APPENDIX A – PUBLIC PROCESS

RESOLUTION NO. 2010 – 74

A RESOLUTION OF INTENT TO DRAFT A GROUNDWATER MANAGEMENT PLAN FOR THE SOUTH WESTSIDE GROUNDWATER BASIN

WHEREAS, the City of San Bruno ("City") is a general law municipality and municipal corporation that provides water service to a portion of the South Westside Basin ("Basin"), a basin which is not subject to groundwater management pursuant to other provisions of law or a court order, judgment of decree; and

WHEREAS, the South Westside Basin is a critical resource for San Mateo and San Francisco Counties as a local water resource that augments imported water from the Tuolumne River and increases the reliability of local water supplies; and

WHEREAS, in 1992, the California Legislature enacted Assembly Bill 3030 to provide local public agencies increased management authority over their groundwater resources and subsequently enacted Senate Bill 1938 to encourage local public agencies to adopt groundwater management plans in order to increase their eligibility for grant funds for groundwater related projects (Water Code Section 10750); and

WHEREAS, the Legislature has also declared that the additional study of groundwater resources is necessary to better understand how to manage groundwater effectively to ensure the safe production, quality, and proper storage of groundwater in the State; and

WHEREAS, the adoption of a groundwater management plan is encouraged, but not required, by law; and

WHEREAS, the City received a Local Groundwater Assistance Fund Grant in the amount of $209,908 from the California Department of Water Resources, pursuant to the Water Security, Clean Drinking Water, costal Beach Protection Act of 2002 (Water Code Section 79560 et seq.) to fund a groundwater management plan for the South Westside Basin; and

WHEREAS, prior to adopting a resolution of intent to draft a groundwater management plan, Water Code Section 10753.2 requires a local agency to hold a public hearing, after publication of notice pursuant to Government Code Section 6066 on whether or not to adopt a resolution of intent to draft a groundwater management plan; and

WHEREAS, pursuant to Government Code 6066, the City duly published notice of a public hearing before the City Council on whether or not to adopt a resolution of intent to draft a groundwater management plan:

NOW, THEREORE, BE IT RESOLVED by the city Council of the City of San Bruno as follows:

1. To adopt a resolution of intent to draft a groundwater management plan for the South Westside Basin in accordance with the provisions of Water Code Sections 10750 *et seq.*
2. Direct the City Clerk to publish the Resolution of Intent under Government Code Section 6066 pursuant to Water Code Section 10753.3(a)
3. Direct Staff to prepare a groundwater management plan for the South Westside Basin in accordance with Water Code Sections 10750 *et seq.*

---oOo---

I hereby certify that foregoing **Resolution No. 2010 - 74** was introduced and adopted by the San Bruno City Council at a regular meeting on August 24, 2010, by the following vote following vote:

AYES: Councilmembers: Ibarra, Medina, O'Connell, Salazar, Mayor Ruane

NOES: Councilmembers: None

ABSENT: Councilmembers: None

CITY OF SAN BRUNO INCORPORATED DEC. 23RD 1914 SAN MATEO CO CAL

Vicky S. Hasha

Vicky S. Hasha, Deputy City Clerk

I hereby certify this to be a full, true and correct copy of the document it puports to be; the original of which is on file in my office.

Dated: September 2, 2010

Vicky S. Hasha, Deputy City Clerk

City Clerk of the City of San Bruno

San Mateo County Times

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Scott Munns,567 El Camino Real
San Bruno CA 94066

PROOF OF PUBLICATION

FILE NO. Groundwater Plan

In the matter of

The undersigned deposes that he/she is the Public Notice Advertising Clerk of the SAN MATEO COUNTY TIMES, a newspaper of general circulation as defined by Government Code Section 6000, adjudicated as such by the Superior Court of the State of California, County of San Mateo (Order Nos. 55795 on September 21, 1951), which is published and circulated in said county and state daily (Sunday excepted).

The PUBLIC NOTICE

was published in every issue of the SAN MATEO COUNTY TIMES on the following date(s):

8/10/2010, 8/17/2010

I certify (or declare) under the penalty of perjury that the foregoing is true and correct.

Public Notice Advertising Clerk

Legal No. **0003613375**

Notice of Public Hearing
Groundwater
Management Plan

NOTICE IS HEREBY GIVEN that at 7:00 p.m. on August 24, 2010 in the City of San Bruno Senior Center at 1555 Crystal Springs Road, San Bruno, California, the City of San Bruno will hold a public hearing on whether or not to adopt a resolution of intent to draft a groundwater management plan for the South Westside Basin (Plan) pursuant to California Water Code section 10750 et seq. for the purposes of developing the Plan and establishing a groundwater management program.

Members of the public, including land owners, are invited to attend the hearing. Draft copies of the proposed resolution of intent to draft a groundwater management plan will be available for review by the public at the hearing or may be obtained at San Bruno City Hall, Department of Public Services, 567 El Camino Real, San Bruno, California. Opportunity for public comment and input will be provided at the hearing. In accordance with Water Code section 10753.4(b), interested parties who wish to participate in developing the groundwater management plan may do so by attending the hearing and expressing their interest, or by submitting a written request to participate, to the attention of Will Anderson, Project Manager, City of San Bruno, Public Services Department, 567 El Camino Real, San Bruno, CA 94066.

The City of San Bruno wishes to make all of its public hearings accessible to the public. Upon request, the proposed resolution of intent document will be made available in appropriate formats to persons with disabilities, as required by Section 202 of the Americans with Disabilities Act of 1990. Any person with a disability who requires a modification or accommodation in order to participate in a meeting should direct such request to the City of San Bruno, Public Services Department at 650-616-7065 at least 72 hours before the meeting, if possible.

The public is invited to attend and comment in the process described above. Written comments may be submitted to the City of San Bruno for inclusion in the public record. Any person unable to attend the public hearing may submit written comments to City of San Bruno, Office of the City Clerk, 567 El Camino Real, San Bruno, CA 94066. If you have questions regarding this notice or the matter to be heard, please contact Will Anderson at (650) 616-7065. In addition, a website has been established as an information source throughout the development process of the groundwater management plan at http://www.southwestsideplan.com.

SMCT #3613375
Aug. 10, 17, 2010

FINAL Notes from First Advisory Committee Meeting
For the Groundwater Management Plan for the South Westside Basin
December 18, 2009, 9:00am at San Bruno City Hall

Minutes prepared by Will Anderson and Jim Blanke.

Attendees: Please see attached sign up sheet

Location: San Bruno City Hall, Conference Room 115

Time: 9:00am – 10:30am

ATTENDEES: PLEASE INFORM WILL ANDERSON IMMEDIATELY IF ANY OF THESE ITEMS DO NOT ACCURATELY REPRESENT DISCUSSIONS AT THE MEETING.

General

An introductory presentation was given by Jim Blanke of WRIME describing the background of the Basin and the role of the Advisory Committee in developing the Groundwater Management Plan (Plan). During the presentation, Greg Bartow of SFPUC also provided a brief description and update about the Regional Groundwater Storage and Recovery Project being planned for the South Westside Basin.

Key comments and action items are listed below.

Comments

Goal

- The proposed goal was accepted with one addition: to include an economic aspect. The accepted goal is "To ensure a sustainable, high-quality, reliable water supply at a fair price for beneficial uses achieved through local groundwater management."

Existing Groundwater Model

- Daly City is the lead agency responsible for preparation and upkeep of the groundwater model to be utilized in our Plan preparation and analysis.
- Daly City plans to continue refinement of the model based on new data, including new water level and production data as well as information developed through the new monitoring wells installed for the Regional Groundwater Storage and

Recovery Project. Daly City will present to their City Council in January a proposal to continue model updates through the end of 2010.

- The assumed groundwater usage data used for model calibration benefits by confirmation by all users, especially the irrigators who mostly have unmetered wells.
- The Plan development will need to identify and address gaps in the available data to ensure future model updates have sufficient data.
- The groundwater model indicates a decline in storage in the South Westside Basin of approximately 750 AFY. While the model quantitatively integrates a large amount of data, this rate is within the range of modeling and data uncertainties associated with any groundwater analysis.

Group Discussion

- Colma stated that they have to report back to their decision-makers about Colma's role in the Advisory Committee. The Plan development process will address various technical and procedural issues in the Basin including governance.
- Research of potential options to recharge the aquifer are recommended to include stormwater retention/detention.

Next Steps

- The Plan development process will be coordinated with any requirements of the grant funding and State laws governing Groundwater Management Plans.
- It was suggested that the timing of the Public Hearing for Intention to Adopt the Plan be coordinated such that more technical data be obtained before presenting the Intention to City Councils.
- San Bruno, as lead agency, is the only entity required to adopt the Intention to Adopt/Draft a Groundwater Management Plan. Other agencies may choose to do so as well if desired.
- A public meeting will be scheduled to discuss an updated version of the information presented at this meeting to the general public. Target date is mid January.
- The next Advisory Committee meeting will focus on Basin Management Objectives, Elements, and Projects and is targeted for late January.

End of minutes.

FINAL Notes from Second Advisory Committee Meeting
For the Groundwater Management Plan for the South Westside Basin
March 11, 2010, 1:30pm at San Bruno City Hall

Minutes prepared by David Veilleux and Jim Blanke

Attendees: Please see attached sign up sheet

Location: San Bruno City Hall, Conference Room 115

Time: 1:30pm – 3:30pm

General:

A presentation of Basin Management Objectives (BMO) was given by Jim Blanke of WRIME. Basin Management Objective topics included Water Quality, Land Subsidence, and Water Levels/Storage and their role in the overall goal of the Groundwater Management Plan. There was also a brief discussion of Senate Bill SBx7 6 given by Mark Nordberg of DWR.

Key Comments

- BMOs – Quantitative measures of success for basin management
  - Land subsidence
    - No reported subsidence – Qualitative BMO
  - Water quality
    - Thresholds are difficult to use for regional contamination issues as there is a time lag as contaminated water reaches groundwater. Seawater intrusion (SWI) can be more quickly mitigated through reduced pumping.
    - Monitor for constituents other than chloride to help predict SWI. Try to coordinate with DPH testing to monitor for other possible markers of SWI in production wells.
    - Plan should focus on regional water quality. Do not set basin wide groundwater quality BMO. Break basin down into subregions. Propose common methodologies to each subregion to develop individual thresholds.
    - Deep water quality is generally good. There is some upwelling of saline water in South San Francisco (SSF) and potentially elsewhere. Could be sediments, exact source/cause is unknown. Wells 20 and 21 in SSF have relatively high levels of chloride.
  - Water levels/storage

        - Some cascading water levels in San Bruno wells. Several basin wells are shallow, including some CalWater wells. 2 cemetery wells are being replaced (same capacity and gpm but deeper)
        - Do not set BMO based on shallowest well in Basin. For monitoring, the Plan should address using existing infrastructure and possibly expanding to protect against SWI. Investigate raising basin-wide groundwater levels to reduce the risk of SWI.
        - May want to consider a dynamic operating range for water level BMO. This will help manage drought situations. Determine different ranges of health for the basin, broken down by subregion.
        - Consider making a moving average range for groundwater levels
        - Groundwater storage in the basin is losing about 750 AFY of storage based on modeling results.
        - Take SFPUC groundwater banking project into account when developing thresholds.
        - Increase monitoring efforts. Investigate adding more monitoring wells where data is sparse or in areas of concern.
        - Impact of new SFPUC wells (in the Sunset District) on the flow of groundwater within the Basin is still under study.

    - Surface water impacts to groundwater
        - No significant surface water bodies in the basin. Do not need to account for storm water runoff as part of a surface water-related BMO. (Maybe mention in Plan that it was considered but deemed unnecessary.)
    - Enforcement of BMO
        - Trigger points set responses, recommend no specific enforcement required by Plan.
        - Reporting will highlight potential problem areas and focus attention on needs.

- Management Zones
    - Develop Management Zones
        - Unique areas with distinct BMOs. Best to define through geologic or hydrologic distinctions.
        - Potential management zones are defined by production well location, water quality data, city boundaries, and water purveyor service areas. There is no clear geological definition for these Zones.

Discussion

- Should pay attention to upwelling. Also monitor thresholds to ensure that the future costs to customers remain reasonable.
- Colma – needs to report to their governing body regarding the progress and details of the plan. Concerned about Plan development governance process.

- Hydrofocus- Aquifer has mostly reached equilibrium. Only known water-level-dependent major recharge zone is San Mateo/San Francisco County boundary. Groundwater model should be run to determine if current pumping levels could maintain a higher water level.
- Cemeteries are good source of recharge. Should try and expand the recharge capability of this land.
- BAWSCA – consider adding freeboard to any threshold requirements to better manage supplies.

