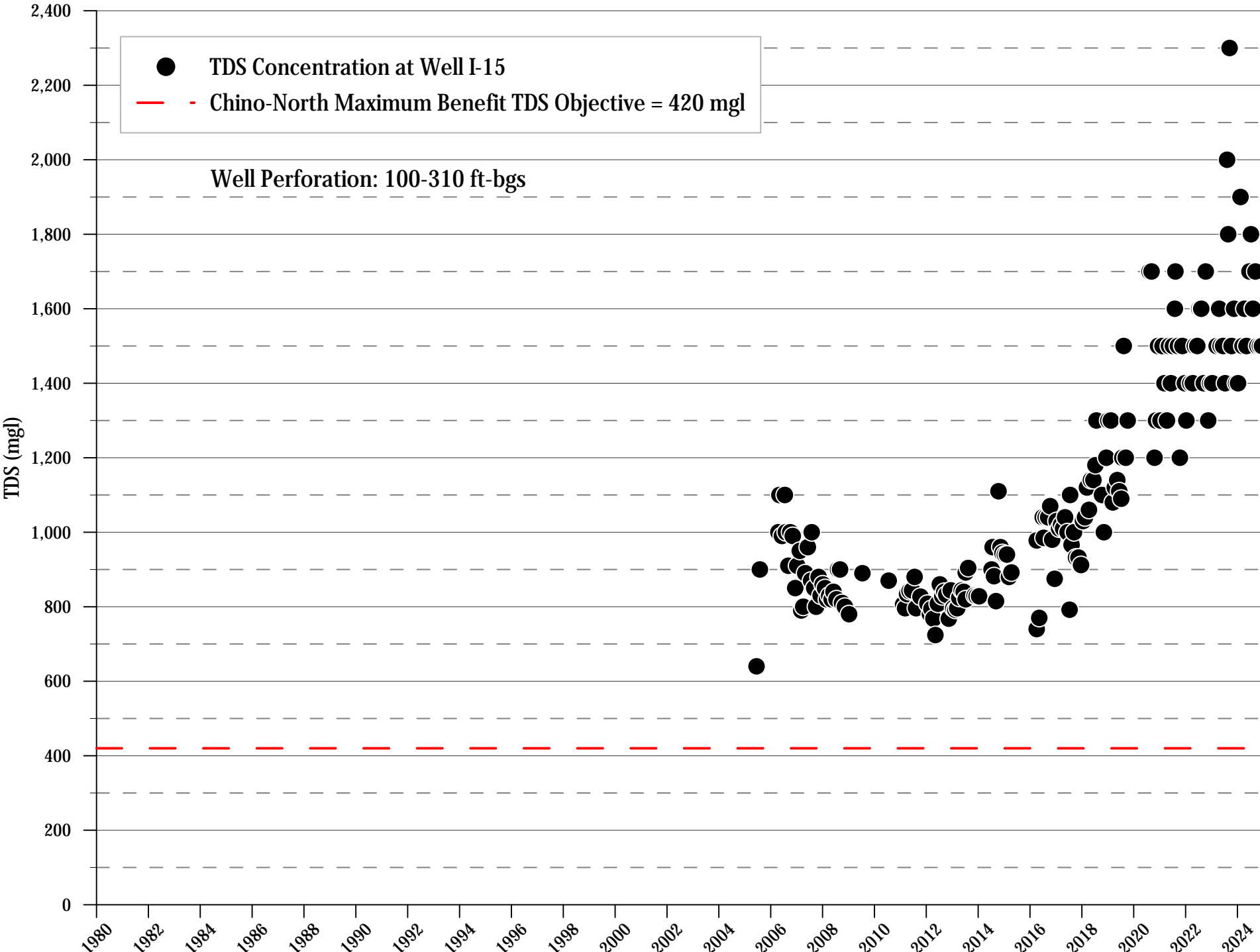


HCMP-9

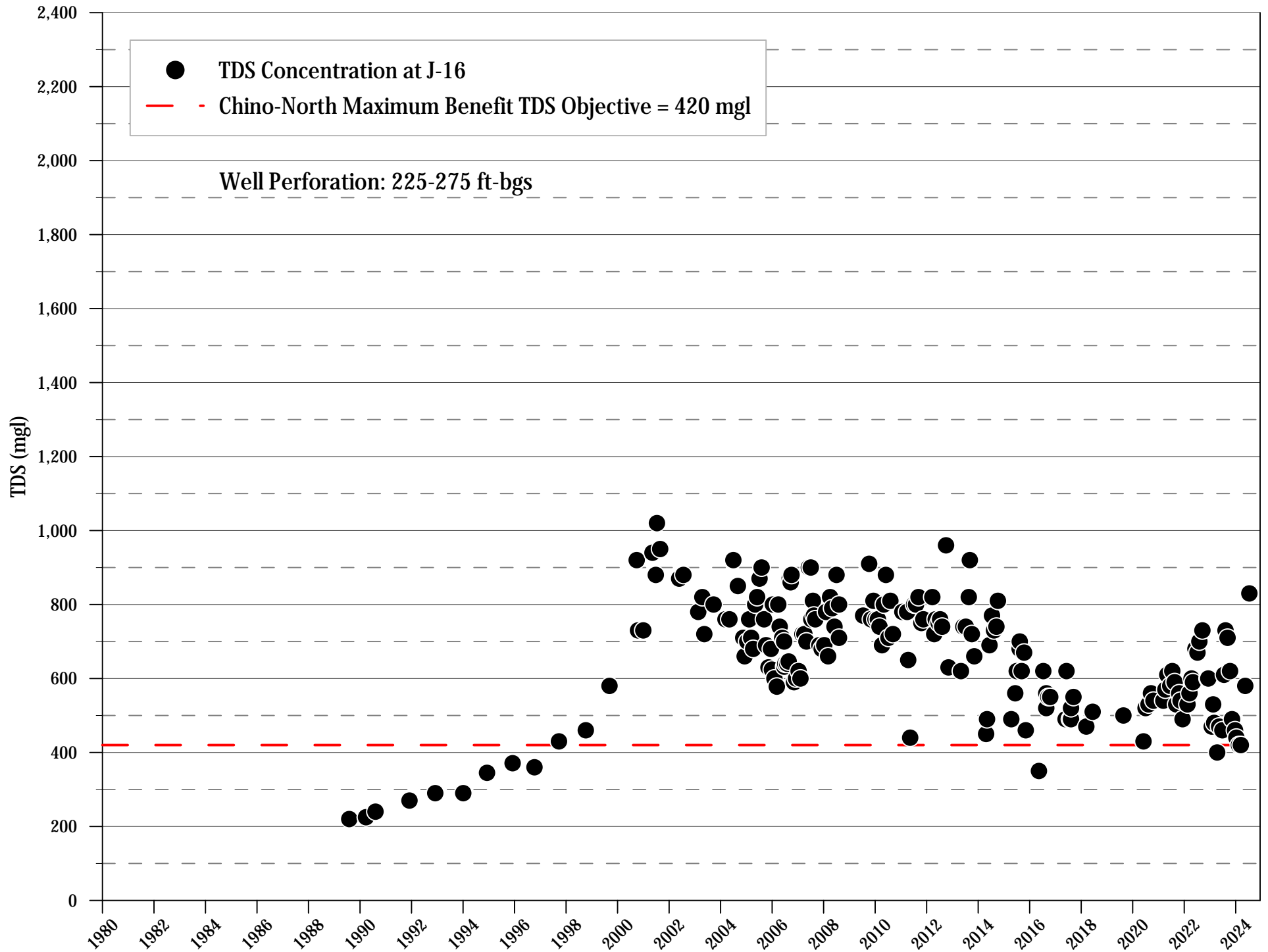




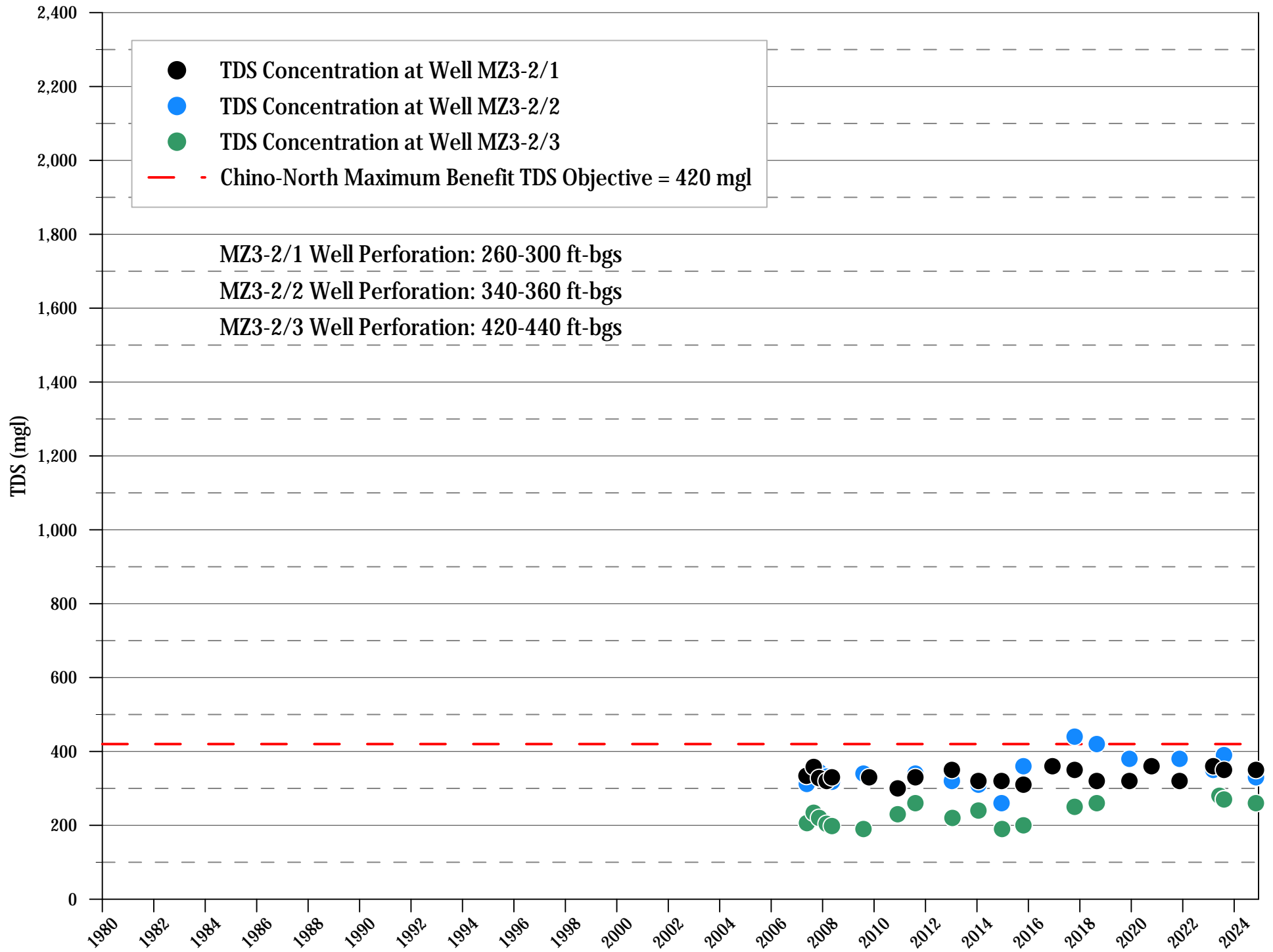
I-15



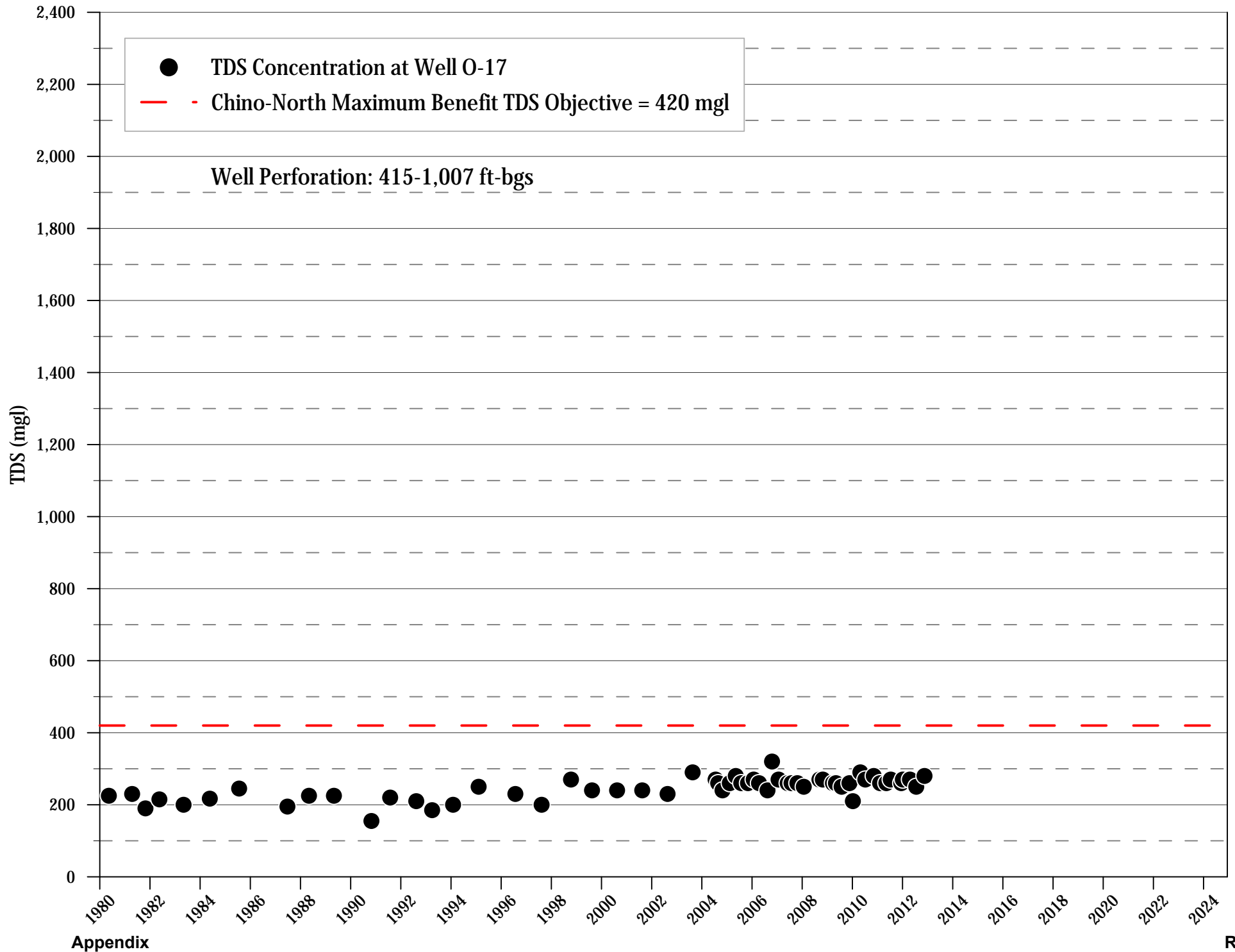
J-16



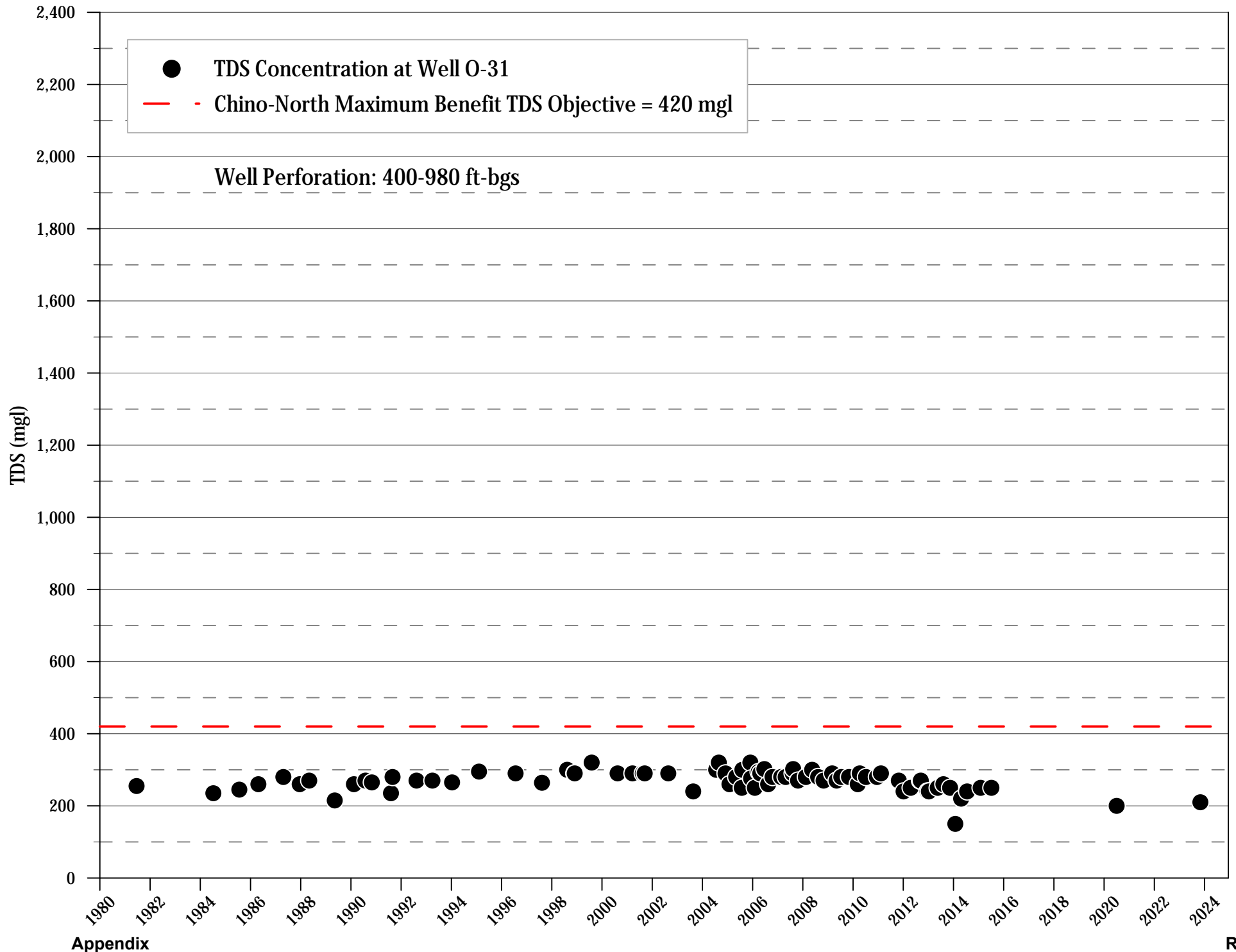
MZ3-2