Next Steps

- Ongoing coordination with stakeholders as Plan development proceeds.
    - WRIME to send draft BMO information, including proposed methodologies, to Advisory Committee and receive and organize comments via email.
- Schedule public meetings regarding progress of Plan.
- Develop Basin Management Objectives, Plan Elements, Potential Projects.

FINAL Notes from Third Advisory Committee Meeting
For the Groundwater Management Plan for the South Westside Basin
June 24, 2010, 10:30am at San Bruno City Hall

Minutes prepared by Will Anderson and Jim Blanke

Attendees: Please see attached sign up sheet

Location: San Bruno City Hall, Conference Room 115

Time: 10:30am – 12:15pm

General:

Mark Nordberg of DWR provided a handout and brief update on the upcoming SB 6 Program for groundwater elevation monitoring. The program is currently being finalized by the State. The proposed Groundwater Management Plans for the North and South Westside Basin, with minor refinements and coordination, can be easily utilized to conform with the reporting requirements of SB 6. The DWR SB 6 contact for our basin will be Mark. Workshops to present the program are upcoming with a potential August 18 workshop in Sonoma being the nearest to the Bay Area.

Greg Bartow, SFPUC, also mentioned an upcoming groundwater conference in Burlingame and will email details to the Advisory Committee (AC). Conference information can be found at http://www.grac.org/am2010.asp.

Jim Blanke, WRIME, gave the keynote presentation regarding the proposed Best Management Objectives (BMOs) for the South Westside Basin Groundwater Management Plan (GWMP). Generally, comments on the draft BMOs presented at the 2nd AC meeting were addressed with revised recommendations presented.

Key Comments

- Resolution of Intent to Draft
  - Needs to occur sooner rather than later as it is tied to the schedule for public meetings.
  - The current schedule calls for adoption of the GWMP by December 31, 2010.
  - Confirm all stakeholders are supportive prior to placing on public agendas.
  - Patrick prefers to have the BMOs in place prior to informing elected officials of the GWMP.
  - Brad and Will to coordinate on outreach to cemeteries to gauge their concurrence. Greg has had recent successful contact with most of the cemeteries.

- Mark mentioned that a documented due diligence public outreach process is important to DWR, the agency funding the GWMP.
- John mentioned as a potential reference an appendix in the previous draft GWMP that described a public outreach process previously used in our Basin.
- Environmental documents beyond a categorical exemption are usually not required for planning-type documents, unless detailed construction projects are included. Our GWMP is not anticipated to include specific construction projects.

- Water Level BMO
  - It was decided to incorporate the most recent well data even though these wells do not have significant historical data for use in threshold development.
  - The groundwater model can be utilized to estimate previous historical low water levels for wells without sufficient historical data
  - The groundwater model is proposed to be extended annually to provide estimated water levels. The annual extension may be reviewed by the AC.
  - The banked water from the Storage and Recovery (Conjunctive Use) project is not to be utilized in the water level determinations.
  - Adequacy of data collection and potential options for increased recharge to be addressed in the "elements" section of the GWMP.
  - The BMOs will not average across sub-areas, and as many wells as reasonable will be presented, with thresholds of "historical low" groundwater level."

- Chloride BMO
  - The threshold of 150 mg/l will be modified to 125 mg/l based on 50% of the 250 mg/l MCL (maximum contaminant level).
  - Age-dating of the groundwater at various locations is recommended to determine a potential time-lag between a contamination event and the contamination of the groundwater (potential for Elements – Monitoring).

- Nitrate BMO
  - Patrick noted that the nitrate concentrations measured at the point of entry into the distribution system may be lower than those measured at individual wells.
  - Nitrate BMO will not average across sub-areas, and will use as many wells as reasonable, with thresholds modified to 80% and 90% of the MCL.

- Land Subsidence BMO
  - Land subsidence is caused by a combination of fluid withdrawl and tectonic movements. Separation of the 2 causes is difficult.
  - Greg mentioned the SFPUC is having a land subsidence study performed by Fugro. Results of that study may be incorporated into the GWMP

- It was decided that implementation would include analysis using InSAR to determine if there is active subsidence from fluid withdrawl. This analysis could be repeated at a 10-year monitoring interval, depending on the results of the initial analysis.

- BMO Thresholds
  - It was decided that all subareas would not be used.

- Groundwater Recharge
  - The GWMP will outline the most productive existing areas of recharge within the basin.
  - The groundwater model can provide a good estimate of the recharge areas.
  - Klara mentioned San Bruno's updating of its Stormwater Master Plan will incorporate recommendations developed by the GWMP.
  - Potential BMP's regarding recharge may be considered by the AC in the future. Existing soils conditions can be investigated during the "Implementation" phase of the GWMP.

- Coordination with San Mateo County regarding Known Haz Mat Sites
  - Patrick will coordinate with Greg Smith of SM County Health Dept to ensure the known hotspots within our basin are identified and accounted for during future basin analyses.

- Miscellaneous
  - Any outstanding comments on the draft BMO's to be provided to Jim and/or Will within the next 2 weeks, although the GWMP is a flexible document that can be amended in the future.
  - The schedule for GWMP development still calls for adoption of the GWMP by December 31, 2010, although an extension to May 2011 from the DWR may be feasible.

Next Steps

- Ongoing coordination with stakeholders as Plan development proceeds.
- Finalize Basin Management Objectives.
- Public Partner Agencies (San Bruno, Daly City, SFPUC) to schedule adoption of Resolutions of Intent to Draft the GWMP. Option for other public agencies over the basin (Colma, South San Francisco) to adopt resolutions. Cal Water to support Colma and South San Francisco if they choose to adopt.
- Schedule public meetings regarding progress of Plan after Resolutions are adopted.
- Next AC meeting will address Governance and Finance.

End of minutes

FINAL Notes from Fourth Advisory Committee Meeting
For the Groundwater Management Plan for the South Westside Basin
August 16, 2010, 3:00pm at San Bruno City Hall

Minutes prepared by Will Anderson and Jim Blanke

Attendees: Please see attached sign up sheet

Location: San Bruno City Hall, Conference Room 115

Time: 3:00pm – 5:00pm

General:

Jim Blanke, WRIME, gave the keynote presentation regarding the proposed options regarding Governance and Financing for the South Westside Basin Groundwater Management Plan (GWMP).

Key Comments

- Summary of Previous Meeting
  - To finalize the recommended Best Management Objectives (BMO's) as agreed to at the 3rd Advisory Committee meeting, the updated results of the groundwater model will be needed.
  - The updated groundwater model is scheduled for draft release to the other agencies after Labor Day, with a 30-day peer review period before it is finalized.

- Resolution of Intent to Draft
  - San Bruno will conduct a public hearing and present to its Council on 8/24/10 a recommendation to adopt a Resolution of Intent to Draft the GWMP.
  - Patrick of Daly City would like the wording in the draft Resolution confirmed, citing AB 303 requirements instead of the AB 3030 requirements.
  - Action item - Will to confirm wording in the Resolution and provide copies of the San Bruno Council packet to all Advisory Committee members.
  - Klara noted that the adopted GWMP will serve, in part, to tie together numerous existing water issues in San Bruno (i.e., Conjunctive Use, reallocations, Master Plan updates for Urban Water and the Water System).
  - The current schedule for completion by the end of the calendar year is still valid. Adoption of the GWMP may extend beyond the calendar year due to limited Council meetings in December.
- Public Meetings
  - It was decided to host 3 of the 5 required Public Meetings at San Bruno on 9/9/10, at Daly City on 9/23/10, and at Colma on or around 10/7/10. The hosting agency will advise Will or Jim of the preferred time, date, and location

as soon as possible. The scope of the meetings will be the same for the three meetings, providing a summary of the GWMP development to date and gathering input from the public to improve the plan.
    - The final 2 required Public Meetings will be hosted by San Bruno for the presentation of the draft GWMP and the adoption of the final GWMP.
    - Public outreach regarding the 3 initial meetings will be performed by the hosting agency as they are most familiar with how to reach their stakeholders. Outreach may include web site postings, newspaper ads, and the distribution of public information pamphlets in billings of Cal Water customers. San Bruno and Daly will do public noticing through available avenues including potentially a short video clip for viewing on local cable TV and the project website.

- Governance
    - Two governance models were presented, an Individual Interest Model (ie a Memorandum of Understanding or MOU) and a Mutual Interest Model (i.e. a Joint Powers Agreement or JPA).
    - It was noted that Cal Water and other private entities such as golf courses and cemeteries are not capable of entering into a JPA although Cal Water has previously entered into MOU's.
    - It was generally agreed to improve on the existing positive collaborations between the participants using a less-formal structure and keeping the focus at a policy level, versus project-specific.
    - The agreement will be a detailed MOU to be developed by WRIME and will define the various roles and responsibilities, continue the existing cooperation and account for future needs and future project implementations. Longevity of the agreement is also a critical concern.
    - Mark of DWR noted the governance structure is mainly for the implementation of the adopted GWMP (not of great concern to DWR) but the engagement of the public during the development of the governance structure is important and of concern to DWR.
    - A discussion of the preferred governance will be included in the GWMP. Finalization and signing of the MOU will occur during implementation of the GWMP, after the plan has been adopted.

Next Steps

- Ongoing coordination with stakeholders as Plan development proceeds.
- Host Public Meetings
- Incorporate forthcoming groundwater modeling results into the Basin Management Objectives.
- Next AC meeting will address the draft version of the GWMP.

End of minutes

FINAL Minutes from the Fifth Advisory Committee Meeting
For the Groundwater Management Plan for the South Westside Basin
February 3, 2011, 1:30pm at San Bruno City Hall

Minutes prepared by Will Anderson and Jim Blanke

Attendees: Please see attached sign up sheet

Presentation Slides: Please see attached copy

Location: San Bruno City Hall, Conference Room 115

Time: 1:30pm – 3:30pm

Please notify Will Anderson at 650-616-7052 if the information presented below is incomplete or incorrect.

General:

Jim Blanke of WRIME and John Fio of HydroFocus presented the process and the results of the draft version of the updated groundwater model that encompasses the entire Westside Basin, which includes the South Westside Basin. The application of the model to develop an estimate of yield for the basin was also discussed.

Jim Blanke also presented the monitoring and reporting requirements for the State Department of Water Resources (DWR) CASGEM Program (California Statewide Groundwater Elevation Monitoring Program).

Key Comments

- Updated Groundwater Model – Draft Version
  - By adding new additional calibration points (new cluster wells in the South Westside Basin), the revised draft model now better reflects actual groundwater elevations obtained from the new calibration points. Previously, vertical head gradients were poorly understood due to the long screens on active and former production wells. The groundwater elevations that were updated are now higher than shown in the previous model version and match the elevations in the new cluster wells.
  - The revisions reflect how the model is impacted by changes to input parameters. Actual metered water usages at Golf Courses compared to estimated usages contributed to the improved accuracy of the model. Additional data for water levels and production from private producers would help improve model accuracy.
  - The updated model will be used to develop thresholds for groundwater elevations BMO (Basin Management Objective).

- The model is a living model intended to incorporate new data and information over time. Model updates by Daly City are planned on a 2-year interval.
- Additional outreach to the cemeteries was discussed to encourage sharing of information about production to improve the basin understanding. It was suggested to install free water meters on wells to monitor actual water usage at cemeteries. It will take time to understand the issues the Cemeteries may have with meters and to build trust with the Cemeteries. Open communications with them and the entire Advisory Committee will be continued.
- Additional information on the per acre usage of water at the cemeteries may be available for cemeteries using exclusively CalWater supplies, although these areas may use less water due to higher unit cost.
- The South Westside Basin average annual change in storage from the model has changed from approximately 700 AFY decline to less than 100 AFY decline.
- The yield for the South Westside basin is estimated as 8,700 AFY
- The yield for the Westside basin is estimated as 10,600 AFY, not accounting for increased potential yield from intercepting subsurface outflow to the Pacific Ocean.
- The yield values are developed based on maintaining current groundwater levels over the long-term. These yield values do not address the risk of seawater intrusion, which will continue even if pumping does not exceed the yield.
- The Basin yield is directly related to groundwater elevations.
- It was recommended that an additional meeting be scheduled in Colma to outreach this new data to the Cemeteries. Date and time to be determined.
- Another alternative to improve model accuracy is to add tracers to the groundwater and/or perform isotope sampling to find areas and times of recharge.