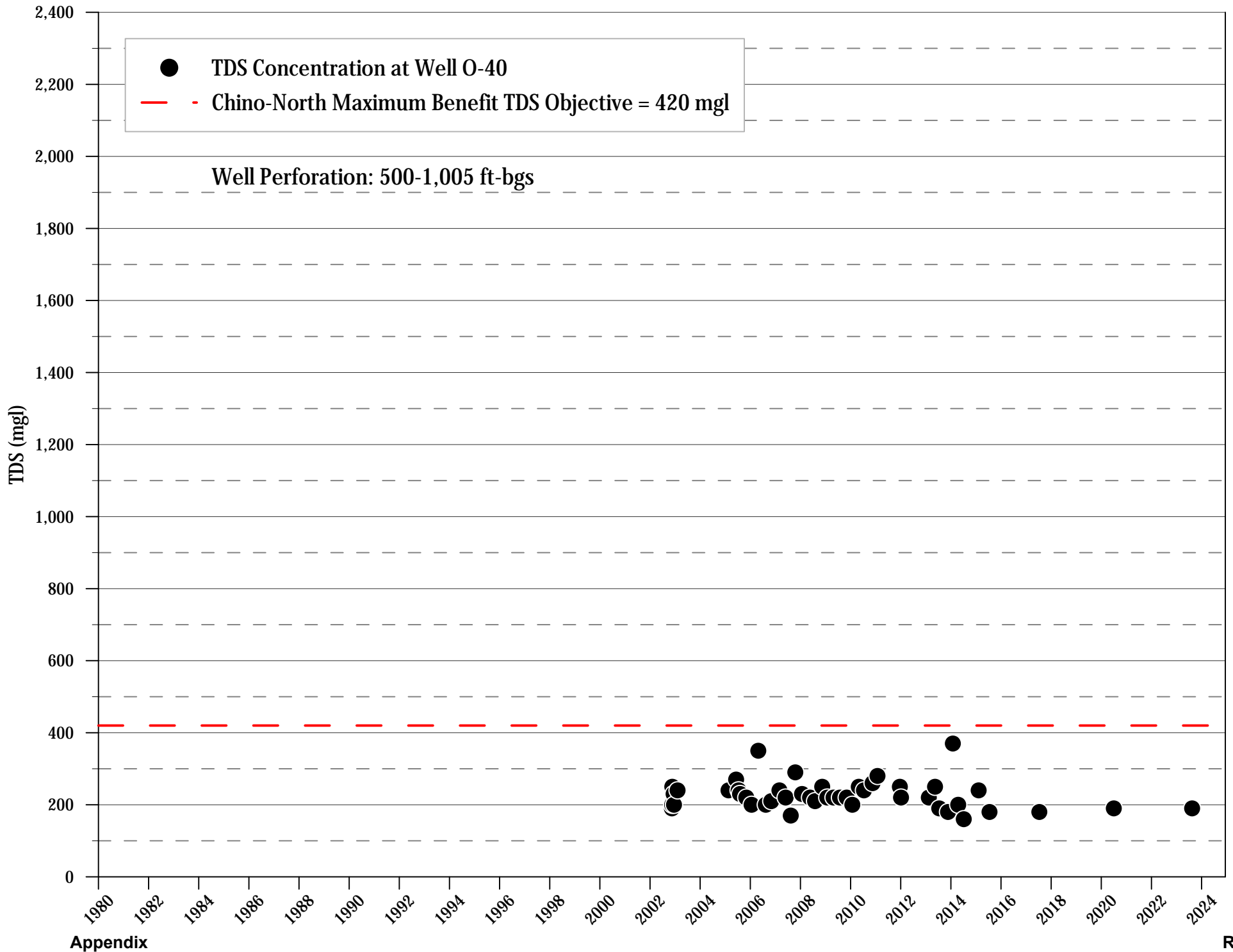
O-17



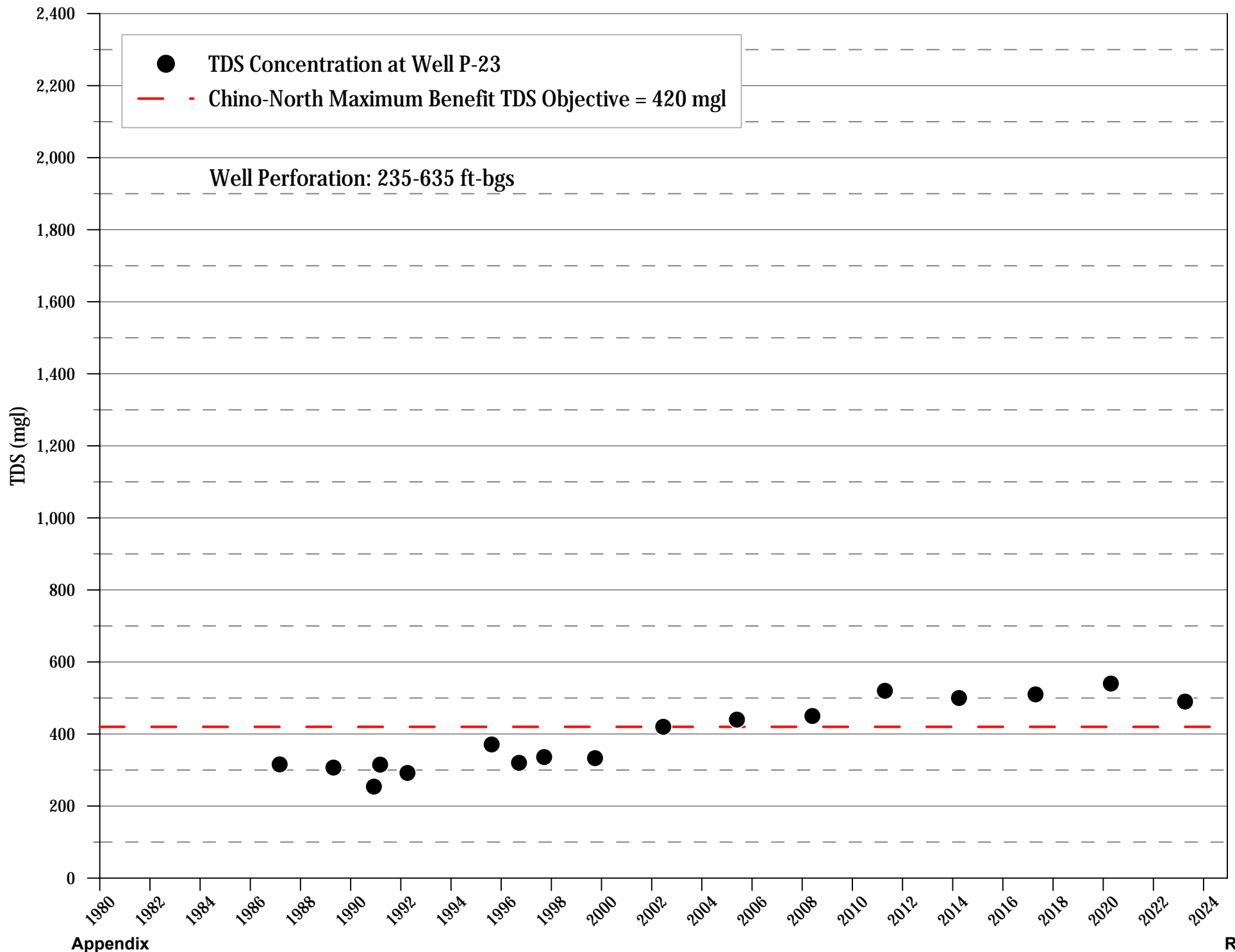
O-31



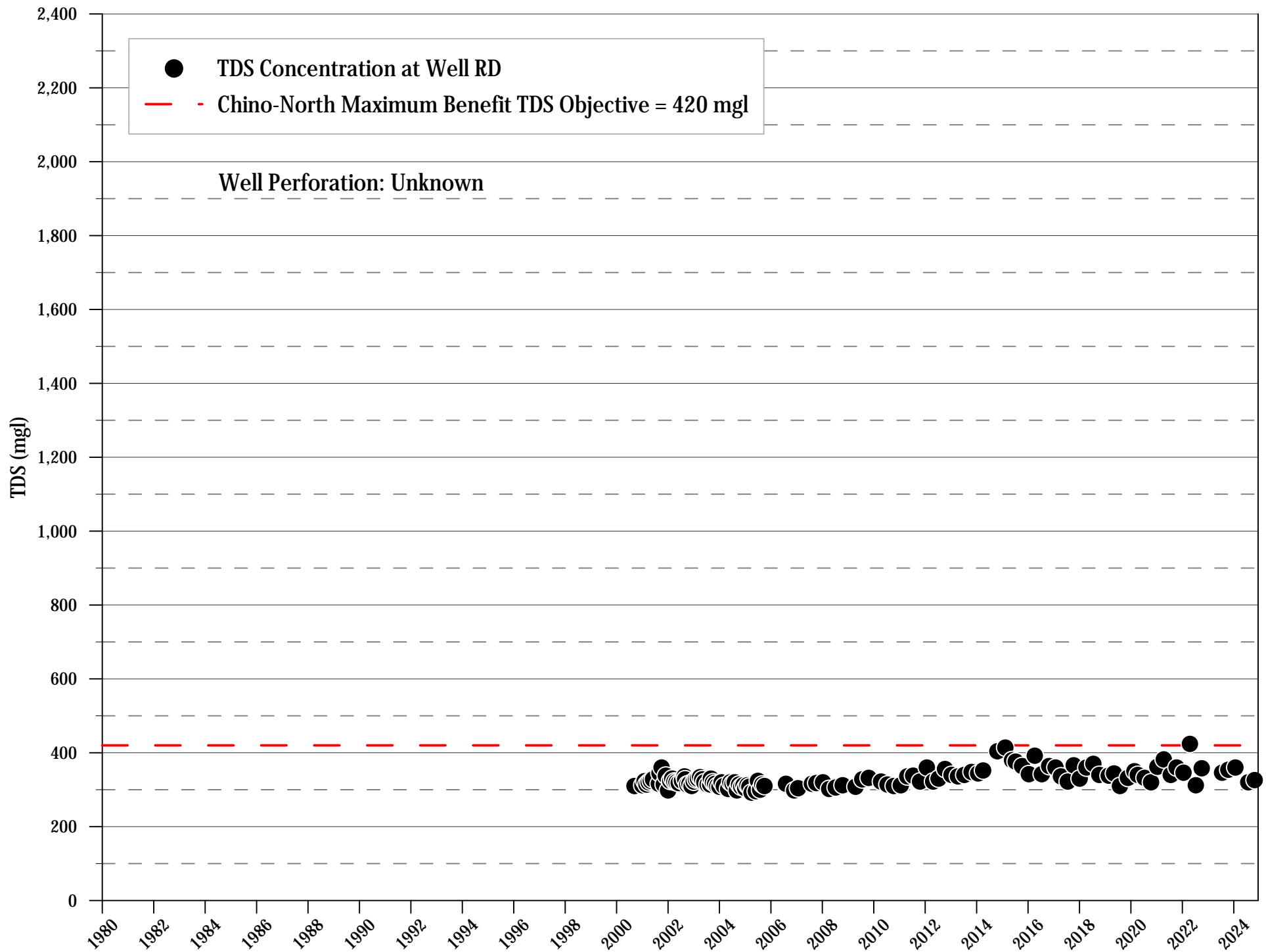
O-40



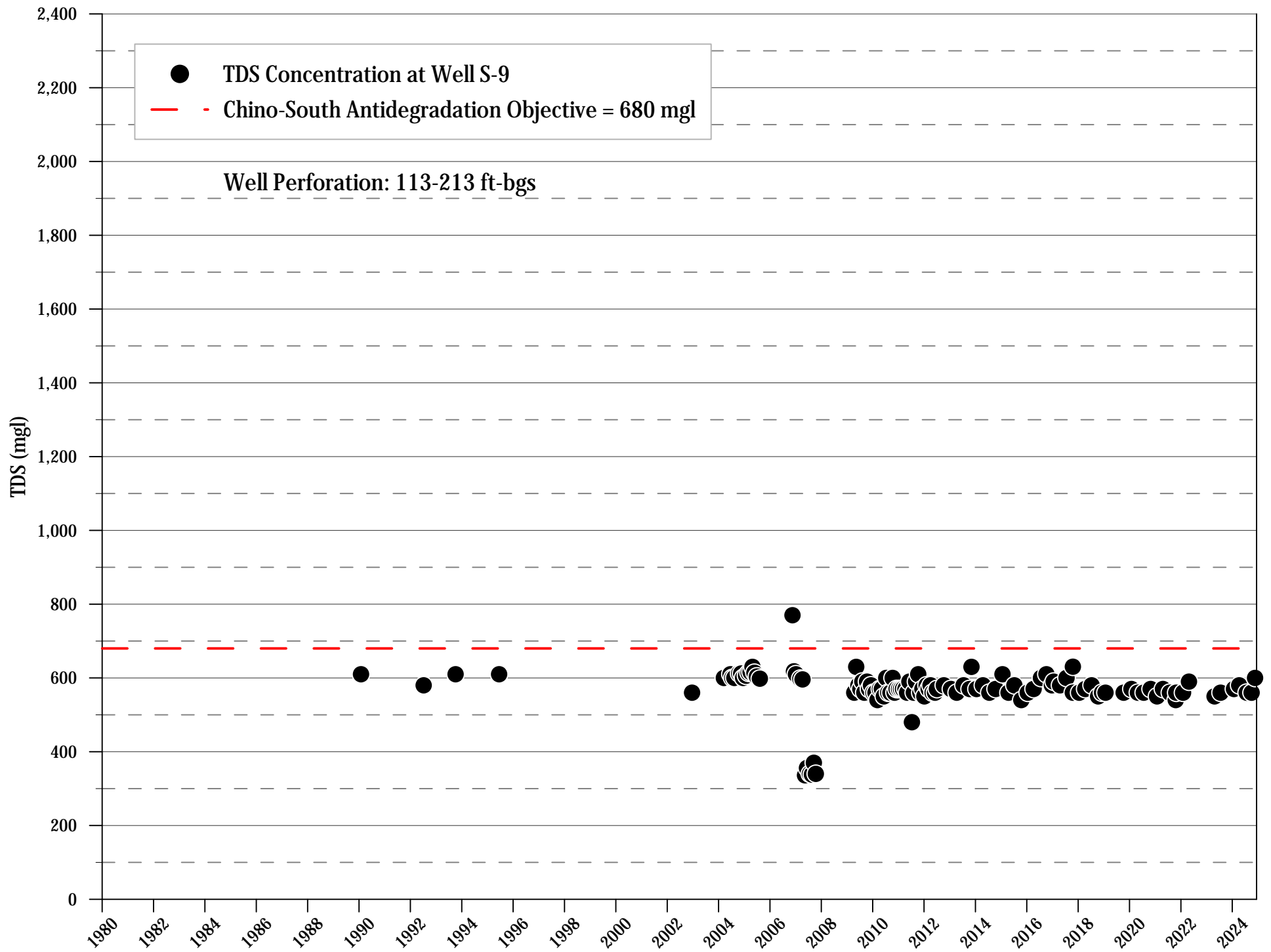
P-23



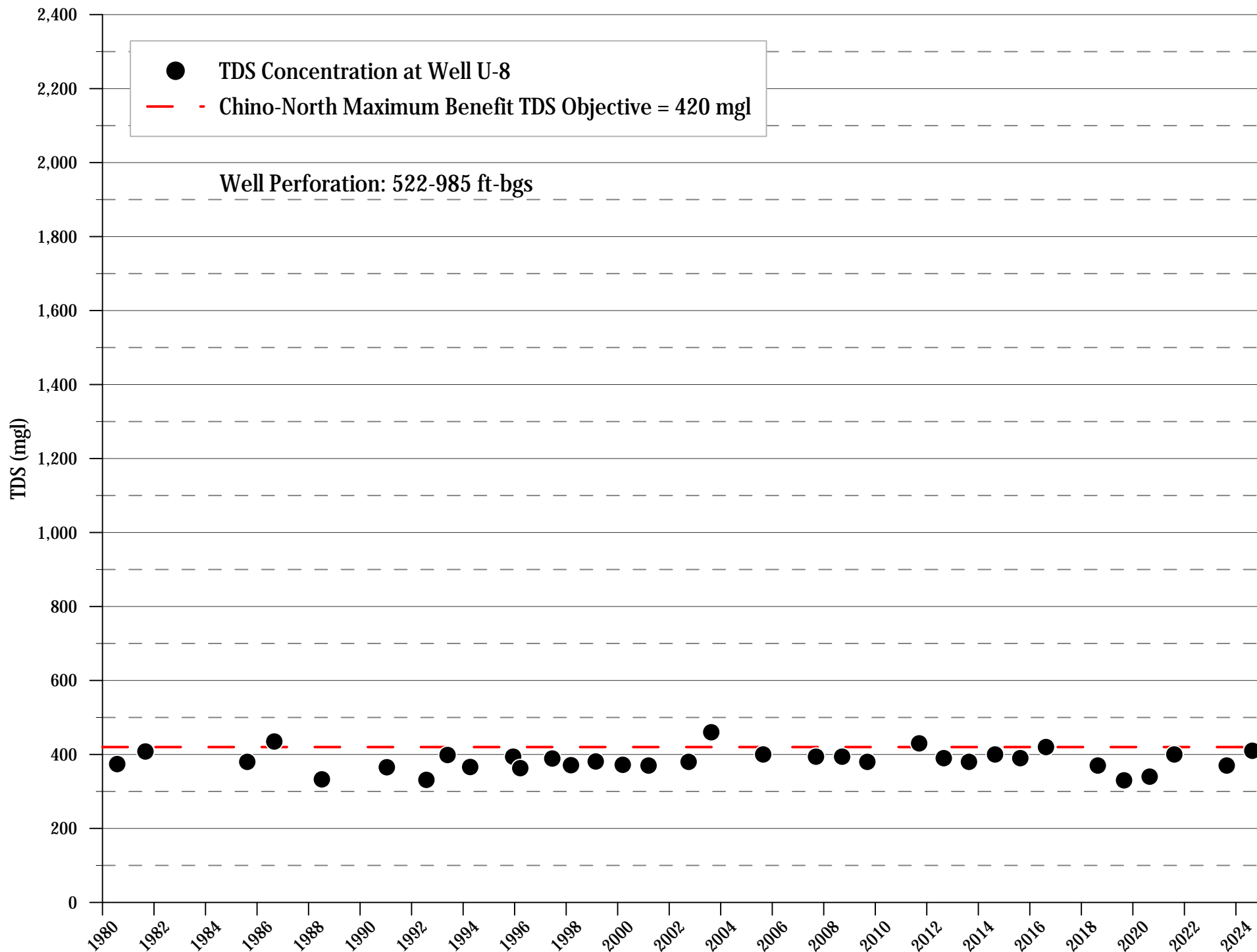
RD



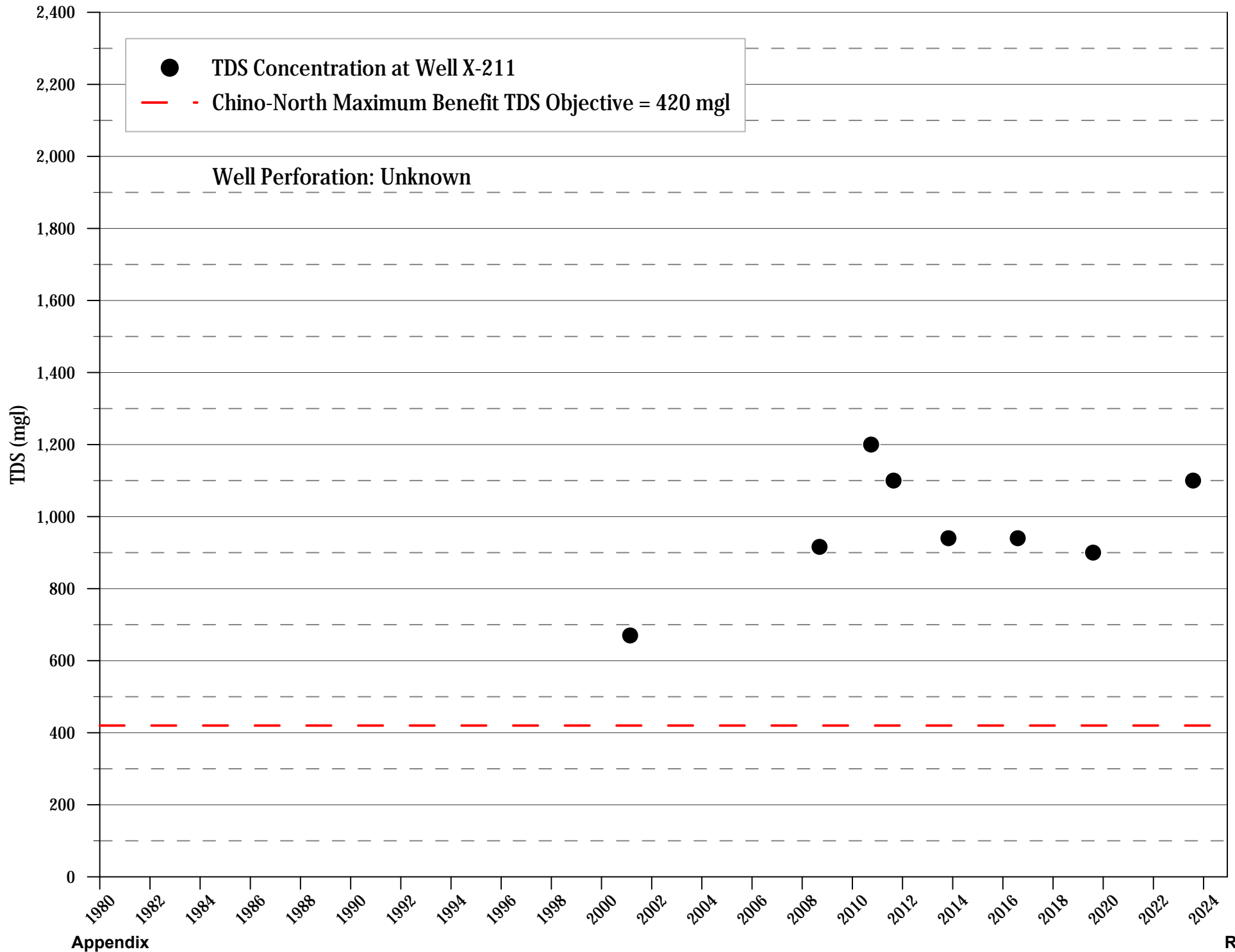