- CASGEM
  - It was agreed to build on the existing monitoring and reporting program already in place as part of SFPUC's Annual Reporting to DWR. Purveyors in the Basin (Cal Water, Daly City, San Bruno and SFPUC) will form a Voluntary Cooperative Groundwater Monitoring Association (VCGMA) and enter into an agreement suitable to DWR (maybe a one-page Memorandum of Understanding [MOU]). A recommended draft MOU including the reporting process will be provided by WRIME.
  - Water level data will be collected by the agency that owns the well and reported to SFPUC. SFPUC, operating through the VCGMA, will report the values to DWR as well as continue to include the data in the annual report.
  - Water level data reported to DWR will be a subset of the data included in the annual report. The actual wells to be included will be determined this summer.

Next Steps

- Ongoing coordination with stakeholders as Plan development proceeds.
- Host Public Meeting in Colma to present the updated groundwater model results to the Cemeteries

- Incorporate updated groundwater modeling results (yield and groundwater elevations) into the Basin Management Objectives.
- Prepare Draft version of GWMP for review by the Advisory Committee. Comments from the Committee will be incorporated before being released for Public review.
- Develop Voluntary Cooperative Groundwater Monitoring Association and notify DWR of intent to be a monitoring entity.

End of minutes

FINAL Minutes from the Sixth Advisory Committee Meeting
For the Groundwater Management Plan for the South Westside Basin
April 28, 2011, 10:00am at San Bruno City Hall

Minutes prepared by Will Anderson and Jim Blanke

Attendees: Please see attached sign up sheet

Presentation Slides and Handouts: Please see attached copies

Location: San Bruno City Hall, Conference Room 115

Time: 10:00am – 12:00pm

Please notify Will Anderson at 650-616-7052 if the information presented below is incomplete or incorrect.

General:

Jim Blanke of WRIME provided an update of the current status of the Groundwater Management Plan and provided information to focus the review to be performed by the Advisory Committee. **Comments are due on May 6, 2011.**

Patrick Sweetland provided information on the recent update to the Westside Basin Groundwater Flow Model, which includes the South Westside Basin.

Jim Blanke also lead the discussion on roles and responsibilities for participation in the State Department of Water Resources (DWR) CASGEM Program (California Statewide Groundwater Elevation Monitoring Program) and provided an update and discussion on opportunities for additional funding through the next round of AB303 funding expected this fall.

Key Comments

- Updated Groundwater Model – Draft Version
  - Although the model has been out for review, the model is still considered to be in draft form. The major revisions were made to Tables 5 and 7.
  - Any additional **comments are to be submitted to John Fio of Hydrofocus via Patrick Sweetland of Daly City by May 12, 2011** at which time a final version of the model may be issued.
  - If anyone needs copies of the written summary of the changes to the model, please notify Will Anderson of San Bruno.
  - Results of the draft model (version 3.0) were used in the draft version of the Groundwater Management Report (GWMP). Results of the final model (version 3.1) will be incorporated into the yield and water budget information in

the updated version of the GWMP. Existing version 3.0 data is sufficient for use in the Water Level BMO calculations.
    - Continue to define needs for additional well installations to better refine the model. "Ideal" well locations for accurate monitoring will be developed. Proposed installations will account for required costs.

- Draft Groundwater Management Plan (GWMP)
    - Access to the draft GWMP was provided to members of the Advisory Committee (AC) prior to the Advisory Committee meeting.
    - **The deadline to provide comments on the draft GWMP is May 6, 2011.** Comments may be provided to either Will Anderson or Jim Blanke.
    - A written response to comments received will be developed and distributed to the AC and any party submitting comments.
    - Jim briefly summarized the various sections of the draft GWMP.
    - Jim also highlighted sections of the draft GWMP that are recommended for review by the various purveyors.
    - Cal Water and SFPUC did provide specific comments on the draft GWMP at the meeting.

- AB 1881 (Landscape Ordinance)
    - Colma is considering modifications to their Landscape Ordinance to credit Cemeteries for a portion of irrigation water used accounting for a portion of water being used serving as recharge.
    - The intent is to work in tandem with the GWMP and incorporate any lessons learned from Colma's experiences into the GWMP.

Next Steps for Draft GWMP

- Ongoing coordination with stakeholders as Plan development proceeds.
- Host Public Meeting (tentatively scheduled in Colma, day and time TBD) to present the draft GWMP to the Cemeteries and other interested members of the Public.
- Schedule calls for completion of the final GWMP by June 30, 2011.

CASGEM (California Statewide Groundwater Elevation Monitoring program)

- Preliminary program notification to Department of Water Resources (DWR) to be performed by San Bruno via RMC-WRIME.
- The group will be representing only the South portion of the Westside Basin. Reporting for the North portion of the Basin will be performed by SFPUC.
- Activities for the group will be performed by the following agencies:
    - Notify DWR – San Bruno via RMC-WRIME
    - Develop Monitoring Plan – SFPUC's plan for the north Basin will be provided to the group and will serve as the model for the south Basin, which will be developed by San Bruno via RMC-WRIME
    - Monitoring – SFPUC
    - Compilation of data – SFPUC
    - Reporting of results to DWR – San Bruno via RMC-WRIME

- Please refer to the attached for a draft version of the Letter of Mutual Understanding (LOMU) to be signed by the Partner Agencies. **Provide comments to Will Anderson by May 13, 2011.** Comments will be incorporated and the LOMU will be circulated for signatures. LOMU must be in place prior to notification of DWR.
- The Cities of Burlingame and Millbrae will not be included in the LOMU.
- The LOMU is intended for approval by the Director or City Manager level. Approval by respective governing boards is not intended.
- Mark Nordberg of DWR presented information about the submittal process to DWR. An informational document of what DWR would like to see is pending.
- The goal of the program is to monitor seasonal highs and lows of groundwater elevations.

AB 303 Grant Opportunities

- Applications for grant funding opportunities are expected to be accepted this fall.
- Proposed applications/projects should be consistent with the GWMP.
- Examples of opportunities were included in the presentation handouts.

Information Items

- Mark from DWR has emailed to the AC information about groundwater management plan references.
- Greg from SFPUC will email to Will an update on their installation of six new wells. Will to distribute to the AC upon receipt.

End of minutes

APPENDIX B – CONSUMER CONFIDENCE REPORTS

WHAT YOU SHOULD KNOW ABOUT DRINKING WATER SAFETY

REDUCING LEAD FROM PLUMBING FIXTURES

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The City of Burlingame Water Division is responsible for providing high-quality drinking water, but cannot control the variety of materials used in your household or building plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline 800-426-4791, or at www.epa.gov/safewater/lead.

CRYPTOSPORIDIUM

Cryptosporidium is a parasitic microbe found in most surface water. The SFPUC regularly tests for this waterborne pathogen, and found it at very low levels in source water and treated water in 2010. However, current test methods approved by the USEPA do not distinguish between dead organisms and those capable of causing disease. Ingestion of Cryptosporidium may produce symptoms of nausea, abdominal cramps, diarrhea, and associated headaches. Cryptosporidium must be ingested to cause disease, and it may be spread through means other than drinking water.

The San Francisco Public Utilities Commission (SFPUC) uses an extensive water sample collection and testing protocol at its various water sources throughout their transmission system. During 2010 over 58,750 water samples were collected and analyzed by the SFPUC Water Quality division. The City of Burlingame also collects and analyzes samples throughout our distribution system including our storage reservoirs. The SFPUC Water Quality Bureau performed our microbiology & general chemistry analysis at their water quality lab located in Millbrae. The results of the water sample analyses are provided in this report.

SAN FRANCISCO PUBLIC UTILITIES COMMISSION

SEISMIC RELIABILITY. DELIVERY RELIABILITY. WATER SUPPLY RELIABILITY

People, businesses, and the economy in the Bay Area depend on a reliable water system. That's why the San Francisco Public Utilities Commission (SFPUC) is rapidly moving forward with the Water System Improvement Program (WSIP) to create long-lasting improvements to our aging water infrastructure and sustain the quality of life for our 2.5 million residential, commercial, and industrial customers in the San Francisco Bay Area. Approximately one-third of delivered water goes to retail customers in San Francisco, while wholesale deliveries to 27 suburban agencies in Alameda, Santa Clara, and San Mateo counties comprise the other two-thirds.

HOW WSIP WILL AFFECT BURLINGAME RESIDENTS

The San Francisco Public Utility Commission (SFPUC) will be replacing their Crystal Springs #2 pipeline which runs down El Camino Real and spans 3.2 miles from Bellevue Avenue to Meadow Glen Avenue in Millbrae. As an estimated 15 months of pipeline work gets underway, Burlingame Residents can expect some changes in their daily driving routines. In June 2011, the pipeline work will begin, necessitating the closure of one or two lanes on El Camino Real. One lane in each direction will be open at all times, and warning signs signifying lane closures will be placed well in advance. Work on the pipelines will take place from 7 a.m. until 2 p.m. Monday through Friday and 8 a.m. until 6 p.m. on Saturdays. No Sunday or night work is anticipated. In total, there are 11 work pits along the 3.2 mile stretch of El Camino Real involved in the project. Seven of those pits are in Burlingame, but only two will be worked on at any given time.

Residents wanting more information can visit http://www.sfwater.org/cspl2 to sign up for email updates. Information is also posted on our Burlingame city website and a 24 hour answering service at 866-973-1476.

City of Burlingame
501 Primrose Road
Burlingame, CA 94010

WATER QUALITY REPORT 2010

FOR MORE INFORMATION

If you would like additional information or if you have any questions concerning the City of Burlingame's testing data or water system, please call the Public Works Department at (650) 558-7670, or write to City Hall, Public Works Department, Water Quality Report, 501 Primrose Road, Burlingame, CA 94010. You may also wish to visit the City's website at www.burlingame.org The City of Burlingame City Council meets twice a month on the first and third Monday at 7:00 p.m. in the Council Chambers at City Hall.

Decisions about water quality issues are made from time to time in public meetings of the San Francisco Public Utilities Commission (SFPUC). The SFPUC meets twice a month on the second and fourth Tuesday at 1:30 p.m. Meetings are held at San Francisco City Hall, Room 400. Inquiries about these meetings can be made by calling the office of the Commission Secretary at (415) 554-3165 or visit their website at www.sfwater.org

Do you want to learn more about drinking water regulations? Visit the California Department of Health Services at www.dhs.ca.gov or the U.S. Environmental Protection Agency website at www.epa.gov

City of Burlingame
Rob Mallick – Public Works Superintendent. . . . . (650) 558-7670
City of Burlingame website . . . . . www.burlingame.org

San Francisco Public Utilities Commission
Water Quality Bureau. . . . . (650) 872-5950
Customer Service Bureau. . . . . (415) 551-3000
Website . . . . . www.sfwater.org

California Department of Public Health
District 17 - Santa Clara/San Mateo . . . . . (510) 620-3474
Home Treatment Device Certification Unit. . . . . (916) 327-1140
Website . . . . . www.dhs.ca.gov

Safe Drinking Water Hotline . . . . . (800) 426-4791
Website . . . . . www.epa.gov

BURLINGAME

2010 Water Quality Report

This report contains important information about your drinking water. Translate it, or speak with someone who understands it.

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien.

此份有關你的食水報告,內有重要資料和訊息,請找他人為你翻譯及解釋清楚。

BURLINGAME'S DRINKING WATER SOURCES

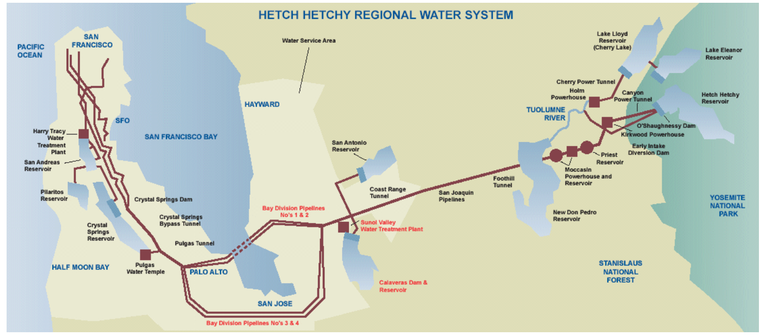
The sources of drinking water (both tap water and bottled water) include rivers, lakes, oceans, streams, ponds, reservoirs, springs, and wells. For the SFPUC system, the major water source originates from spring snowmelt flowing down the Tuolumne River to the Hetch Hetchy Reservoir, where it is stored. This pristine Sierra water source meets all federal and state criteria for watershed protection. The SFPUC also maintains stringent disinfection treatment practices, extensive bacteriological-quality monitoring, and high operational standards. As a result, the California Department of Public Health and USEPA have granted the Hetch Hetchy water source a filtration exemption. In other words, the source is so clean and protected that the SFPUC is not required to filter water from the Hetch Hetchy Reservoir.