S-9



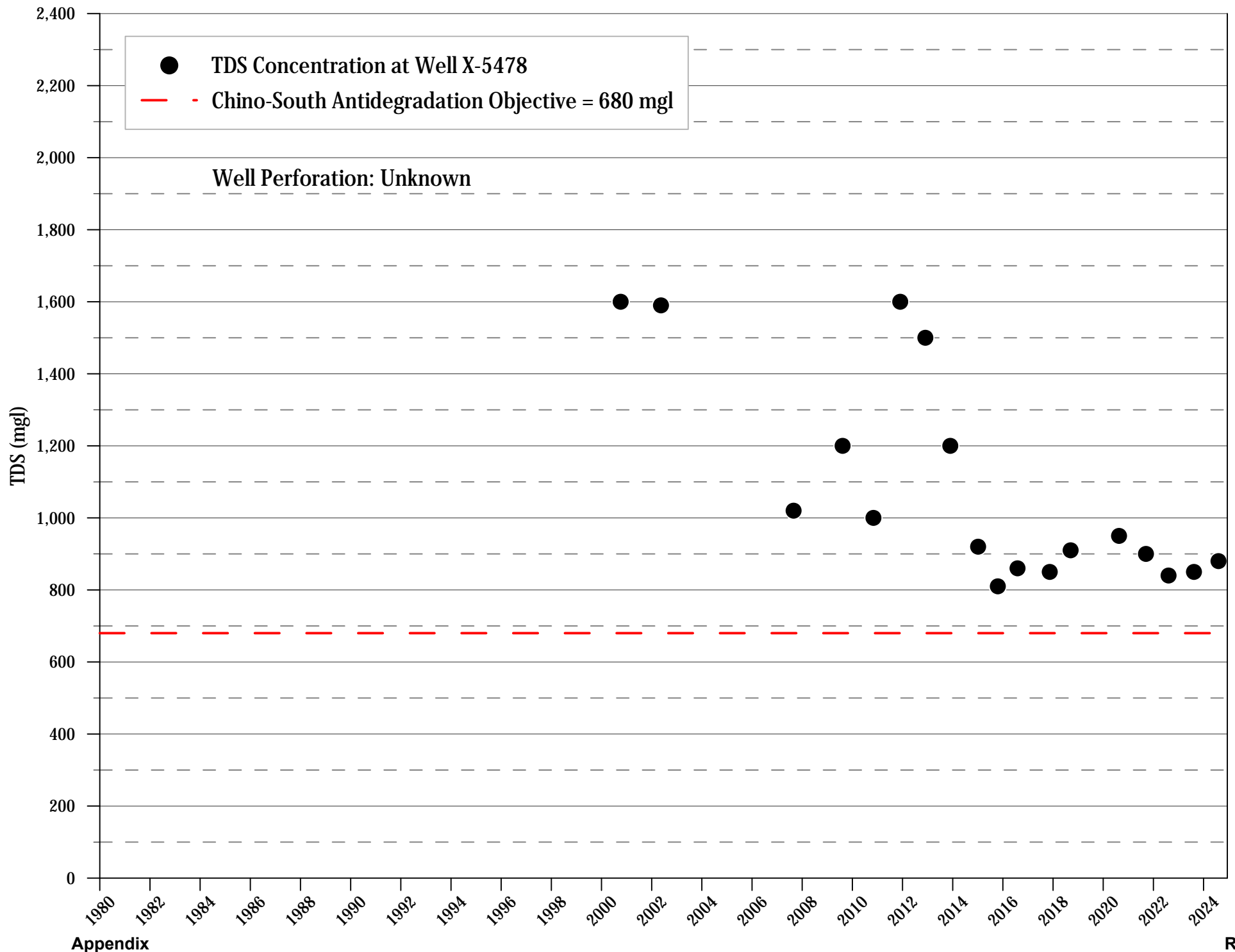
U-8



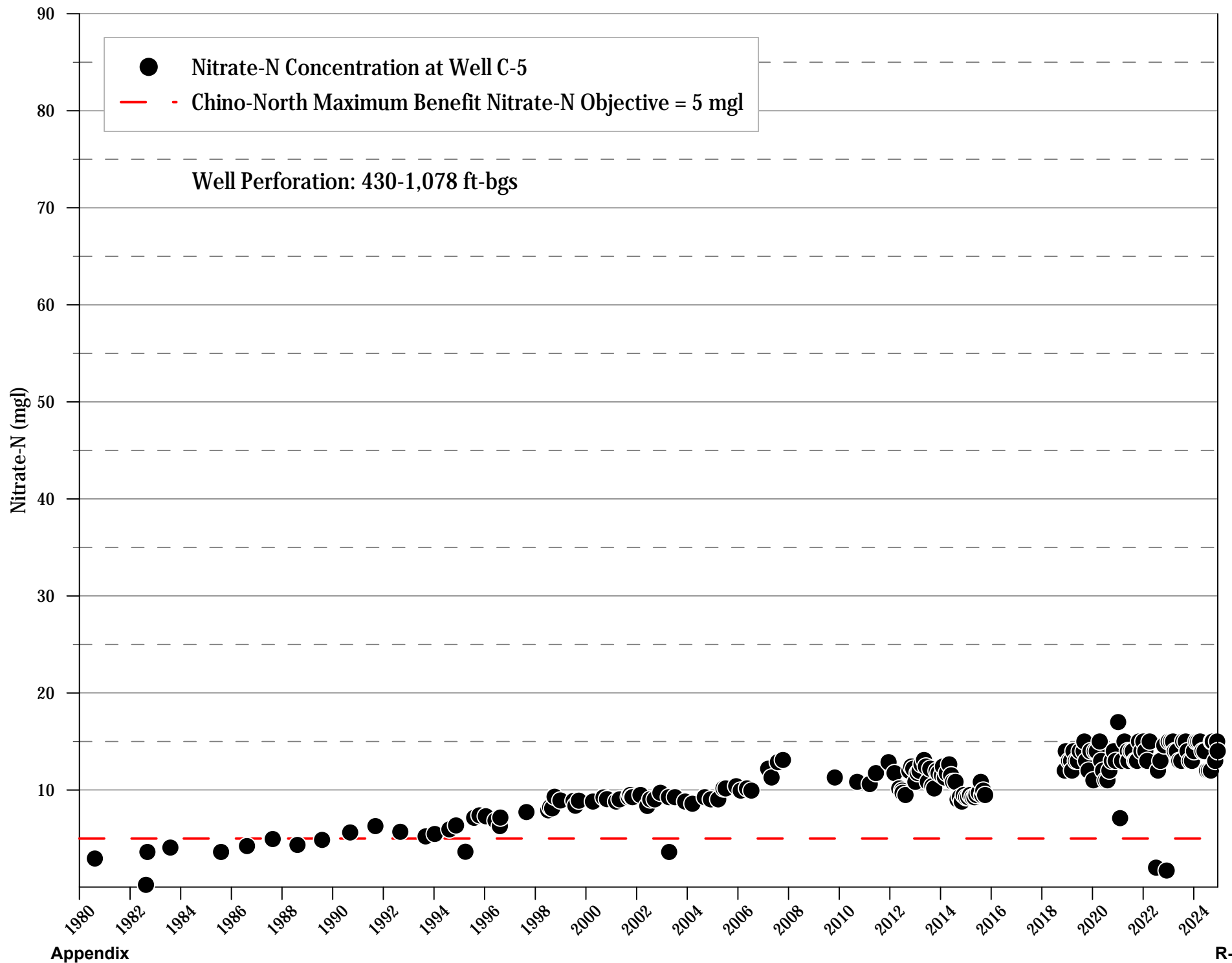
X-211



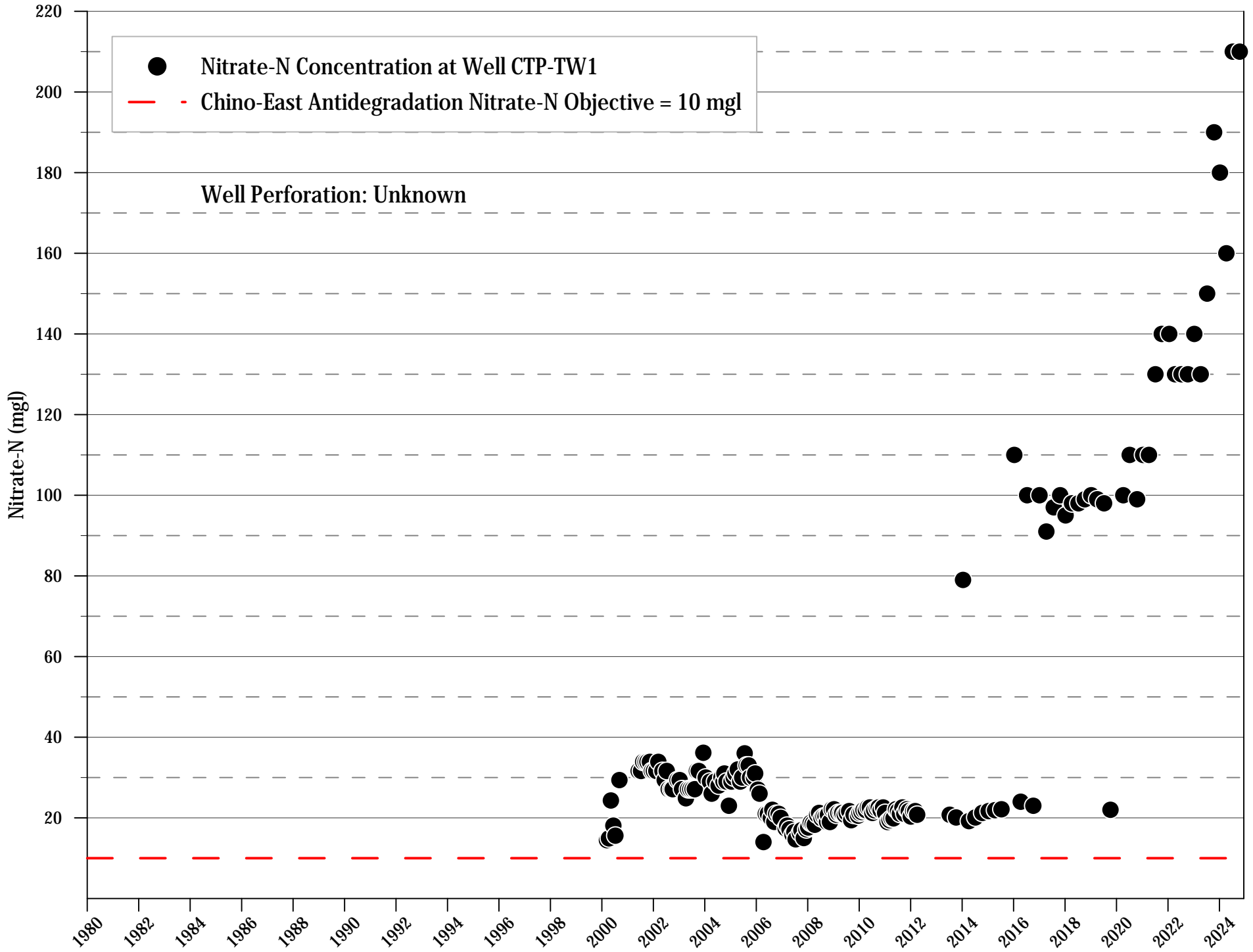
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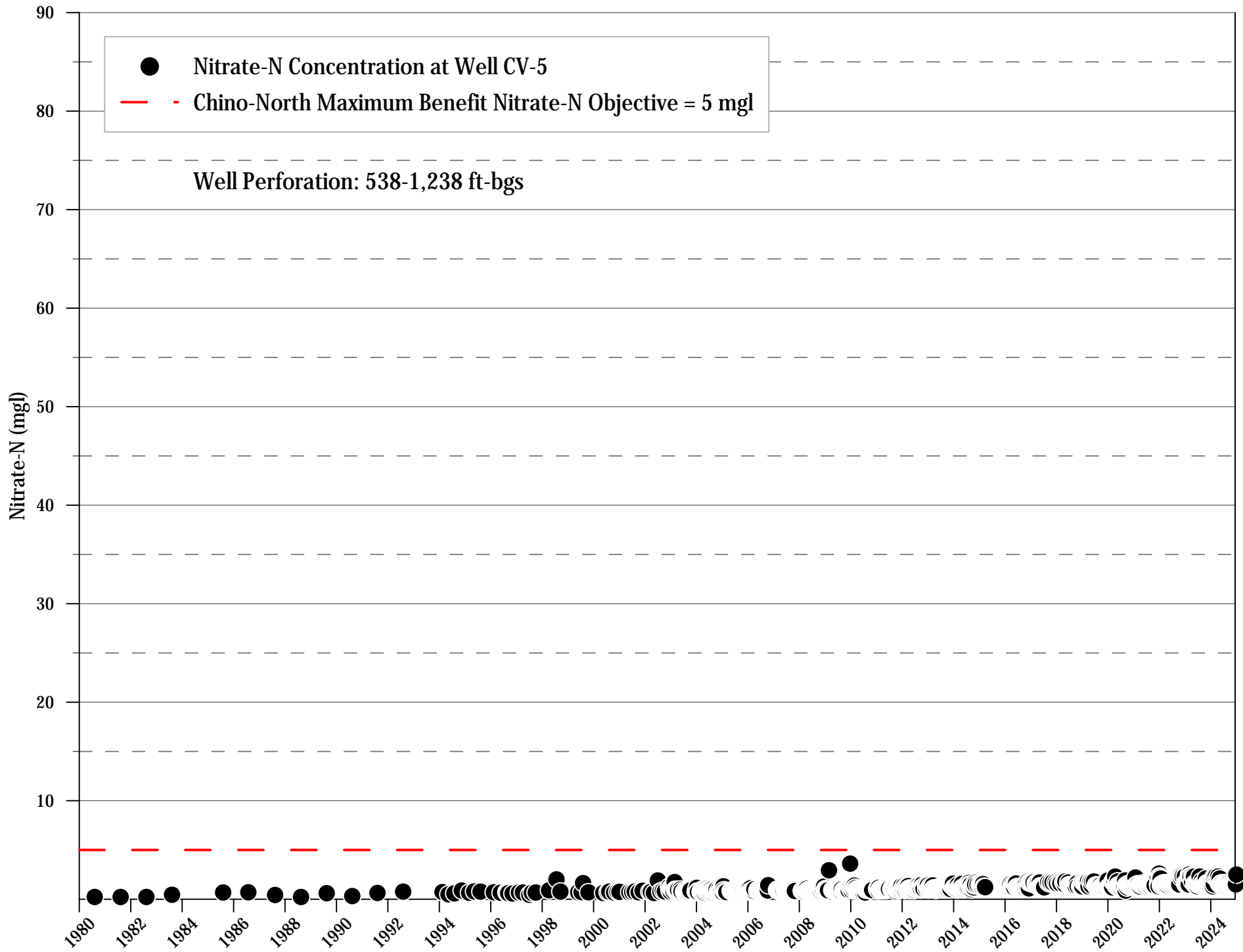
C-5



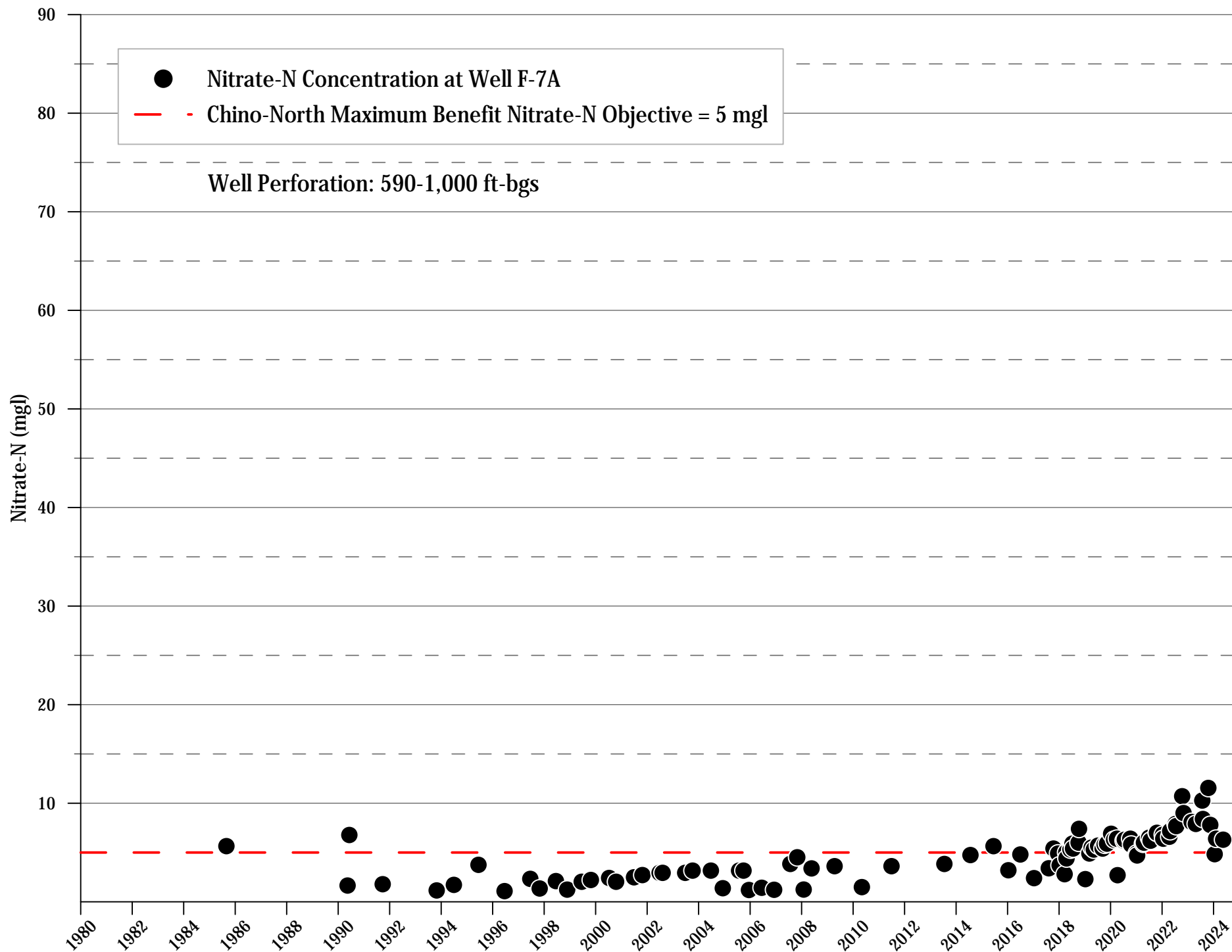
CTP-TW1



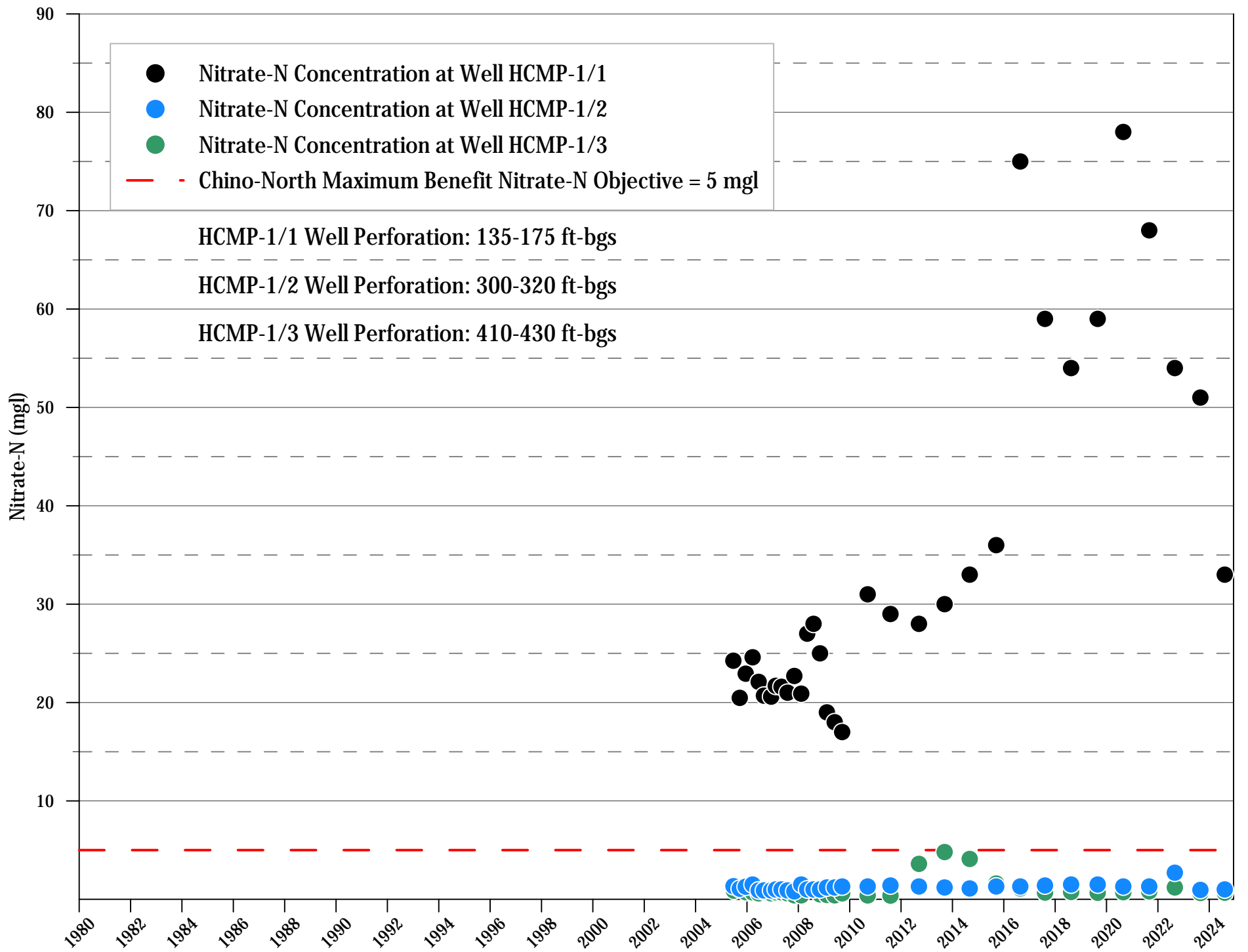
CV-5



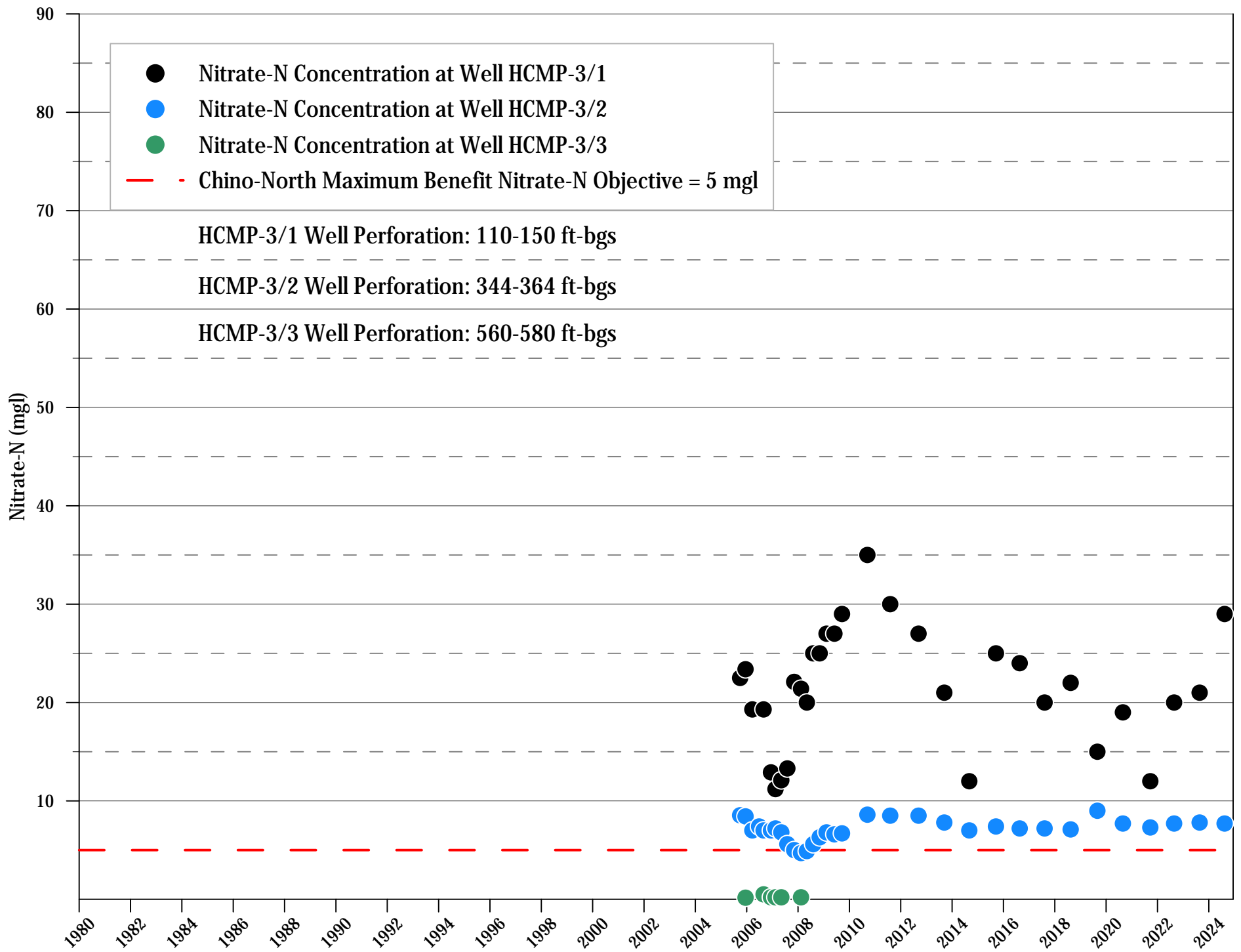
F-7A



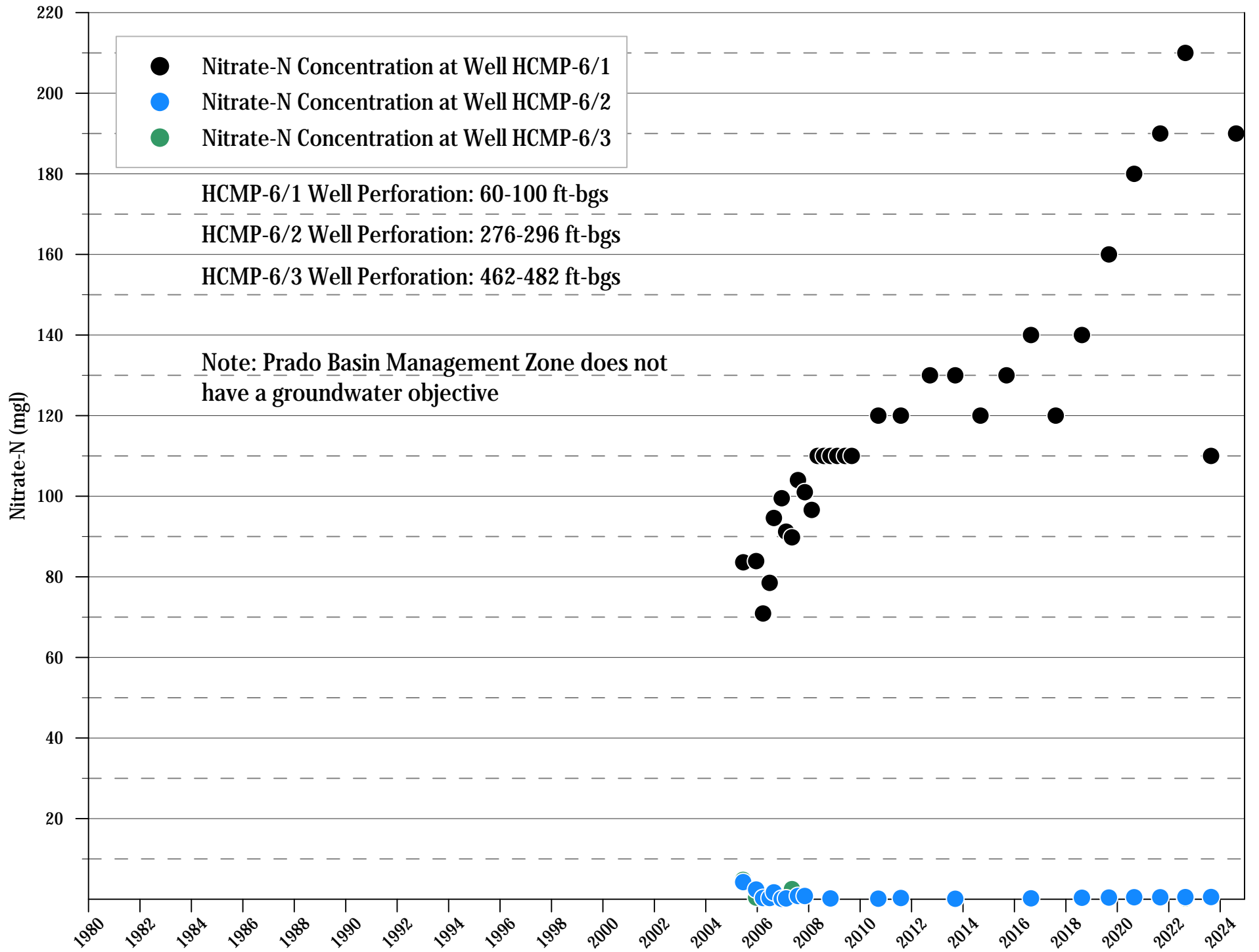
HCMP-1