The Hetch Hetchy water is supplemented with surface water from two local watersheds. Rainfall and runoff from the Alameda Watershed, spanning more than 35,000 acres in Alameda and Santa Clara counties, are collected in the Calaveras and San Antonio reservoirs and treated at the Sunol Valley Water Treatment Plant before distribution. Rainfall and runoff from the 23,000-acre Peninsula Watershed in San Mateo County are stored in Crystal Springs, San Andreas, and Pilarcitos reservoirs and treated at the Harry Tracy Water Treatment Plant before distribution.

In 2010, the Hetch Hetchy Watershed provided the majority of our total water supply, with the remainder contributed by the local watersheds.

OUR MISSION: Quality Water

The City of Burlingame in coordination with the San Francisco Public Utilities Commission (SFPUC) is pleased to present our 2010 Annual Water Quality Consumer Confidence Report. We want our customers to know where their water comes from, how it is treated to ensure it is top quality and the results of water quality monitoring performed by the City of Burlingame and the SFPUC. With this knowledge, consumers can make health decisions concerning their water use. During 2010 the SFPUC and the City of Burlingame monitored the water quality by collecting health samples. The City of Burlingame collected 850 water quality samples and we are very pleased to announce that the City of Burlingame has met all Federal (USEPA) and State drinking water health standards in 2010. The City of Burlingame and the SFPUC is committed to customer service and providing you with high quality water.



BURLINGAME WATER SYSTEM SERVICE AREA

The City of Burlingame purchases all of its water from the San Francisco Public Utilities Commission (SFPUC). The SFPUC has several large pipelines running through town. We have six metered connections at various locations throughout the city. These connections feed directly into the Aqueduct zone (Purple area on map). Water is pumped to the higher elevations by booster pump stations and to storage reservoirs. To regulate the pressure in the higher elevations we have several pressure reducing valves.

ENSURING THE HIGHEST WATER QUALITY

WATER QUALITY: CONTAMINANTS AND REGULATIONS

The SFPUC's Water Quality Division regularly collects and tests water samples from reservoirs and designated sampling points throughout the system to ensure that the SFPUC's water meets or exceeds federal and state drinking water standards. In 2010, Water Quality staff conducted more than 58,750 drinking water tests in the transmission and distribution systems. This monitoring effort is in addition to the extensive treatment process control monitoring performed by our certified and knowledgeable treatment plant staff and online instruments.

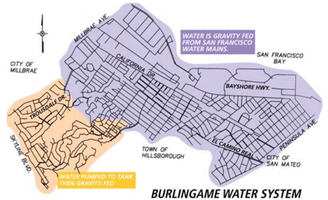
As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Such substances are called contaminants. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk.

In order to ensure that tap water is safe to drink, the United States Environmental Protection Agency (USEPA) and California Department of Public Health (CDPH) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. CDPH regulations also establish limits for contaminants in bottled water that provide the same protection for public health. More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline 800-426-4791.

CONTAMINANTS THAT MAY BE PRESENT IN SOURCE WATER INCLUDE:

- Microbial contaminants, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants, such as salts and metals, that can be naturally occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- Pesticides and herbicides that may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, that are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, agricultural application, and septic systems.
- Radioactive contaminants, that can be naturally occurring or be the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the U.S. Environmental Protection Agency (USEPA) and the California Department of Health Services (CDPH) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. CDPH regulations also establish limits for contaminants in bottled water that must provide the same protection for public health. More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline (1-800-426-4791).



BURLINGAME WATER SYSTEM

Key Water Quality Terms

Following are definitions of key terms noted on the adjacent water quality data table. These terms refer to the standards and goals for water quality described below.

PUBLIC HEALTH GOAL (PHG): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the USEPA.

MAXIMUM CONTAMINANT LEVEL GOAL (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the USEPA.

MAXIMUM CONTAMINANT LEVEL (MCL): The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs or MCLGs as is economically and technologically feasible. Secondary MCLs (SMCLs) are set to protect the odor, taste, and appearance of drinking water.

MAXIMUM RESIDUAL DISINFECTANT LEVEL (MRDL): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

MAXIMUM RESIDUAL DISINFECTANT LEVEL GOAL (MRDLG): The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

PRIMARY DRINKING WATER STANDARD (PDWS): MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

TREATMENT TECHNIQUE (TT): A required process intended to reduce the level of a contaminant in drinking water.

TURBIDITY: A water clarity indicator that is also used to indicate the effectiveness of the filtration plants. High turbidity can hinder the effectiveness of disinfectants.

REGULATORY ACTION LEVEL: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.turbidity can hinder the effectiveness of disinfectants.

SPECIAL HEALTH NEEDS

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons, such as those with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly people, and infants can be particularly at risk from infections.

These people should seek advice about drinking water from their health care providers. USEPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline 800-426-4791 or at www.epa.gov/safewater.

WATER QUALITY DATA FOR YEAR 2010

The table below lists all 2010 detected drinking water contaminants and the information about their typical sources. Contaminants below detection limits are not shown, in accord with the CDPH guidance. (Note: The CDPH allows the SFPUC to monitor for some contaminants less than once per year because their concentrations do not change frequently. The SFPUC received from the CDPH a monitoring waiver for some contaminants that were absent in the water.)

DETECTED CONTAMINANTS	Unit	MCL	PHG or (MCLG)	Range or Level Found	Average or [Max]	Major Sources in Drinking Water
TURBIDITY						
For Unfiltered Hetch Hetchy Water	NTU	5	N/A	0.2 - 0.6 (2)	[4.9] (3)	Soil runoff
For Filtered Water from Sunol Valley Water Treatment Plant (SVWTP)	NTU -	1(4) min 95% of samples ≤0.3 NTU(4)	N/A N/A	- 97.6% - 100%	[0.54] -	Soil runoff Soil runoff
For Filtered Water from Harry Tracy Water Treatment Plant (HTWTP)	NTU -	1(4) min 95% of samples ≤0.3 NTU(4)	N/A N/A	- 100%	[0.19] -	Soil runoff Soil runoff
DISINFECTION BYPRODUCTS AND PRECURSOR (SFPUC Regional System) - for information only						
Total Trihalomethanes Haloacetic Acids Total Organic Carbon (6)	ppb ppb ppm	80 60 TT	N/A N/A N/A	14 - 92 7 - 55 2.4 - 3.2	[40] (5) [25] (5) 2.7	Byproduct of drinking water chlorination Byproduct of drinking water chlorination Various natural and man-made sources
DISINFECTION BYPRODUCTS AND PRECURSOR (City of Burlingame)						
Total Trihalomethanes Haloacetic Acids Total Organic Carbon (6)	ppb ppb ppm	80 60 N/A	N/A N/A N/A	37.6 - 67.7 23.2 - 42.1 2.4 - 3.2	50.9 (5) 33.9 (5) 2.7	Byproduct of drinking water chlorination Byproduct of drinking water chlorination Various natural and man-made sources
MICROBIOLOGICAL (City of Burlingame)						
Total Coliform Giardia lamblia	- cyst/L	≤5.0% of monthly samples TT	[0] [0]	0 - 2.3 ND - 0.06	2.3 [0.06]	Naturally present in the environment Naturally present in the environment
INORGANIC CHEMICALS						
Fluoride (source water) (7) Chloramine (as chlorine)	ppm ppm	2.0 MRDL = 4.0	1 MRDLG = 4	ND - 0.15 1.80 - 2.07	ND (8) 1.98 (5)	Erosion of natural deposits Drinking water disinfectant added for treatment
CONSTITUENTS WITH SECONDARY STANDARDS	**Unit**	**SMCL**	**PHG**	**Range**	**Average**	**Typical Sources in Drinking Water**
Chloride	ppm	500	N/A	3 - 16	9.5	Runoff / leaching from natural deposits
Color	unit	15	N/A	<5 - 6	<5	Naturally-occurring organic materials
Specific Conductance	µS/cm	1600	N/A	33 - 316	179	Substances that form ions when in water
Sulfate	ppm	500	N/A	1.6 - 38.7	18.2	Runoff / leaching from natural deposits
Total Dissolved Solids	ppm	1000	N/A	27 - 174	95	Runoff / leaching from natural deposits
Turbidity	NTU	5	N/A	0.07 - 0.33	0.16	Soil runoff
LEAD AND COPPER (City of Burlingame)	**Unit**	**AL**	**PHG**	**Range**	**90th Percetile**	**Major Sources in Drinking Water**
Copper	ppb	1300	300	3.5 - 188	60.6	Corrosion of household plumbing systems
Lead	ppb	15	0.2	<1 - 19.6 (9)	2.1	Corrosion of household plumbing systems
OTHER WATER QUALITY PARAMETERS	**Unit**	**ORL**	**Range**	**Average**		
Alkalinity (as CaCO3)	ppm	N/A	8 - 98	49		
Bromide	ppb	N/A	<10 - 17	<10		
Calcium (as Ca)	ppm	N/A	2 - 26	12		
Chlorate (12)	ppb	(800) NL	92 - 357	150		
Hardness (as CaCO3)	ppm	N/A	8 - 104	53		
Magnesium	ppm	N/A	0.3 - 9	4.6		
pH	-	N/A	8.2 - 8.7	8.5		
Potassium	ppm	N/A	0.34 - 1.2	0.6		
Silica	ppm	N/A	4.1 - 7.6	5.7		
Sodium	ppm	N/A	3 - 22	13		

KEY:

< / ≤	=	less than / less than or equal to
AL	=	Action Level
Max	=	Maximum
Min	=	Minimum
N/A	=	Not Available
ND	=	Non-detect
NL	=	Notification Level
NTU	=	Nephelometric Turbidity Unit
ORL	=	Other Regulatory Level
ppb	=	part per billion
ppm	=	part per million
µS/cm	=	microSiemens / centimeter

Note:

(1) All results met State and Federal drinking water health standards.

(2) Turbidity is measured every four hours. These are monthly average turbidity values.

(3) This is the highest turbidity of the unfiltered water served to customers in 2010. The switch of San Joaquin Pipelines and rate change caused elevated turbidities as a result of sediment resuspension in the pipelines The turbidity spike was not observed further downstream at Alameda East.

(4) There is no MCL for turbidity. The limits are based on the TT requirements in the State drinking water regulations.

(5) This is the highest quarterly running annual average value.

(6) Total organic carbon is a precursor for disinfection byproduct formation. The TT requirement applies to the filtered water from the SVWTP only.

(7) The SFPUC adds fluoride to the naturally occurring level to help prevent dental caries in consumers. The CDPH requires our fluoride levels in the treated water to be maintained within a range of 0.8 ppm - 1.5 ppm. In 2010, the range and average of our fluoride levels were 0.6 ppm - 1.5 ppm and 1.0 ppm, respectively.

(8) The naturally occurring fluoride levels in the Hetch Hetchy and SVWTP raw water were ND and 0.15 ppm, respectively. The HTWTP raw water had elevated fluoride levels of 0.7 ppm - 0.9 ppm due to the continued supply of the fluoridated Hetch Hetchy & SVWTP treated water into the Lower Crystal Springs Reservoir, which supplies water via the San Andreas Reservoir to the HTWTP for treatment.

(9) The most recent Lead and Copper Rule monitoring was in 2010. 1 of 30 water samples collected at consumer taps had lead concentrations above the Action Level.

Note: Additional water quality data may be obtained by calling the City of Burlingame water system phone number (650) 558-7670

BURLINGAME WATER QUALITY ASSURANCE PROGRAM

Burlingame Water Quality Assurance Objectives:

- To conduct our water quality monitoring program to assure the water delivered to you meets all water quality standards as determined by the California Department of Health Services and the Federal Environmental Protection Agency.
- To maintain the existing water system infrastructure to assure that it continues to reliably deliver quality water to our customers.
- To construct capital projects that ensure the water system meets water quality standards and continues to reliably deliver quality water in the future.

PROTECTING OUR WATERSHEDS

The SFPUC aggressively protects the natural water resources entrusted to its care. Its annual Hetch Hetchy Watershed survey evaluates the sanitary conditions, water quality, potential contamination sources, and the results of watershed management activities by the SFPUC and its partner agencies, including the National Park Service, to reduce or eliminate contamination sources, The SFPUC also conducts sanitary surveys of the local Alameda and Peninsula watersheds every five years. These surveys identified wildllife and human activity as potential contamination sources. The reports are available for review at the CDPH's San Francisco District office (510-620-3474).