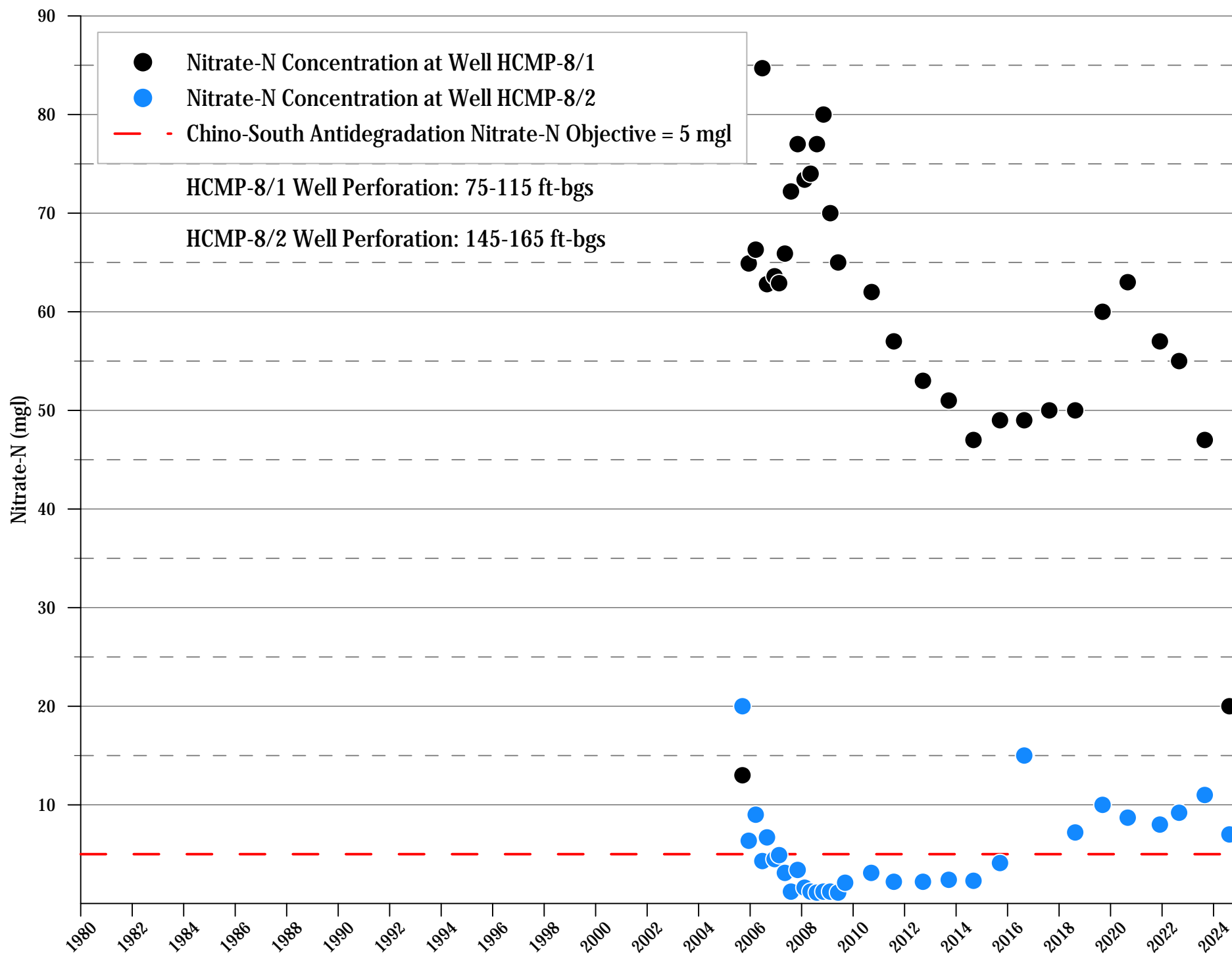
HCMP-3



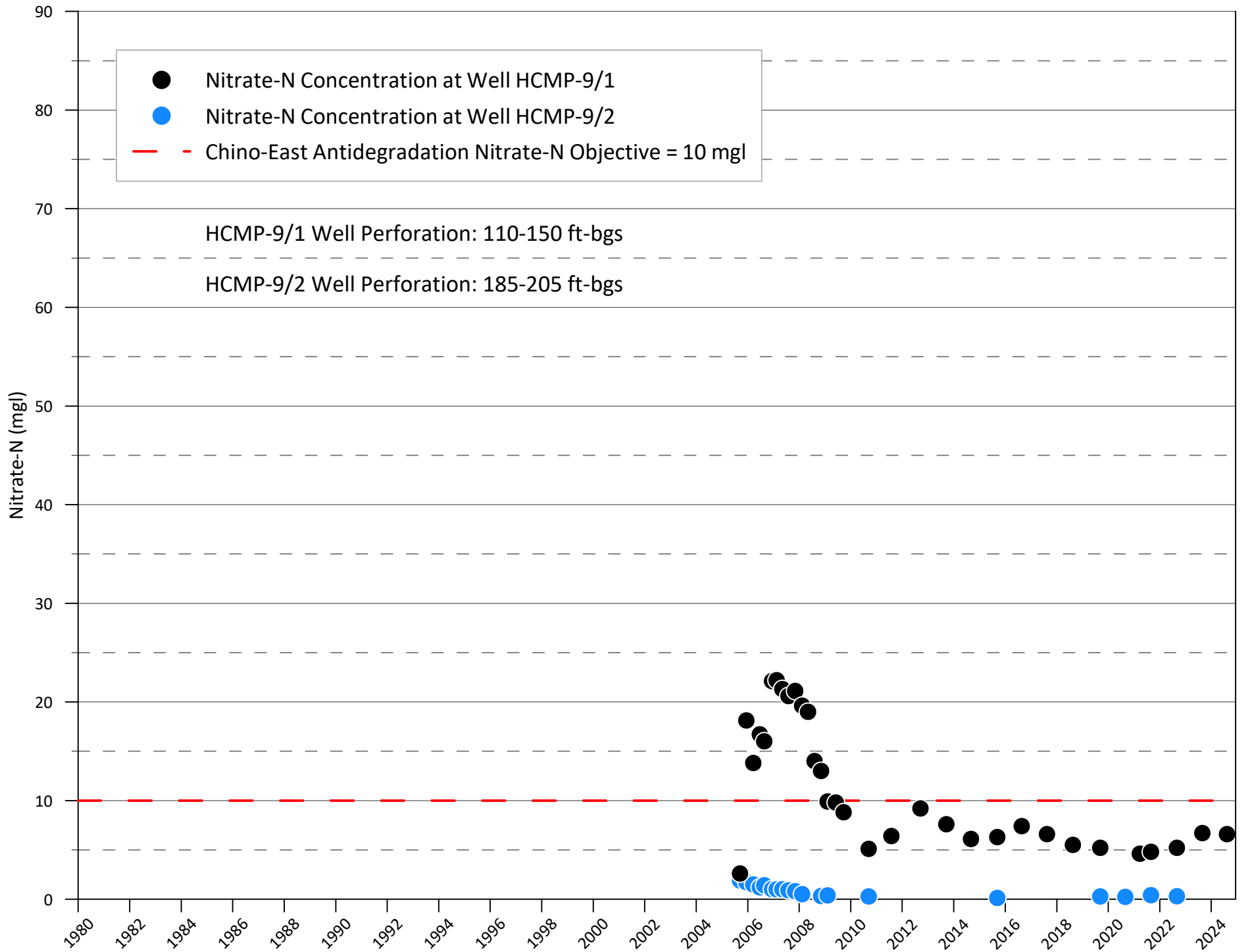
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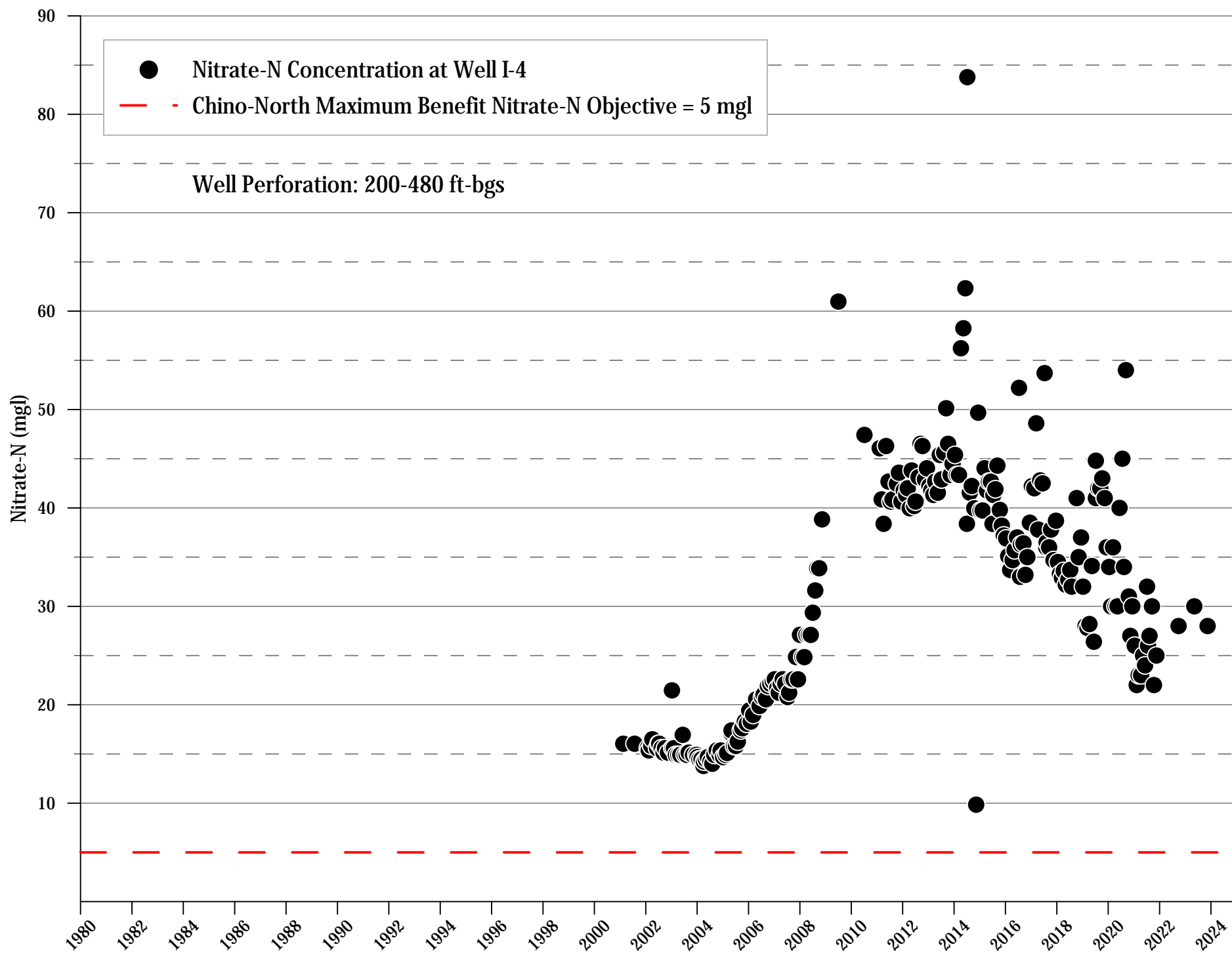
HCMP-8



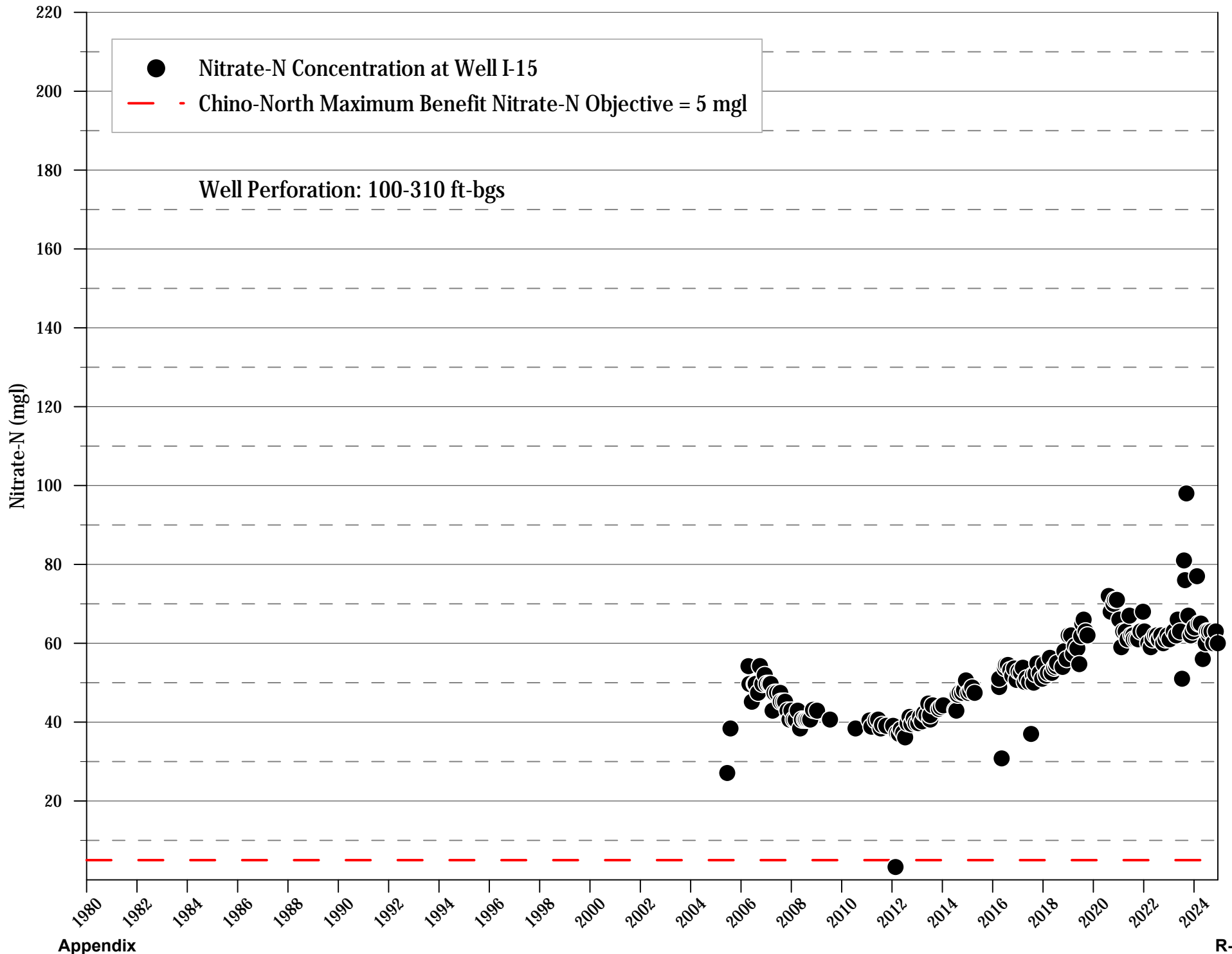
HCMP-9



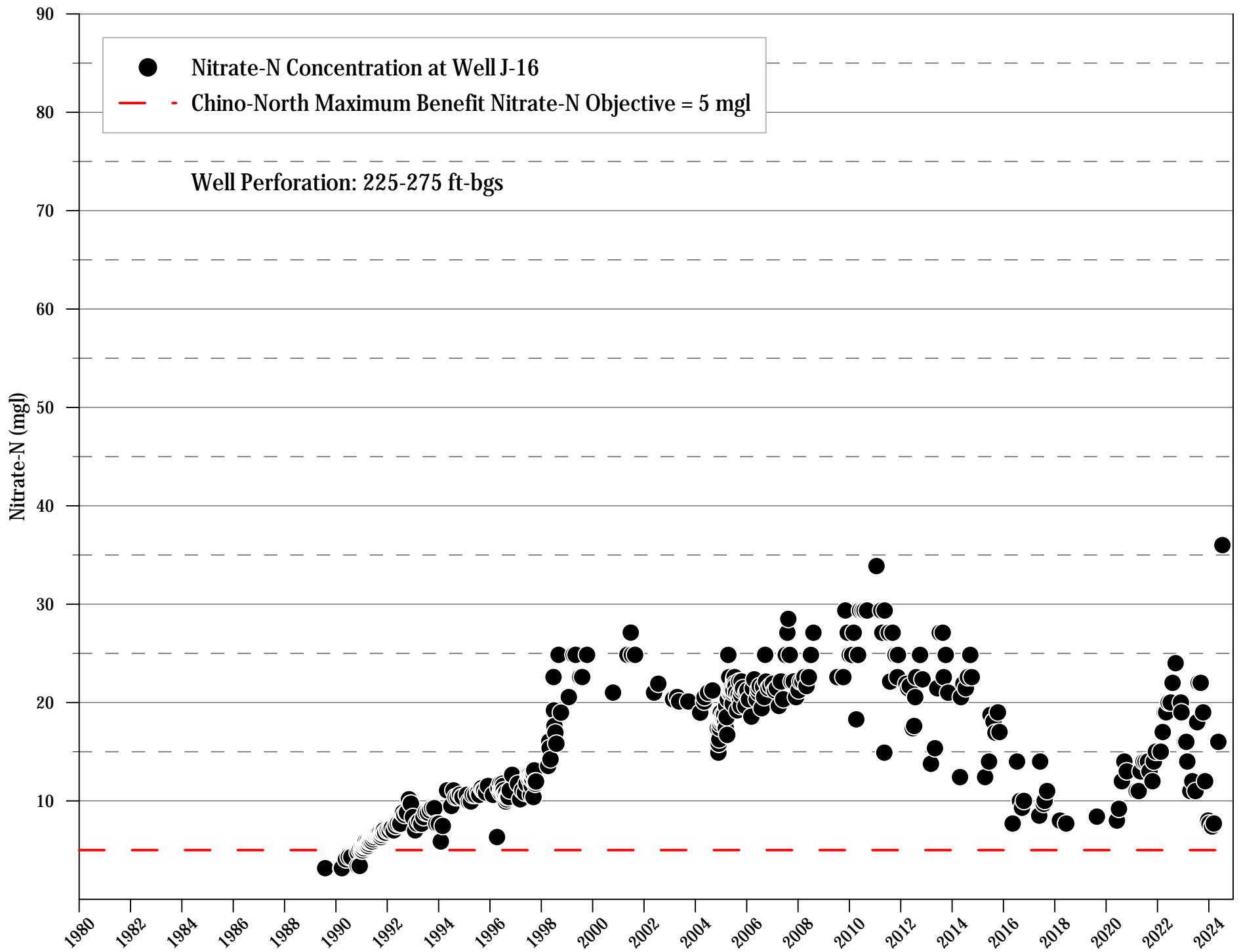
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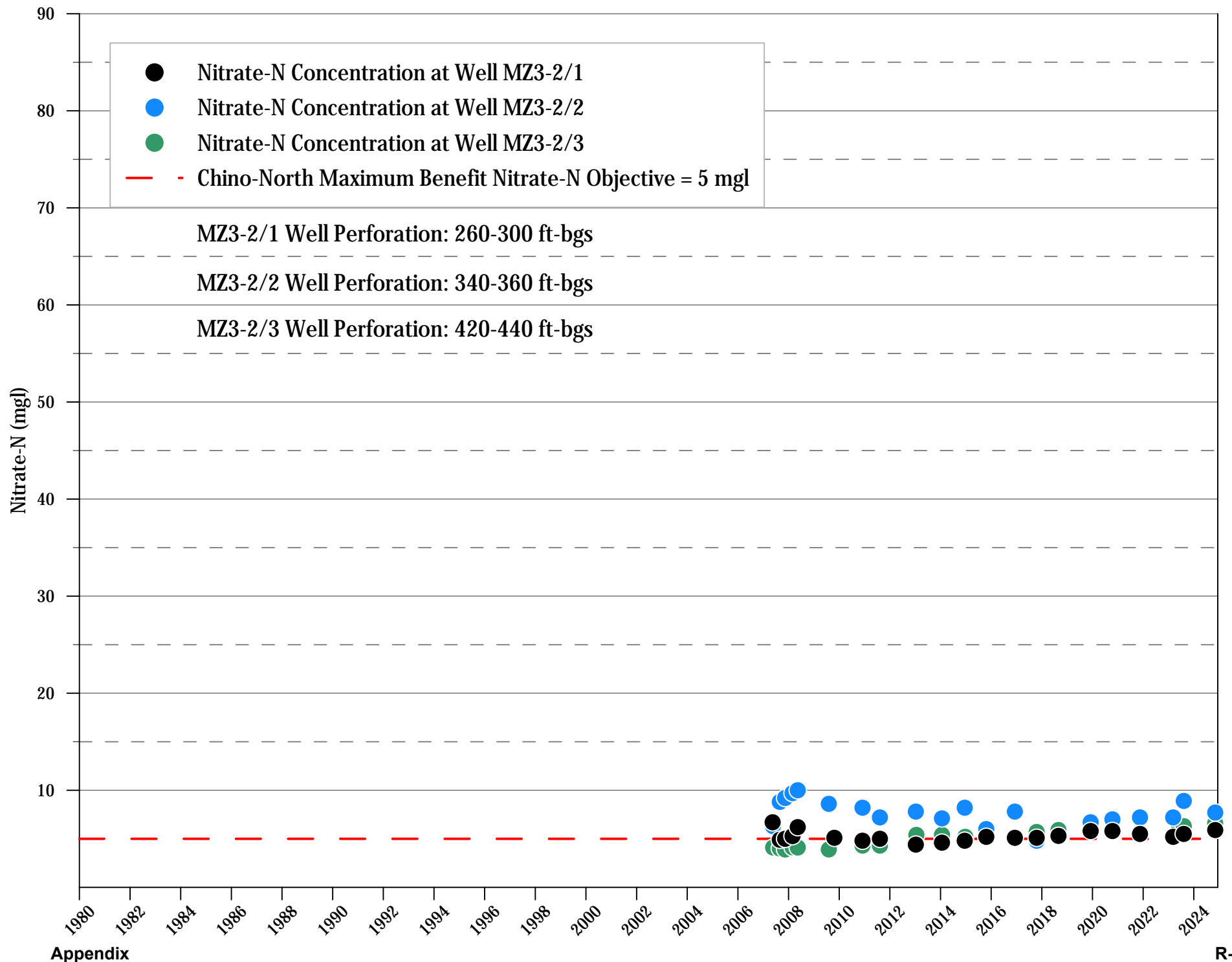
I-15