FLUORIDE: NATURE'S CAVITY FIGHTER

San Francisco has been adding fluoride to the City's drinking water for more than 50 years to protect dental health. For more information in English, Spanish, or Chinese, call the toll-free SFPUC fluoride information line at 866-668-6008 or visit the SFPUC website at www.sfwater.org/fluoride.

Hetch Hetchy Reservoir from O'Shaughnessy Dam

HOW CAN WE PRESERVE OUR MOST PRECIOUS NATURAL RESOURCE?

- Don't over-water your lawn and water early in the morning or at night to avoid excess evaporation. When planting use drought tolerant vegetation.
- Fully load the dishwasher and clothes washer before running them.
- When brushing your teeth or washing dishes by hand, don't let the water run. Taking shorter showers can save 2.5 gallons per minute.
- Stop leaks. Repair dripping faucets and leaking toilets as soon as possible.
- If you have a swimming pool, use a cover. You will cut the loss of water by evaporation by 90 percent.

You can obtain a free water conservation kit and shower head retrofit kit by calling (650) 558-7670. The City of Burlingame also provides residential rebates for low flush toilet and high efficiency clothes washer purchases

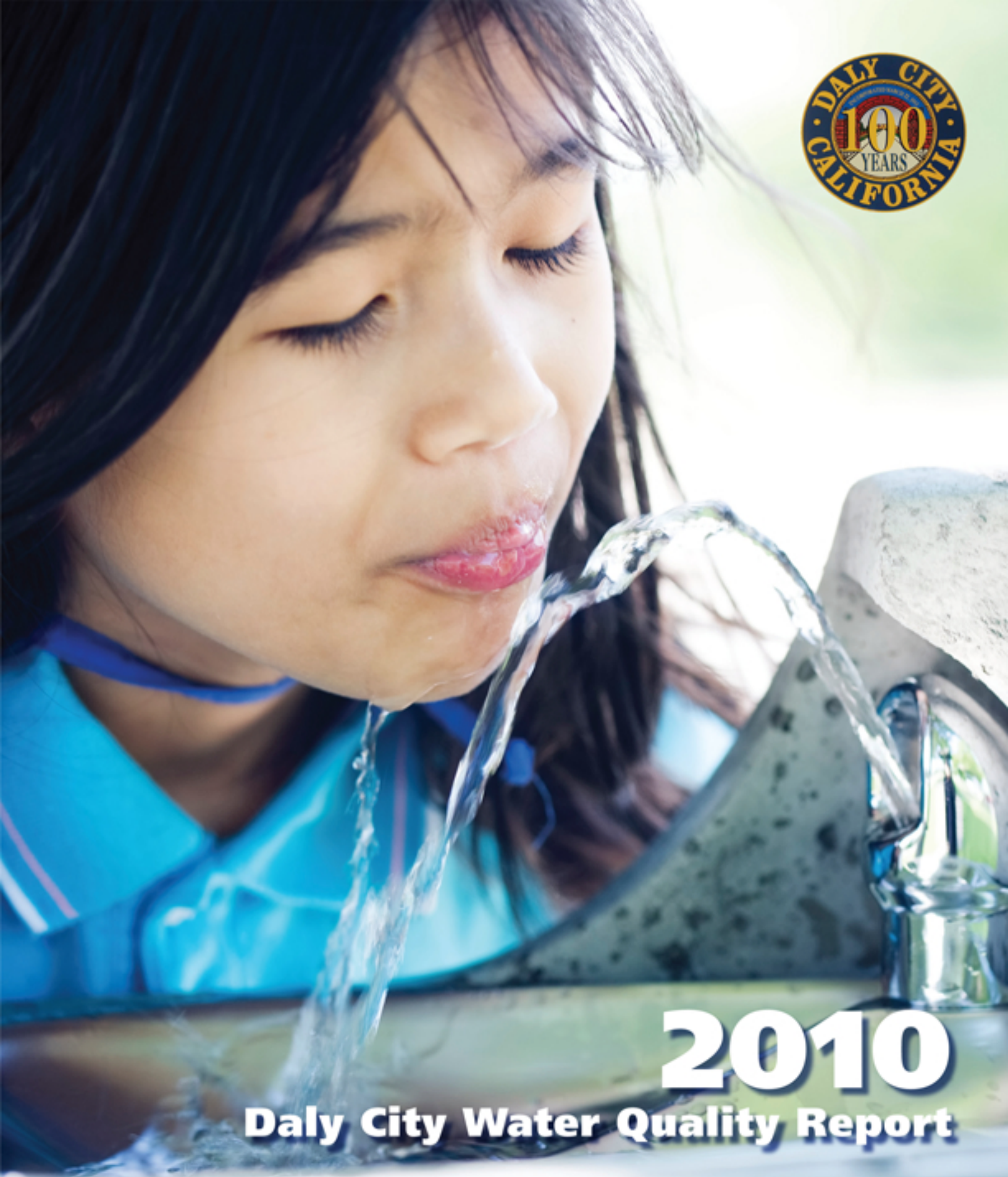
Further water conservation information can be found at the following websites: http://www.sfwater.org, http://www.h2ouse.org, http://www.bawsca.org

BOTTLE WATER

Drinking water, including bottle water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline (1-800-426-4791).

STORING EMERGENCY WATER SUPPLIES

Although the SFPUC strives to ensure a reliable supply of water for our customers, a natural disaster such as a major earthquake could interrupt water delivery. Residents are encouraged to store drinking water in case of an emergency. The SFPUC recommends storing at least three days worth of water (one gallon of water per person, per day, including pets) in food-grade plastic containers, such as two-liter soda bottles, and replacing supplies every six months. To learn more about emergency preparedness for yourself and your family, visit www.72hours.org.



2010
Daly City Water Quality Report

To our water customers:

This 2010 Water Quality Report contains required regulatory information about Daly City's water supply and how it complies with State standards. It is your right to know this information and to become an informed customer of your public water system. The City of Daly City is pleased to present this report to you.

2010 Daly City Water Quality Report

Your drinking water undergoes a rigorous monitoring program. It is of the highest quality and meets all mandated regulations of the California Department of Public Health (CDPH) and the United States Environmental Protection Agency (USEPA).

Drinking Water Sources

The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or human activity. Such substances are called contaminants. In order to ensure that tap water is safe to drink, the USEPA and the CDPH prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. CDPH regulations also establish limits for contaminants in bottled water that provide the same protection for public health.

The Daly City water system is supplied by two sources: surface water supplies managed by the San Francisco Public Utilities Commission (SFPUC) that is blended with groundwater produced by local Daly City wells. Approximately 55 percent of Daly City's average daily demand is supplied from SFPUC surface water supplies. The remaining 45 percent of Daly City's water supply comes from local groundwater wells. Water is drawn from an average of 300 feet below ground from a large underground aquifer known as the Westside Basin. This basin serves a large portion of the northern San Mateo Peninsula and extends north to Golden Gate Park in San Francisco. In many ways groundwater is a better protected source than surface water. Due to its closed environment and

consistent test results, well water is only required to have disinfectants added prior to it being placed into the drinking water distribution system.

The major source of SFPUC surface water originates from spring snowmelt in the Hetch Hetchy Watershed located in Yosemite National Park. This pristine water source meets all federal and state criteria for watershed protection. Because of existing disinfection treatment practice, extensive bacteriological quality monitoring, and high operational standards, the State has granted the Hetch Hetchy water source a filtration exemption.

Hetch Hetchy water is supplemented with surface water from two local Bay Area watersheds. Rainfall and runoff from 35,000 acres in Alameda and Santa Clara counties are collected in the Calaveras and San Antonio Reservoirs. Prior to distribution, water from these reservoirs is treated at the Sunol Valley Water Treatment Plant. In San Mateo County, rainfall and runoff from 23,000 acres in the Peninsula Watershed are stored in Crystal Springs, San Andreas, Pilarcitos and Stone Dam Reservoirs. This water is treated at the Harry Tracy Water Treatment Plant.

How You Can Become Involved

The City welcomes your comments and suggestions on how to improve the municipal water system and better preserve our resources.

Daly City conducts City Council meetings beginning at 7:00 p.m. on the second and fourth Mondays of each month. These meetings are open to the public and are held in the City Council Chamber located on the second floor of the Daly City Civic Center, 333-90th Street.

Important customer information is also available on Daly City's website: **www.dalycity.org**.

City of Daly City - Water Quality Data for 2010[1]

DETECTED CONTAMINANTS	Unit	MCL	PHG or (MCLG)	Range or Level Found	Average or [Max]	Typical Sources in Drinking Water
TURBIDITY [2]						
For Unfiltered Hetch Hetchy Water	NTU	5	N/A	0.2 - 0.6 [3]	[4.9] [4]	Soil runoff
For Filtered Water from Harry Tracy Water Treatment Plant (HTWTP)	NTU	† [5]	N/A	-	[0.54]	Soil runoff
	-	min 95% of samples ≤0.3 NTU [5]	N/A	97.6% - 100%	-	Soil runoff
For Filtered Water from Sunol Valley Water Treatment Plant (SVWTP)	NTU	† [5]	N/A	-	[0.19]	Soil runoff
	-	min 95% of samples ≤0.3 NTU [5]	N/A	100%	-	Soil runoff
DISINFECTION BYPRODUCTS AND PRECURSOR (SFPUC Regional System) - for information only						
Total Trihalomethanes	ppb	80	N/A	14 - 92	[40] [6]	Byproduct of drinking water chlorination
Haloacetic Acids	ppb	60	N/A	7 - 55	[25] [6]	Byproduct of drinking water chlorination
Total Organic Carbon [7]	ppm	TT	N/A	2.4 - 3.2	2.7	Various natural and man-made sources
DISINFECTION BYPRODUCTS AND PRECURSOR						
Total Trihalomethanes	ppb	80	N/A	0 - 77.2	[31.2] [6]	Byproduct of drinking water chlorination
Haloacetic Acids	ppb	60	N/A	0 - 57.4	[21.8] [6]	Byproduct of drinking water chlorination
Total Organic Carbon [7]	ppm	N/A	N/A	0.0 - 2.22	1.7	Various natural and man-made sources
MICROBIOLOGICAL						
Total Coliform	-	NoP ≤5.0% of monthly samples	(0)	-	[0.3]	Naturally present in the environment
Giardia lamblia	cyst/L	TT	(0)	ND - 0.06	[0.06]	Naturally present in the environment
E. coli (Federal Ground Water Rule)	-	0	(0)	ND	ND	Naturally present in the environment
INORGANIC CHEMICALS						
Fluoride (source water) [8]	ppm	2.0	1	ND - 0.7	0.3 [9]	Erosion of natural deposits
Chlorine (as chlorine)	ppm	MRDL = 4.0	MRDLG = 4	0.2 - 3.3	1.84	Drinking water disinfectant added for treatment

CONSTITUENTS WITH SECONDARY STANDARDS	Unit	SMCL	PHG	Range	Average	Typical Sources in Drinking Water
Aluminum	ppb	200	N/A	<50 - 51	<50	Erosion of natural deposits
Chloride	ppm	500	N/A	3 - 16	9.5	Runoff / leaching from natural deposits
Color	unit	15	N/A	<5 - 6	<5	Naturally-occurring organic materials
Specific Conductance	µS/cm	1600	N/A	33 - 316	179	Substances that form ions when in water
Sulfate	ppm	500	N/A	1.6 - 38.7	18.2	Runoff / leaching from natural deposits
Total Dissolved Solids	ppm	1000	N/A	27 - 174	95	Runoff / leaching from natural deposits
Turbidity	NTU	5	N/A	0.07 - 0.33	0.16	Soil runoff

LEAD AND COPPER	Unit	AL	PHG	Range	90th Percentile	Typical Sources in Drinking Water
Copper	ppb	1300	300	<4 - 150 [10]	150	Corrosion of household plumbing systems
Lead	ppb	15	0.2	<4 - 76 [10]	<4	Corrosion of household plumbing systems

OTHER WATER QUALITY PARAMETERS	Unit	ORL	Range	Average
Alkalinity (as $CaCO_3$)	ppm	N/A	8 - 98	49
Boron	ppb	N/A	<100 - 102	<100
Bromide	ppb	N/A	<10 - 17	<10
Calcium (as Ca)	ppm	N/A	2 - 26	12
Chlorate [11]	ppb	(800) NL	92 - 357	150
Hardness (as $CaCO_3$)	ppm	N/A	8 - 104	53
Magnesium	ppm	N/A	0.3 - 9	4.6
pH	-	N/A	8.2 - 8.7	8.5
Potassium	ppm	N/A	0.34 - 1.2	0.6
Silica	ppm	N/A	4.1 - 7.6	5.7
Sodium	ppm	N/A	3 - 22	13

KEY:

< / ≤	= less than / less than or equal to
µS/cm	= microSiemens / centimeter
cyst/L	= Cysts / Liter
AL	= Action Level
Average	= All test results divided by # of tests
Max	= Maximum
Min	= Minimum
MCL	= Maximum Contaminant Level
MCLG	= Maximum Contaminant Level Goal
MRDL	= Maximum Residual Disinfectant Level
MRDLG	= Maximum Residual Disinfectant Level Goal
N/A	= Not Available
ND	= Non-Detect
NL	= Notification Level
NoP	= Number of Coliform-Positive Samples
NTU	= Nephelometric Turbidity Unit
ORL	= Other Regulatory Level
PHG	= Public Health Goal
ppb	= parts per billion
ppm	= parts per million
SMCL	= Secondary Maximum Contaminant Level
TT	= Treatment Technique

Notes:

(1) All results met State and Federal drinking water health standards. The data is based on Hetch Hetchy water, effluents from both the Sunol Valley and Harry Tracy Water Treatment Plants, and local sources.