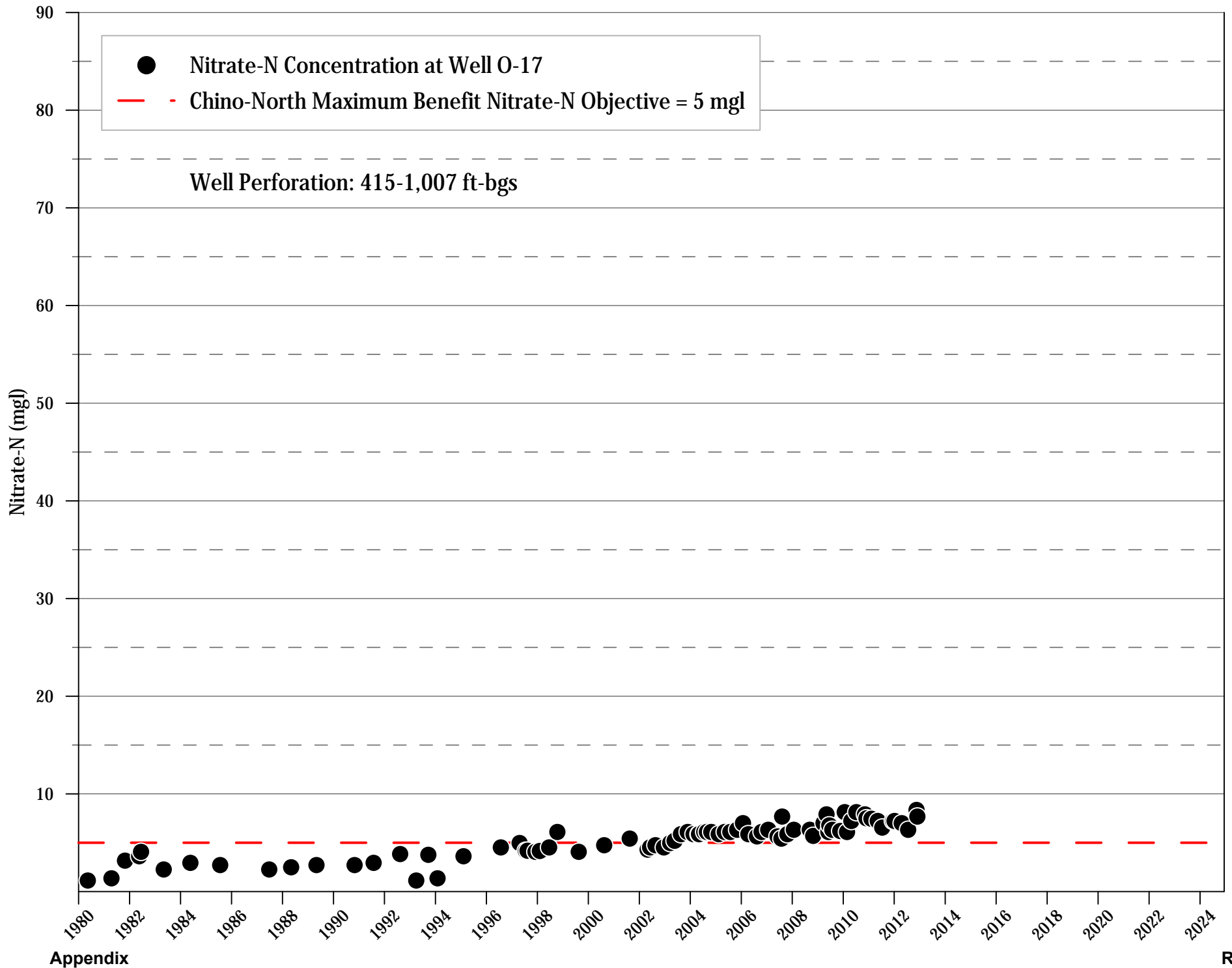
J-16



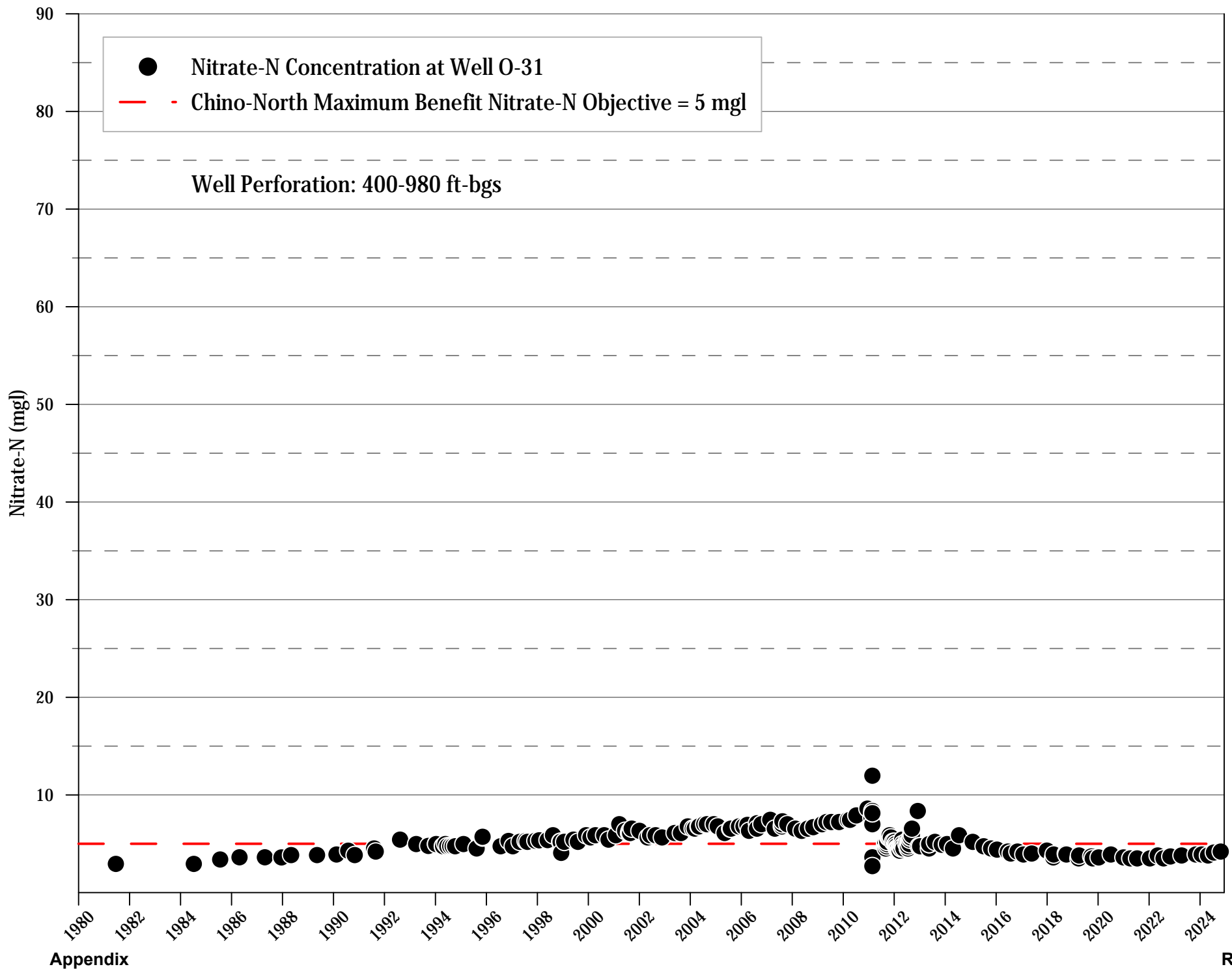
MZ3-2



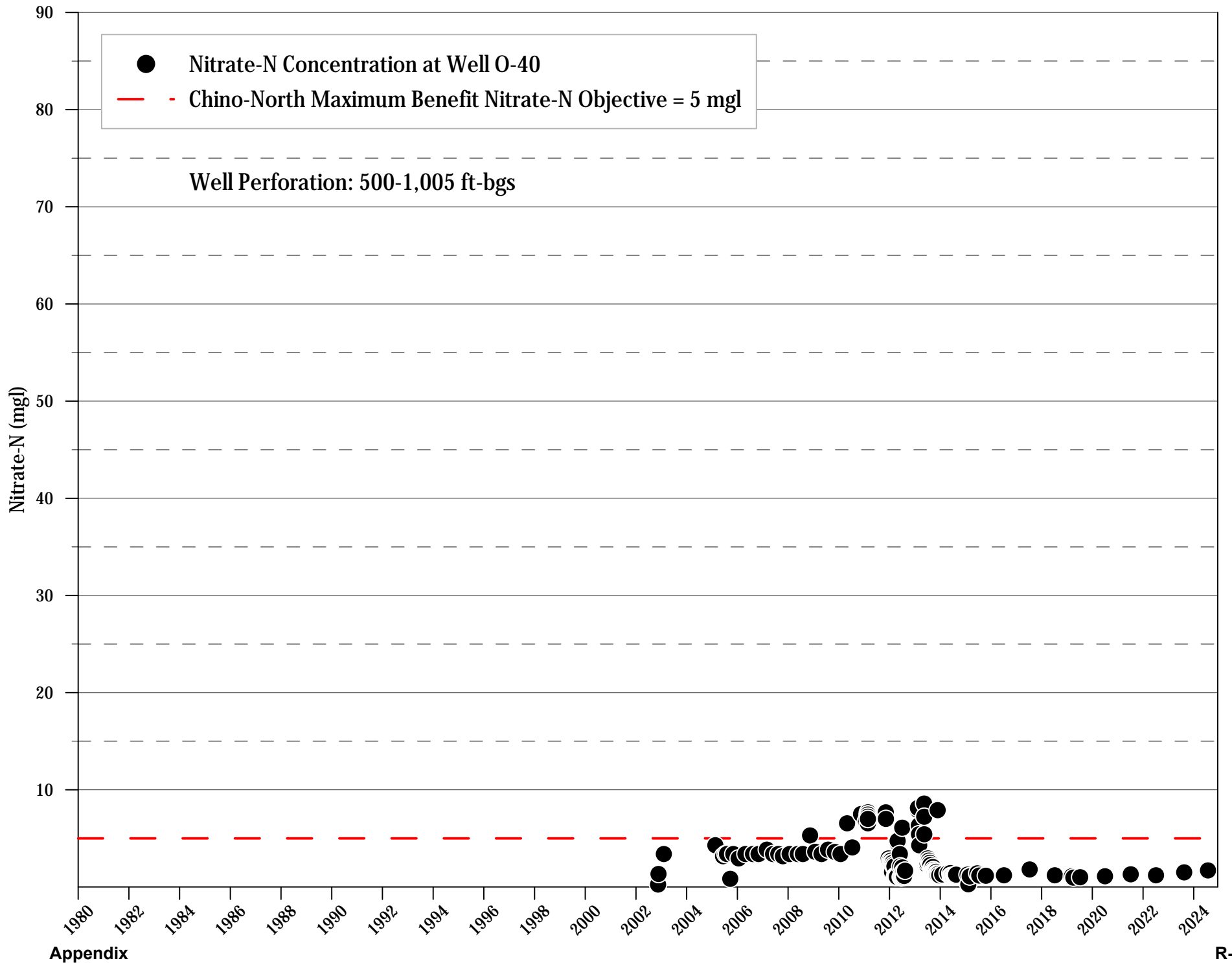
O-17



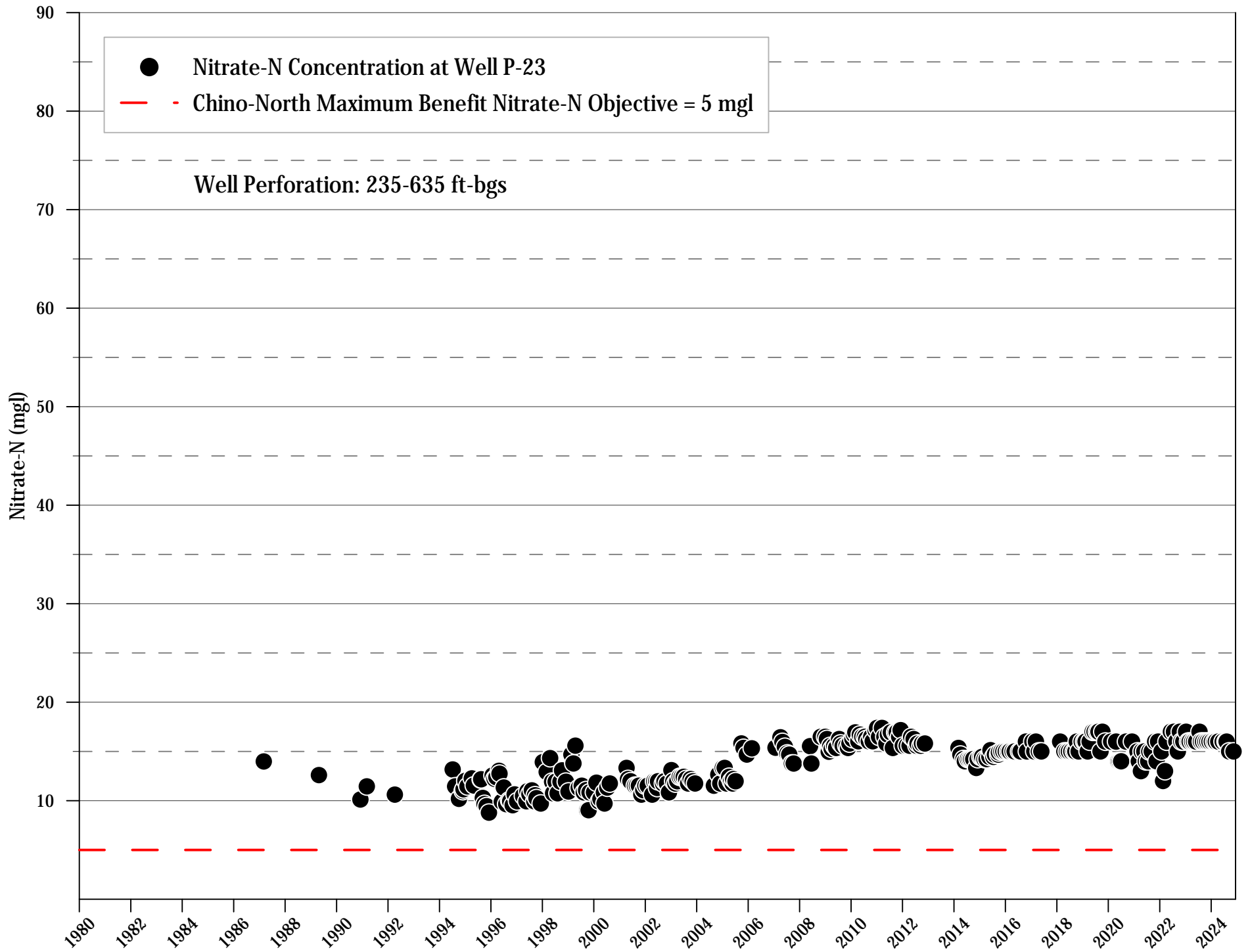
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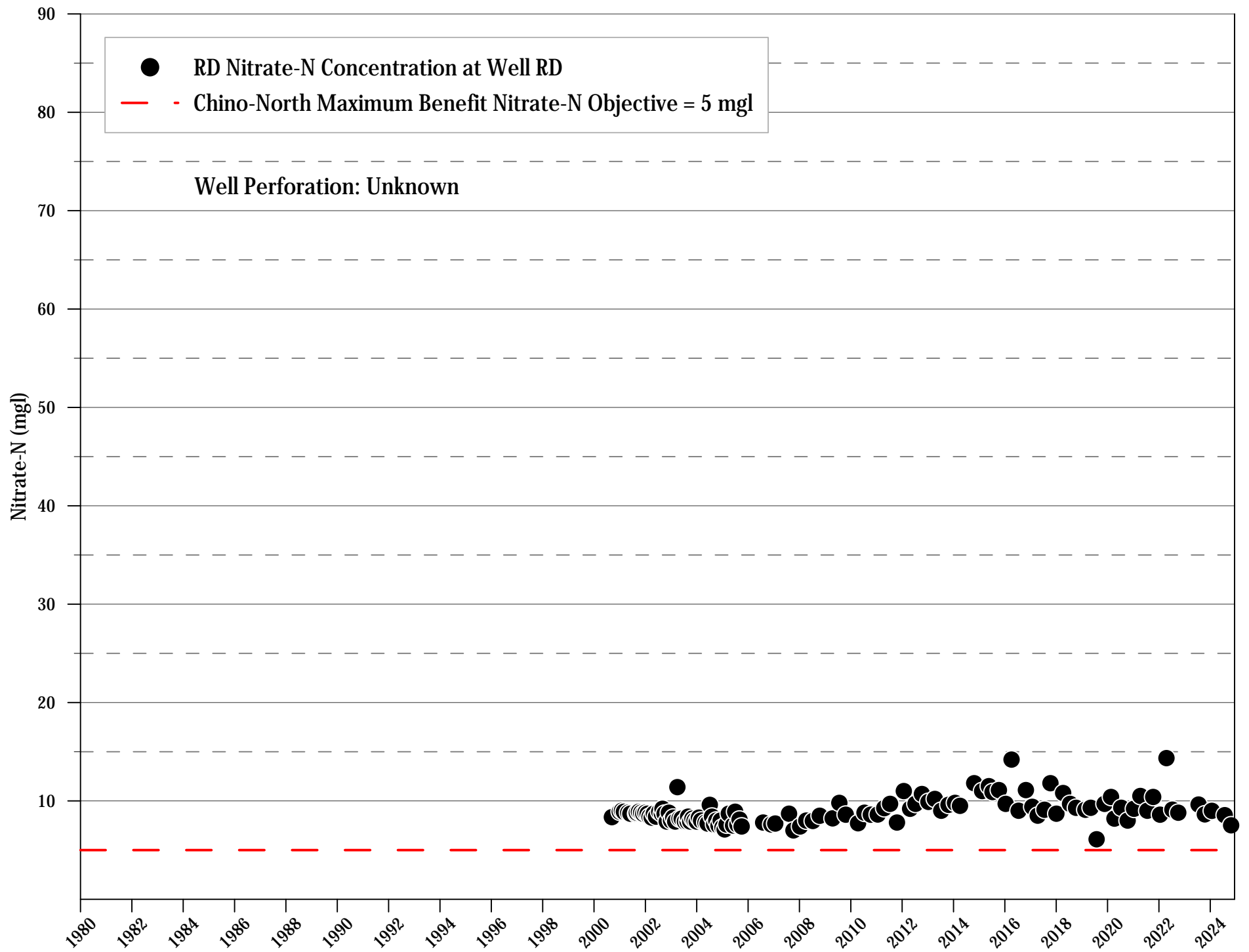
O-40