(2) Turbidity is a water clarity indicator; it also indicates the effectiveness of the filtration plants.

(3) Turbidity is measured every four hours. These are monthly average turbidity values.

(4) This is the highest turbidity of the unfiltered water served to customers in 2010. The switch of San Joaquin Pipelines and rate change caused elevated turbidities as a result of sediment resuspension in the pipeline. The turbidity spike was not observed further downstream at Alameda East.

(5) There is no MCL for turbidity. The limits are based on the TT requirements in the State drinking water regulations.

(6) This is the highest quarterly running annual average value.

(7) Total organic carbon is a precursor for disinfection byproduct formation. The TT requirement applies to the filtered water from the SVWTP only.

(8) The SFPUC adds fluoride to the naturally occurring level to help prevent dental cavities in consumers. The CDPH requires fluoride levels in the treated water to be maintained within a range of 0.8 - 1.5 ppm. Daly City water = 0.99 ppm avg in 2010.

(9) The naturally occurring fluoride levels in the Hetchy Hetchy and SVWTP raw water are ND and 0.15 ppm, respectively. The HTWTP raw water has elevated fluoride levels of 0.7 ppm - 0.9 ppm due to the continued supply of the fluoridated Hetch Hetchy & SVWTP treated water into Lower Crystal Springs Reservoir, which supplies water via San Andreas Reservoir to the HTWTP for treatment.

(10) The most recent Lead and Copper Rule monitoring was in 2010. Zero of the 53 water samples collected at consumer taps had either copper or lead concentrations above the Action Level. Further testing will take place in 2013.

(11) Chlorate was not detected in the raw water sources; however, it was detected in the treated water and is a byproduct of the degradation of sodium hypochlorite, the primary disinfectant used by SFPUC for water disinfection.

Additional water quality data may be obtained by calling the Daly City Department of Water and Wastewater Resources at (650) 991-8200

Water Quality Data

The table on the adjacent page lists drinking water contaminants detected in 2010. Contaminants below federally established detection limits, such as arsenic, perchlorate, MTBE, and others, are not listed. The table contains the name of each contaminant, the applicable drinking water standards or regulatory action levels, the ideal goals for public health, the amount detected, the typical contaminant sources and footnotes explaining the findings.

The State allows the San Francisco Public Utilities Commission (SFPUC) to monitor for some contaminants less than once per year because their concentrations do not change. For certain other contaminants that were absent in the water, based on many years of monitoring, the SFPUC received a monitoring waiver from the State.

Results from nitrate testing at one of Daly City's six wells (Well #4) showed amounts in excess of the maximum contaminant level of 45 parts per million; however, the 2010 blended average in the distribution system was 4.3 parts per million.

Nitrate in drinking water at levels above 45 parts per million is a health risk for infants less than six months of age. High nitrate levels in drinking water can reduce the capacity of an infant's blood to carry oxygen, resulting in serious illness. Symptoms include shortness of breath and blueness of the skin. Nitrate levels above 45 parts per million may affect the ability of the blood to carry oxygen for other individuals, such as pregnant women and those with certain specific enzyme deficiencies. If you are caring for an infant or pregnant, you should seek advice from your health care provider. Additionally, nitrate levels may rise quickly for short periods of time due to rainfall or agricultural activity.

During each quarter of 2008, Daly City completed the required monitoring for 25 contaminants under the USEPA's second Unregulated Contaminant Monitoring Regulation (UCMR). None of the 25 contaminants were detected. A list of the 25 contaminants is available at USEPA's website: *http://www.epa.gov/safewater/ucmr/ucmr2/basicinformation.html#list.* The third UCMR is scheduled for 2012.

Contaminants that may be present in source water include:

- *Microbial contaminants* are viruses and bacteria from wastewater treatment plants, septic systems, agricultural activity, or wildlife;
- *Inorganic contaminants* are salts and metals that occur naturally or result from stormwater runoff, wastewater discharges, mining, farming, or oil and gas production;
- *Pesticides* and herbicides come from agricultural activity, stormwater runoff, or residential use;
- *Organic chemical contaminants*, including synthetic and volatile organic chemicals, are byproducts of industrial processes and petroleum production, gas stations, stormwater runoff, agricultural activity, or septic systems; and,
- *Radioactive contaminants* that are naturally occurring, the result of mining activities or oil and gas production.

Key Water Quality Terms

Following are definitions of key terms noted on the adjacent water quality data table. These terms refer to the standards and goals for water quality described below:

Public Health Goal (PHG): The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Environmental Protection Agency.

Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the USEPA.

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs or MCLGs as is economically and technologically feasible. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.

Maximum Residual Disinfectant Level (MRDL): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

Primary Drinking Water Standard (PDWS): MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.

Regulatory Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

Cryptosporidium is a parasitic microbe found in most surface water. The SFPUC regularly tests for this waterborne pathogen, and found it at very low levels in source water and treated water in 2009. However, current test methods approved by the USEPA do not distinguish between dead organisms and those capable of causing disease. If ingested, these parasites may produce symptoms of nausea, stomach cramps, diarrhea, and associated headaches.

Indoor Water Use Efficiency and Conservation Ordinance

Daly City Municipal Code 15.66 became effective on March 10, 2010. The ordinance addresses two public policy challenges. The first challenge is the supply limit amount of 4.292 million gallons of water a day set by the San Francisco Regional Water System. The second challenge is the enactment of a new state law requiring local agencies to conserve additional water and to enforce new indoor water use efficiency standards.

A few easy life-style shifts that save water and lower your water bill include:

- Turning off the faucet when you are brushing your teeth or doing dishes;
- Taking shorter showers;
- Using a broom to clean sidewalks or driveways;
- Operating your washing machine and dishwasher with full loads; and,
- Using a shut off hose nozzle (free to local residents) when you wash your car.

Free Water Conservation Devices and Cash Rebates

To assist our customers in voluntary conservation efforts, the Department of Water and Wastewater Resources offers a variety of free water saving devices, publications, rebates and school programs for residents, commercial users and students. For more information contact Cynthia Royer at (650) 991-8203 or by email at: **croyer@dalycity.org**.

For additional water conservation information, click on: www.dalycity.org/conserve

Water Main Flushing Program

Daly City staff routinely flushes water mains throughout the City in order to maintain water quality and remove sediment from the water distribution system. Sediment and rust can collect in water mains. This can discolor water, cause undesirable tastes and odors, and over time impede the flow of water through the main. The mains are flushed by operating valves in the street and opening hydrants to force the flow of water in one direction to properly flush the water main. The flushed water is dechlorinated and, if possible, directed to a landscaped area. The flushing continues until the water flowing out of the hydrant runs clear. Visit **www.dalycity.org** for more information.

Drinking Water Source Assessment

In March 2003 a drinking water source assessment was completed, and five of Daly City's six municipal production wells assessed were noted as being highly protected from potential pathways of contamination. Well #4 was noted as being moderately protected. Daly City's municipal wells are considered most vulnerable to automotive repair activities, roadway contaminants and railways.

A copy of the complete assessment is available from the CDPH Drinking Water Field Operations Branch, 850 Marina Bay Parkway, Building P, 2nd Floor, Richmond, CA 94804. You may also obtain a summary of the assessment by contacting either CDPH District Engineer Eric Lacy at (510) 620-3453, or Daly City's Director of Water and Wastewater Resources Patrick Sweetland at **(650) 991-8200.**

Fluoridation Program

The San Francisco Public Utilities Commission has fluoridated drinking water for more than fifty years. Since June 2004, Daly City fluoridates the blended water supply throughout the entire community in keeping with the optimum level established by the CDPH.

Special Health Needs

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised people undergoing chemotherapy or organ transplants, having immune system disorders, some elderly and infants can be particularly at risk from infection. These individuals should seek advice about drinking water from their health care providers. Guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (800) 426-4791 or at: **www.epa.gov/safewater**

City of Daly City
Department of Water and
Wastewater Resources
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Daly City, CA 94015

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Contacts for Your Questions

For questions regarding:

- Your water bill and starting or stopping service: contact *Utility Billing* at **(650) 991-8082**.
- Leaks, service problems, water quality information, technical data or any other water related questions: contact the *Department of Water and Wastewater Resources* at **(650) 991-8200**.
- This report: contact Patrick Sweetland, Director of the *Department of Water and Wastewater Resources*, at **(650) 991-8200** for other questions related to this report.

If English is Not Your Primary Language

This report contains important information regarding your health and drinking water. Call the Daly City Water and Wastewater Resources Department **(650) 991-8200** should you require assistance in Chinese, Spanish, or Tagalog.

Este reporte contiene información muy importante de su salud y el agua que toma. Llame a Daly City Water and Wastewater Resources Department a **(650) 991-8200** si necesita asistencia en Español.

此報告包括有關您的健康和食水的重要資料。如需華語協助，請來電大利市水務及廢水資源部，電話 **(650) 991-8200**。

Ang ulat na ito ay naglalaman ng mahalagang impormasyon tungkol sa inyong kalusugan at sa inumin ninyong tubig. Mangyari po lamang na tawagan ang Daly City Water and Wastewater Resources Department sa numero **(650) 991-8200** kung kinakailangan ninyo ng tulong o interpretasyon sa wikang Tagalog.

(Data based on Hetch Hetchy water and effluents from both SVWTP and HTWTP)

City of Millbrae - Water Quality Data for Year 2010[1]

DETECTED CONTAMINANTS	Unit	MCL	PHG or (MCLG)	Range or Level Found	Average or [Max]	Major Sources in Drinking Water
TURBIDITY						
For Unfiltered Hetch Hetchy Water	NTU	5	N/A	0.2 - 0.6 [2]	[4.9] [3]	Soil runoff
For Filtered Water from Sunol Valley Water Treatment Plant (SVWTP)	NTU	1 [4]	N/A	-	[0.54]	Soil runoff
	-	min 95% of samples ≤ 0.3 NTU [4]	N/A	97.6% - 100%	-	Soil runoff
For Filtered Water from Harry Tracy Water Treatment Plant (HTWTP)	NTU	1 [4]	N/A	-	[0.19]	Soil runoff
	-	min 95% of samples ≤ 0.3 NTU [4]	N/A	100%	-	Soil runoff
DISINFECTION BYPRODUCTS AND PRECURSOR (SFPUC Regional System) - for information only						
Total Trihalomethanes	ppb	80	N/A	14 - 92	[40] [5]	Byproduct of drinking water chlorination
Haloacetic Acids	ppb	60	N/A	7 - 55	[25] [5]	Byproduct of drinking water chlorination
Total Organic Carbon [6]	ppm	TT	N/A	2.4 - 3.2	2.7	Various natural and man-made sources
DISINFECTION BYPRODUCTS AND PRECURSOR						
Total Trihalomethanes	ppb	80	N/A	10.4-59.3	24.5	Byproduct of drinking water chlorination
Haloacetic Acids	ppb	60	N/A	3.7 - 34.3	13.1	Byproduct of drinking water chlorination
Total Organic Carbon [6]	ppm	N/A	N/A	NA	NA	Various natural and man-made sources
MICROBIOLOGICAL						
Total Coliform [7]	-	≤ 5.0% of monthly samples	(0)	-	0	Naturally present in the environment
Giardia lamblia	cyst/L	TT	(0)	ND - 0.06	[0.06]	Naturally present in the environment
INORGANIC CHEMICALS						
Fluoride (source water) [8]	ppm	2.0	1	ND - 0.7	0.3 [9]	Erosion of natural deposits
Chloramine (as chlorine)	ppm	MRDL = 4.0	MRDLG = 4	1.1 - 2.4	2.00 MGL	Drinking water disinfectant added for treatment

CONSTITUENTS WITH SECONDARY STANDARDS	Unit	SMCL	PHG	Range	Average	Typical Sources of Contaminant
Chloride	ppm	500	N/A	3 - 16	9.5	Runoff / leaching from natural deposits
Color	unit	15	N/A	<5 - 6	<5	Naturally-occurring organic materials
Specific Conductance	µS/cm	1600	N/A	33 - 316	179	Substances that form ions when in water
Sulfate	ppm	500	N/A	1.6 - 38.7	18.2	Runoff / leaching from natural deposits
Total Dissolved Solids	ppm	1000	N/A	27 - 174	95	Runoff / leaching from natural deposits
Turbidity	NTU	5	N/A	0.07 - 0.33	0.16	Soil runoff

LEAD AND COPPER	Unit	AL	PHG	Range	90th Percentile	Typical Sources in Drinking Water
Copper	ppb	1300	300	10-120	<50	Corrosion of household plumbing systems
Lead	ppb	15	0.2	2 - 7	4	Corrosion of household plumbing systems

OTHER WATER QUALITY PARAMETERS	Unit	ORL	Range	Average
Alkalinity (as $CaCO_3$)	ppm	N/A	8 - 98	49
Bromide	ppb	N/A	<10 - 17	<10
Calcium (as Ca)	ppm	N/A	2 - 26	12
Chlorate [12]	ppb	(800) NL	92 - 357	150
Hardness (as $CaCO_3$)	ppm	N/A	8 - 104	53
Magnesium	ppm	N/A	0.3 - 9	4.6
pH	-	N/A	8.2 - 8.7	8.5
Potassium	ppm	N/A	0.34 - 1.2	0.6
Silica	ppm	N/A	4.1 - 7.6	5.7
Sodium	ppm	N/A	3 - 22	13

KEY:

< / ≤	= less than / less than or equal to
AL	= Action Level
Max	= Maximum
Min	= Minimum
N/A	= Not Available
ND	= Non-detect
NL	= Notification Level
NTU	= Nephelometric Turbidity Unit
ORL	= Other Regulatory Level
ppb	= part per billion
ppm	= part per million
µS/cm	= microSiemens / centimeter

Notes:

(1) All results met State and Federal drinking water health standards.
(2) Turbidity is measured every four hours. These are monthly average turbidity values.
(3) This is the highest turbidity of the unfiltered water served to customers in 2010. The switch of San Joaquin Pipelines and rate change caused elevated turbidities as a result of sediment resuspension in the pipelines. The turbidity spike was not observed further downstream at Alameda East.
(4) There is no MCL for turbidity. The limits are based on the TT requirements in the State drinking water regulations.
(5) This is the highest quarterly running annual average value.
(6) Total organic carbon is a precursor for disinfection byproduct formation. The TT requirement applies to the filtered water from the SVWTP only.
(8) The SFPUC adds fluoride to the naturally occurring level to help prevent dental caries in consumers. The CDPH requires our fluoride levels in the treated water to be maintained within a range of 0.8 ppm - 1.5 ppm. In 2010, the range and average of our fluoride levels were 0.6 ppm - 1.5 ppm and 1.0 ppm, respectively.
(9) The naturally occurring fluoride levels in the Hetch Hetchy and SVWTP raw water were ND and 0.15 ppm, respectively. The HTWTP raw water had elevated fluoride levels of 0.7 ppm - 0.9 ppm due to the continued supply of the fluoridated Hetch Hetchy & SVWTP treated water into the Lower Crystal Springs Reservoir, which supplies water via the San Andreas Reservoir to the HTWTP for treatment.
(10) The most recent Lead and Copper Rule monitoring was in 2010. 0 of 30 water samples collected at consumer taps had copper concentrations above the Action Level.
(11) The most recent Lead and Copper Rule monitoring was in 2010. 1 of 30 water samples collected at consumer taps had lead concentrations above the Action Level.
(12) There were no chlorate detected in the raw water sources except the Crystal Springs and San Andreas reservoirs, where the detected chlorate were 81 ppb and 57 ppb, respectively. The chlorate levels in both reservoirs are due to the transfer of the disinfected Hetch Hetchy water and SVWTP effluent into the Crystal Springs Reservoir. The detected chlorate in treated water is a degradation byproduct of sodium hypochlorite, the primary disinfectant used by SFPUC for water disinfection.

Note: Additional water quality data may be obtained by calling the City of Millbrae water system phone number.650-259-2375

What does this table mean?

This table shows the results of our water quality analysis for 2010. It contains the name of each substance, the highest level allowed by regulation (MCL), the ideal goals for public health (PHG), the amount detected, the typical sources of such contamination, footnotes to explain our findings and a key to the units of measurement.

Key Water Quality Terms

Following are definitions of key terms noted on the adjacent water quality data table. These terms refer to the standards and goals for water quality.

Public Health Goal (PHG)
The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Environmental Protection Agency.

Maximum Contaminant Level Goal (MCLG)
The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the USEPA.

Maximum Contaminant Level (MCL)
The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs or MCLGs as is economically and technologically feasible. Secondary MCLs are set to protect the odor, taste, and appearance of drinking water.

Maximum Residual Disinfectant Level (MRDL)
The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG)
The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

Primary Drinking Water Standard (PDWS)
MCLs and MRDLs for contaminants that affect health along with their monitoring, reporting requirements, and water treatment requirements.

Treatment Technique (TT)
A required process intended to reduce the level of a contaminant in drinking water.

Turbidity
A water clarity indicator that is also used to indicate the effectiveness of the filtration plants. High turbidity can hinder the effectiveness of disinfectants.

Regulatory Action Level
The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

MILLBRAE WATER 2010 QUALITY REPORT

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Maintaining Water Quality in Your Home or Business

Customers can help to maintain a high standard of water quality, too. By following the simple measures described below you can help to prevent contamination of your water.

Hot water heaters: Flush the water heater tank through the drain outlet at the bottom annually.

Cross-connections: Some water users have contaminated their drinking water by creating cross connections that can siphon toxic fluids into their plumbing system. You can prevent them by:

1. Install anti-siphon fittings on all outside faucets.
2. Depressurize all hoses when not in use.
3. Remove any garden aspirator-type sprayers immediately after using.
4. Disconnect all hoses extending from the faucet into the sink.

Sinks: Clean faucet aerators regularly.

Thank you for your efforts to conserve water use by at least 10 percent. This will also save money on your bills.

Tips for reducing your water use:

1. Install a low flow showerhead and take 5-minute or less showers. Free showerheads and timers are available.
2. Catch water in a watering can or a bucket while waiting for water to get hot.
3. Replace your toilet with a high-efficiency model or put a water displacement bag in each toilet tank. Rebates are available for qualifying high-efficiency models.
4. Fix all leaky toilets, faucets and pipes. Install low flow faucet aerators in the kitchen and bathroom. Free low flow aerators are available.
5. Scrape plates and run the garbage disposal less frequently. Compost food scraps instead.
6. Turn off the water while brushing your teeth.
7. Run only full loads in dishwashers and clothes washers. Replace these appliances with water efficient machines. Rebates are available for qualifying high-efficiency clothes washer models.
8. Water lawn/landscapes between 6:00 pm and 10:00 am. Be sure not to over water landscaping. Check and adjust sprinkler heads seasonally. Plant drought-tolerant and native plants.
9. Use a carwash facility or bucket of water and one short rinse to wash your car; wash on a permeable surface (grass or gravel).
10. Sweep (never hose) driveways, patios and sidewalks.

Look online at www.ci.millbrae.ca.us/waterconservation or call the Water Resources & Conservation Program at (650) 259-2348 for more information on free water saving devices, high efficiency clothes washer and toilet rebates and workshops.

FOR MORE INFORMATION

United States Environmental Protection Agency
Safe Drinking Water Hotline: **(800) 426-4791**
Website: **http://www.epa.gov/safewater/hotline**

California Department of Public Health
Home Treatment Devices:
Drinking Water Treatment Device Certification Unit **(916) 449-5600**
Website:
http://www.cdph.ca.gov/certlic/device/Pages/watertreatmentdevices.aspx

San Francisco Public Utilities Commission
Water Supply & Treatment Division, Dispatch Line: **(650) 872-5900**
Customer Services: **(415) 551-3000**
Website: **http://www.sfwater.org**

City of Millbrae
Ronnald Popp, Public Works Director: **(650) 259-2339**
Mike Riddell, Public Works Utilities & Operations Superintendent: **(650) 259-2374**
Website: **http://www.ci.millbrae.ca.us**

For more information about the contents of this report, contact Mike Riddell at (650) 259-2374 or visit us online at **http://www.ci.millbrae.ca.us**. Water quality policies are decided at public hearings held at Millbrae City Hall, Council Chambers, 621 Magnolia Ave, Millbrae, CA 94030. For more information visit **www.ci.millbrae.ca.us.**

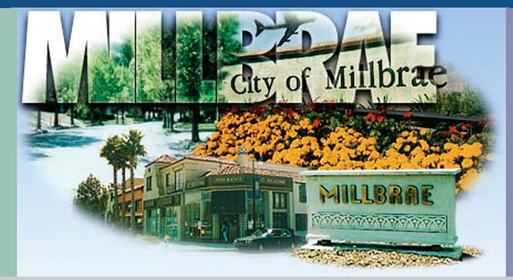
Translation Languages

This report contains important information about your drinking water. Translate it, or speak with someone who understands it.
Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien.
Para ver una versión en español, visite nuestro sitio web en www.sfwater.org/quality

此份有关你的食水报告,内有重要资料和讯息,请找他人为你翻译及解释清楚。

この情報は重要です。
翻訳を依頼してください。

MILLBRAE WATER QUALITY REPORT



2010

A MESSAGE FROM YOUR WATER DIVISION

The City of Millbrae/Public Works/Utilities & Operations

We present to you the City of Millbrae 2010 water quality report. Pursuant to federal regulations mandated by the Safe Drinking Water Act, all water consumers are to be provided annual information about their water and its sources.

We hope that this report will give you all of the information you may need regarding your water resources. We want our customers to know the origin of their drinking water supply, the specifics of the treatment(s) that it receives, and the results of water quality monitoring reports performed daily by the City of Millbrae, Public Works, Utilities and Operations staff and the San Francisco Public Utilities Commission (SFPUC). This data should offer you, the reader, a good working knowledge about Millbrae's water-related issues.

The City of Millbrae also endeavors to inform its water customers about the challenges we face and the efforts we perform in order to continuously provide water quality of the highest caliber.

Furthermore, we would like to encourage all water consumers to play an active role in the vital decisions that are made to protect our water resources and to ensure the quality of the water supply that is delivered to all homes and businesses in Millbrae.

We believe it is in everyone's interest to obtain a high quality and reliable water supply because it is integral to personal health, environmental integrity and community prosperity.

WATER QUALITY AND YOU

Water quality is extremely important, because we cannot survive without a clean and reliable source of it. We all have read and heard news reports in the past detailing many different occurrences of contaminants in water resources. For example, chemicals (like endocrine disruptors, such as PCB's and phthalates), disinfection by-products (like trihalomethanes (THMs) and haloacetic acids (HAAs)) and trace amounts of various pharmaceuticals have been discovered. In addition, the continued threat of terrorist attacks against public water supplies and infrastructure has added to society's concerns about the safety of drinking water supplies.

As challenges like these come out in the media, our customers can take the opportunity to become better informed about the quality of their water supply. The City of Millbrae; our water supplier, the San Francisco Public Utilities Commission (SFPUC); the California Department of Public Health (CDPH); and the United States Environmental Protection Agency (USEPA) are all working simultaneously to enure the highest quality water and to educate water consumers and to encourage their involvement in relevant decisions. Consumers who familiarize themselves with the basic drinking water information contained in this report will be able to participate more effectively in these decision-making processes. Together, we can be a great force to promote programs that will aid us in continuing to deliver water that meets the highest possible standards.

One way you can get more involved in the water quality conversation:
You are invited to attend Public Meetings held by the SFPUC. Meetings are held on the second and fourth Tuesdays of each month in City Hall, Room 400, 1 Dr. Carlton B. Goodlett Place, San Francisco, CA 94102. They are scheduled to begin at 1:30 PM. Contact the Commission at (415) 554-3165 for more information about the meetings.