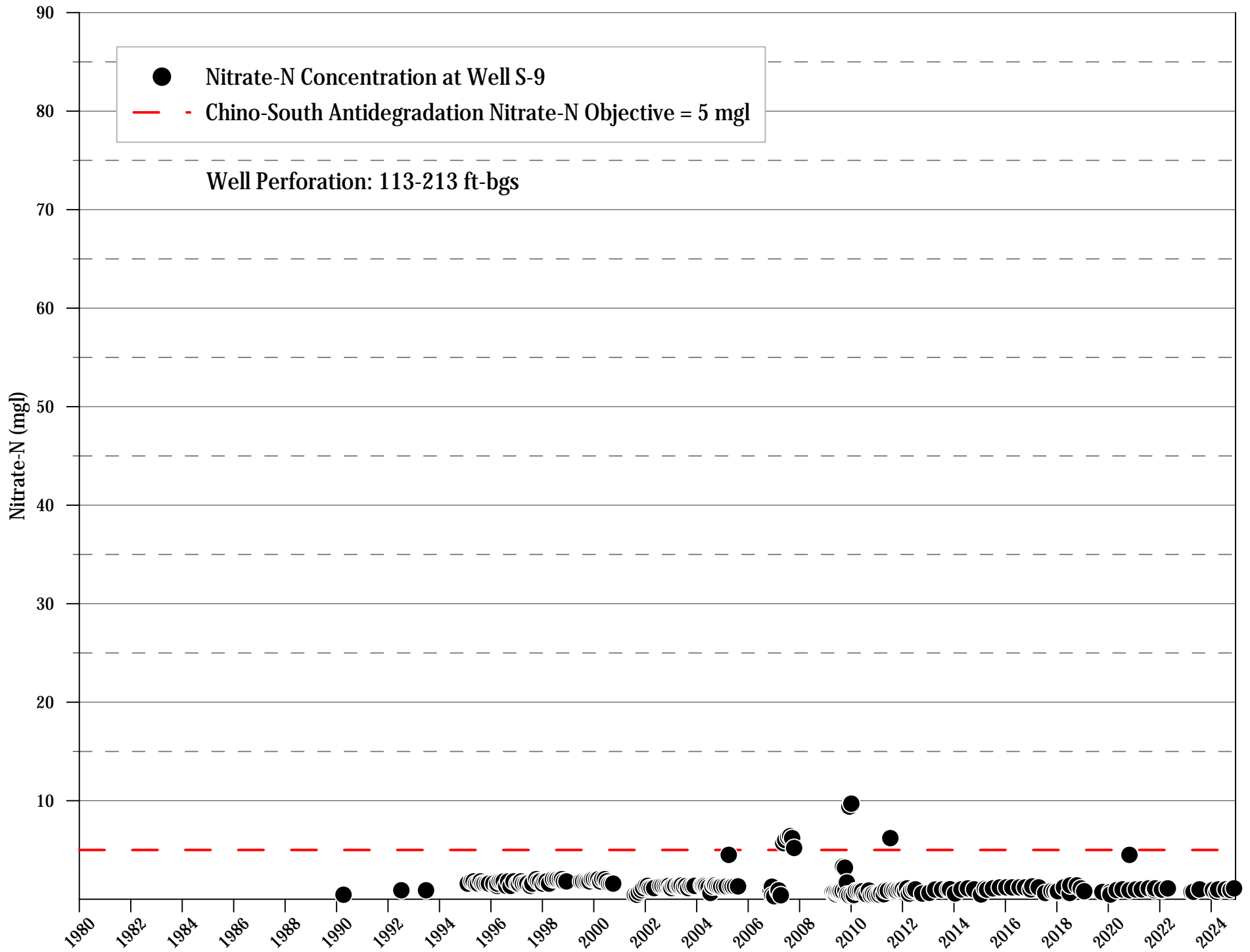
P-23



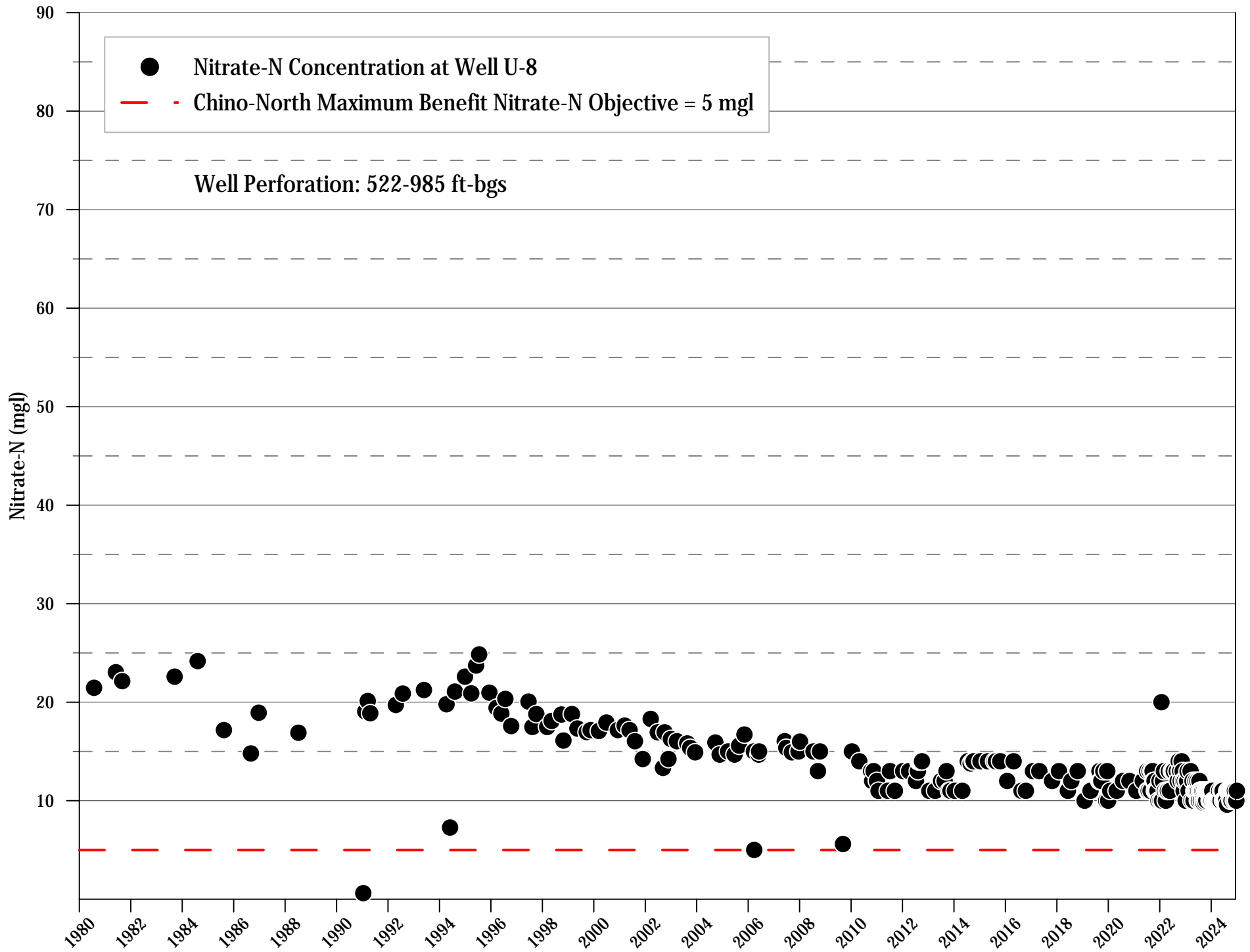
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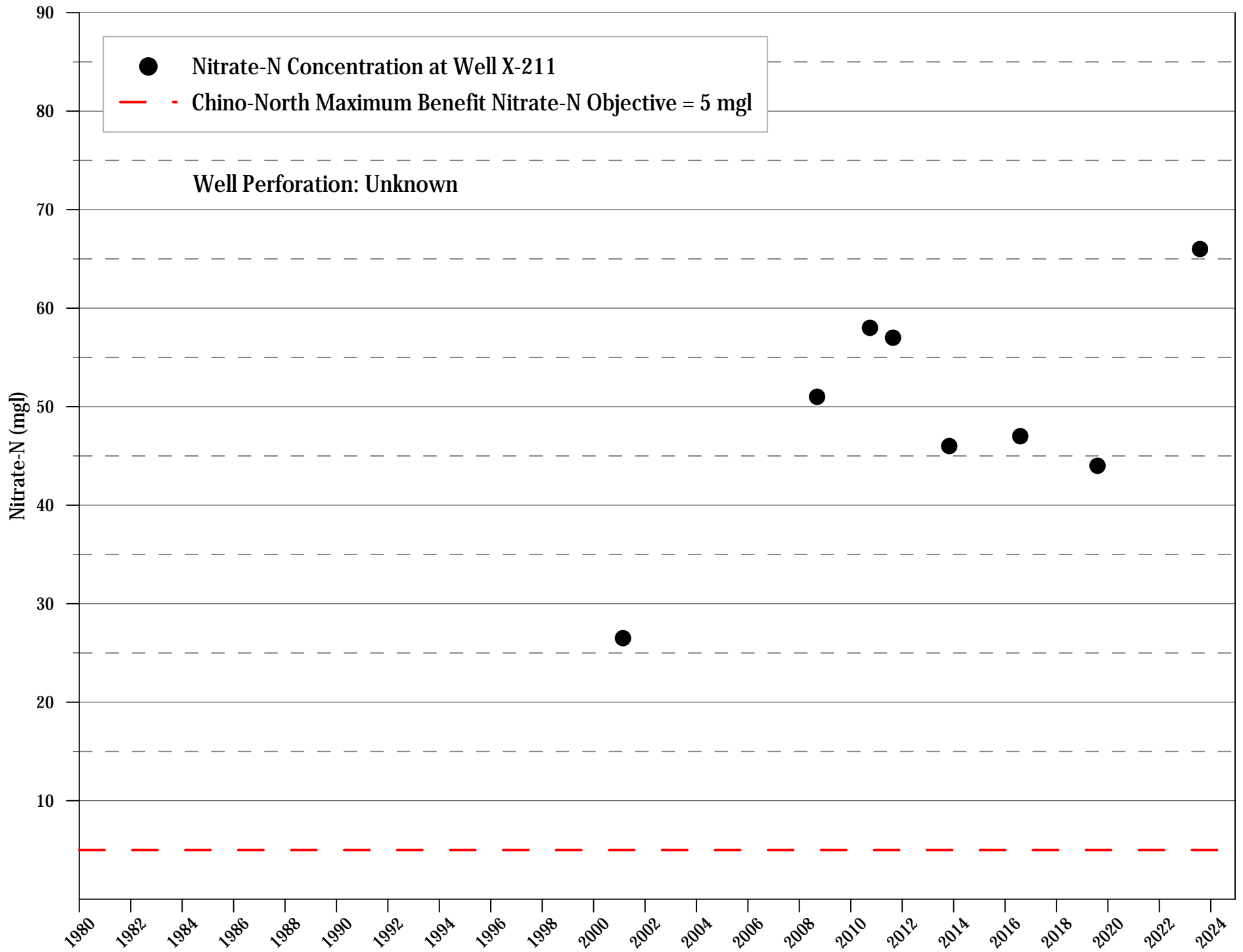
S-9



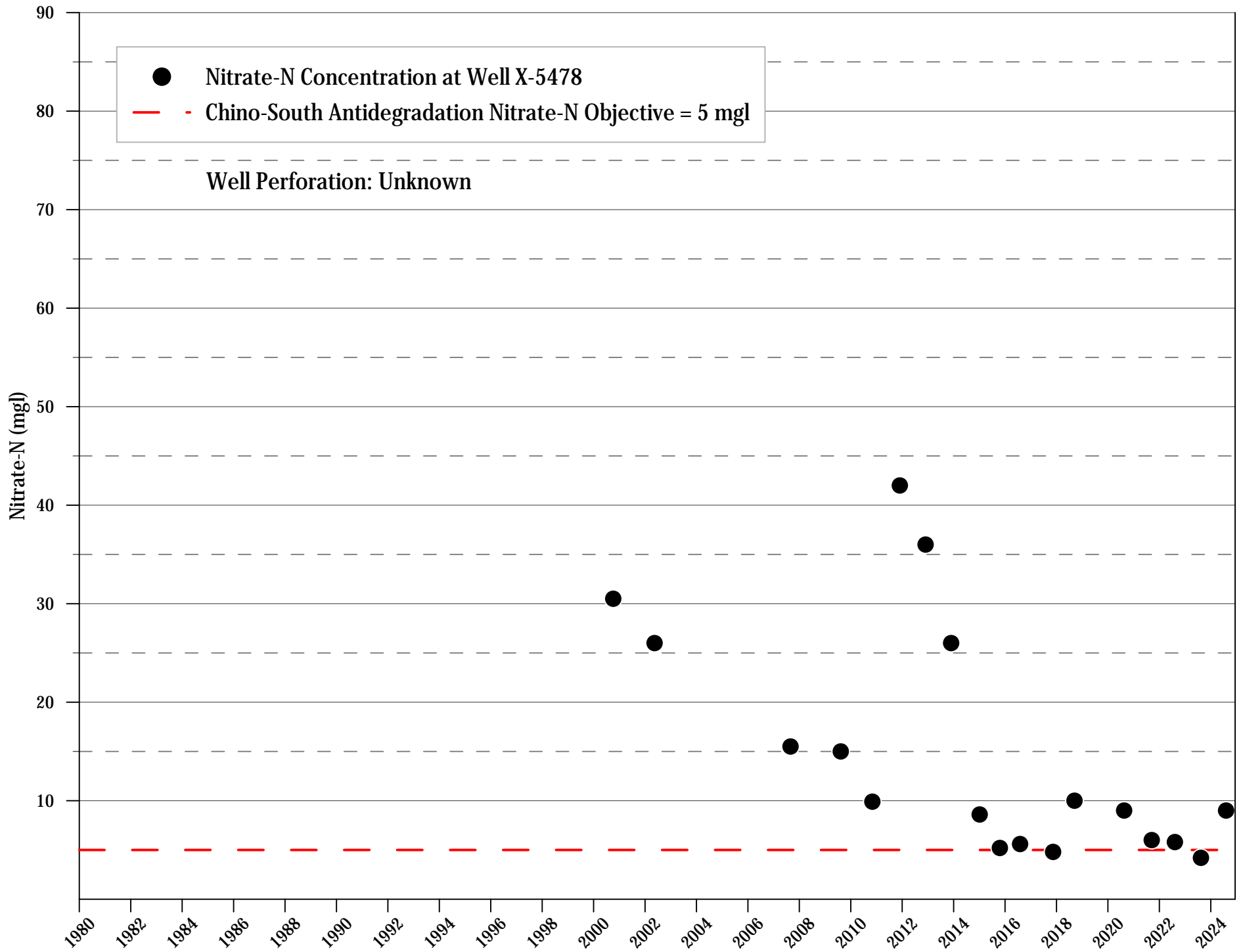
U-8



X-211



X-5478



Declez Basins.





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