The following websites provide information on water resources. We encourage you to visit these sites.

City of Millbrae, Millbrae, CA
http://www.ci.millbrae.ca.us
The City of Millbrae's website remains an invaluable source to the public on information about our city and projects. In relation to water resources, check out the pages on Utilities and Operations, the Water Pollution Control Plant, and other city programs, like: Recycling and Waste Prevention, and Water Conservation.

San Francisco Public Utilities Commission (SFPUC)
http://www.sfwater.org
The San Francisco Public Utilities Commission (SFPUC) provides drinking water to the City of Millbrae. Their website hosts the 2009 SFPUC Water Quality Report, statistics on our water supply, tips for water conservation practices, and information about natural resources.

United States Environmental Protection Agency (USEPA)
http://www.epa.gov
The United States Environmental Protection Agency (USEPA) is the federal government entity responsible for writing and enforcing environmental regulations in the country. Check out their website for information on many different topics, including water.

American Water Works Association (AWWA)
http://www.awwa.org
This website has many interesting sections; for instance, one can find local water utility information (under "Water Community Links"), gain access to the Association's "Water Library" and read water-related "Breaking News".

California Department of Public Health (CDPH)
http://www.cdph.ca.gov
This state agency works to protect public health in California and its website contains multiple resources including water quality information. Of interest, is a CDPH service entitled, "Decisions Pending & Opportunities for Public Participation" as well as links to other programs, like the Drinking Water Program.

Our Mission: Quality Water

The City of Millbrae, along with the San Francisco Public Utilities Commission (SFPUC), is pleased to present our 2010 Annual Consumer Confidence Report. This brochure offers a snapshot of the quality of water we provide to you throughout the year. We hope that it will give you all of the information you may need about your water resources. We want our customers to know the origin of their drinking water supply, the specifics of the treatment(s) that it receives, and the results of water quality monitoring reports performed daily by the City of Millbrae/Public Works/Utilities and Operations staff and the SFPUC.

Water Source Information

San Francisco Public Utilities Commission (SFPUC) is the sole provider of drinking water to Millbrae, its citizens and businesses. The map below shows how water is delivered to our City by the SFPUC.

SFPUC Drinking Water Sources

The sources of drinking water (both tap water and bottled water) include rivers, lakes, oceans, streams, ponds, reservoirs, springs, and wells. For the SFPUC system, the major water source originates from spring snowmelt flowing down the Tuolumne River to the **Hetch Hetchy Reservoir**, where it is stored. This pristine Sierra water source meets all federal and state criteria for watershed protection. The SFPUC also maintains stringent disinfection treatment practices, extensive bacteriological-quality monitoring, and high operational standards. As a result, the California Department of Public Health and United States Environmental Protection Agency (USEPA) have granted the Hetch Hetchy water source a filtration exemption. In other words, the source is so clean and protected that the SFPUC is not required to filter water from the Hetch Hetchy Reservoir.

The Hetch Hetchy water is supplemented with surface water from two local watersheds. Rainfall and runoff from the **Alameda Watershed**, spanning more than 35,000 acres in Alameda and Santa Clara Counties are collected in the Calaveras and San Antonio reservoirs and treated at the Sunol Valley Water Treatment Plant before distribution. Rainfall and runoff from the 23,000 acre **Peninsula Watershed** in San Mateo County are stored in Crystal Springs, San Andreas, and Pilarcitos reservoirs and treated at the Harry Tracy Water Treatment Plant before distribution.

In 2010, the Hetch Hetchy Watershed provided the majority of our total water supply, with the remainder contributed by the local watersheds.

Protecting Our Watersheds

The SFPUC aggressively protects the natural water resources entrusted to its care. Its annual Hetch Hetchy Watershed survey evaluates the sanitary conditions, water quality, potential contamination sources, and the results of watershed management activities by the SFPUC and its partner agencies, including the National Park Service, to reduce or eliminate contamination sources. The SFPUC also conducts sanitary surveys of the local Alameda and Peninsula watersheds every five years. These surveys identified wildllife and human activity as potential contamination sources. The reports are available for review at the CDPH's San Francisco District office **(510-620-3474)**.

Millbrae Water Distribution System

The City of Millbrae water system is fortunate to have two independent sources flowing to us from the SFPUC system. The Hetch Hetchy aqueducts run from south to north, generally along El Camino Real and Magnolia Avenue. They provide water to our customers in the gray shaded area between the San Francisco Bay and the areas that are approximately 100-feet above sea level. The blue shaded area indicates the area supplied by the Harry Tracy Water Treatment Plant (located at the upper right corner of the City of Millbrae map).

Water Quality: Contaminants and Regulations

The SFPUC's Water Quality Division regularly collects and tests water samples from reservoirs and designated sampling points throughout the system to ensure that the SFPUC's water meets or exceeds federal and state drinking water standards. In 2010, Water Quality staff conducted more than **58,750** drinking water tests in the transmission and distribution systems. This monitoring effort is in addition to the extensive treatment process control monitoring performed by our certified and knowledgeable treatment plant staff and online instruments.

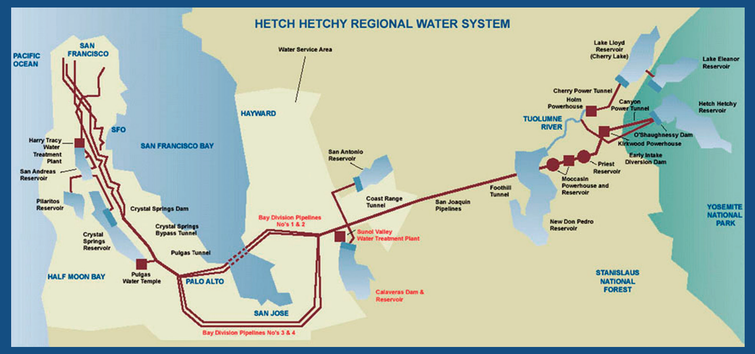
As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Such substances are called contaminants. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk.

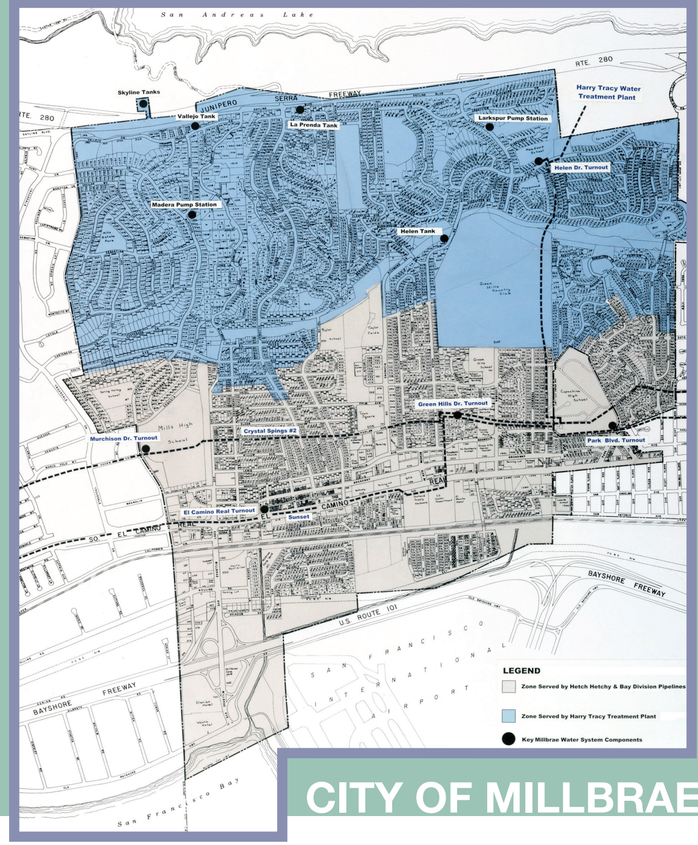
In order to ensure that tap water is safe to drink, the USEPA and California Department of Public Health (CDPH) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. CDPH regulations also establish limits for contaminants in bottled water that provide the same protection for public health. More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline at **800-426-4791**.

Water Quality Data For Year 2010

The table on the back of this brochure lists all 2010 detected drinking water contaminants and the information about their typical sources. Contaminants below detection limits are not shown, in accordance with the CDPH guidance.

(Note: The CDPH allows the SFPUC to monitor for some contaminants less than once per year because their concentrations do not change frequently. The SFPUC received from the CDPH a monitoring waiver for some contaminants that were absent in the water.)





CITY OF MILLBRAE

Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants, such as salts and metals, that can be naturally occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining or farming.
- Pesticides and herbicides that may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- Organic Chemical contaminants, including synthetic and volatile organic chemicals, that are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, agricultural application, and septic systems.
- Radioactive contaminants that can be naturally occurring or be the result of oil and gas production and mining activities.

Cryptosporidium is a parasitic microbe found in most surface water. The SFPUC regularly tests for this waterborne pathogen, and found it at very low levels in source water and treated water in 2010. However, current test methods approved by the USEPA do not distinguish between dead organisms and those capable of causing disease. Ingestion of *Cryptosporidium* may produce symptoms of nausea, abdominal cramps, diarrhea, and associated headaches. *Cryptosporidium* must be ingested to cause disease, and it may be spread through means other than drinking water.

Special Health Needs

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons, such as those with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly people, and infants can be particularly at risk from infections.

These people should seek advice about drinking water from their health care providers. USEPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline at **800-426-4791** or at **www.epa.gov/safewater**.

Fluoridation of Drinking Water

In 2010, water supplied to the City of Millbrae was fluoridated at less than 1 part per million (ppm), the level prescribed by the State. In addition, the SFPUC has added fluoride to its drinking water for over 50 years in order to prevent dental tooth decay.

Reducing Lead from Plumbing Fixtures

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The City of Millbrae Water System is responsible for providing high-quality drinking water, but cannot control the variety of materials used in your household or building plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline at **800-426-4791**, or at **www.epa.gov/safewater/lead**.

Lead and Copper Monitoring

In addition, the City of Millbrae follows a CDPH approved "reduced triennial monitoring frequency" schedule for measuring levels of lead and copper. This means we are consistently below the maximum contaminant level for both of these inorganic elements. Results from our 2010 tests validate this classification, because the City continues to be well within all required standards concerning lead and copper. The City of Millbrae plans to monitor for lead and copper again in 2013.

Drinking Water Regulations

In 2004, the USEPA proposed two new rules requiring water systems to enhance their existing efforts in reducing Cryptosporidium and Disinfection By-Products. The Long Term 2 Enhanced Surface Water Treatment Rule and the Stage 2 Disinfection By-Product Rule have imposed additional monitoring and disinfection requirements for the City of Millbrae. The City continues to monitor and to report data under the Disinfection By-Product Rule.

Earthquake Readiness

The City of Millbrae Water Division would like to remind you to prepare your home with emergency provisions, including a three-to-five-day supply of drinking water for every member of your household.

- Store tap water-at least one gallon per person per day (don't forget water for pets, too!) in clean, plastic, airtight containers in a dark, cool place.
- Store enough to last at least three to five days.
- Label each container with a date and replace the water every six months.
- At the time of usage, add 16 drops of bleach to each gallon to ensure disinfection (use pure household bleach only- not products with scents or other additives.) Mix and allow it to stand for 30 minutes before each use. If a camp stove is available, you can also disinfect the water by bringing it to a rolling boil for 5 to 10 minutes.
- If you run out of stored drinking water, strain and treat water from your water heater. To strain, pour it through a clean cloth or layers of paper towels. Treat with household bleach, as directed above. Other sources of water inside the home are ice cubes, and the reservoir tank of your toilet (not the bowl).
- If your water supply is not sufficient for hand washing, use antiseptic hand gel or wipes.

For more information visit www.sfwater.org, www.72hours.org or contact the City of Millbrae, your water provider, at www.ci.millbrae.ca.us.

Millbrae Water Quality Assurance Programs

The Millbrae water division conducts a comprehensive water quality assurance program. We collect and report over forty samples a month throughout our system to regularly monitor water quality. We send samples to a state certified laboratory for testing. We are pleased to report that all samples have tested negative for coliforms and that the City had zero violations related to any maximum contaminant level (MCL) in the calendar year 2010.

Other water samples are collected periodically to check for levels of lead and copper, disinfection by-products [trihalomethanes and haloacetic acids - THMs and HAAs] and general physical components as required by state and federal regulations. The City of Millbrae received a waiver for asbestos sampling.

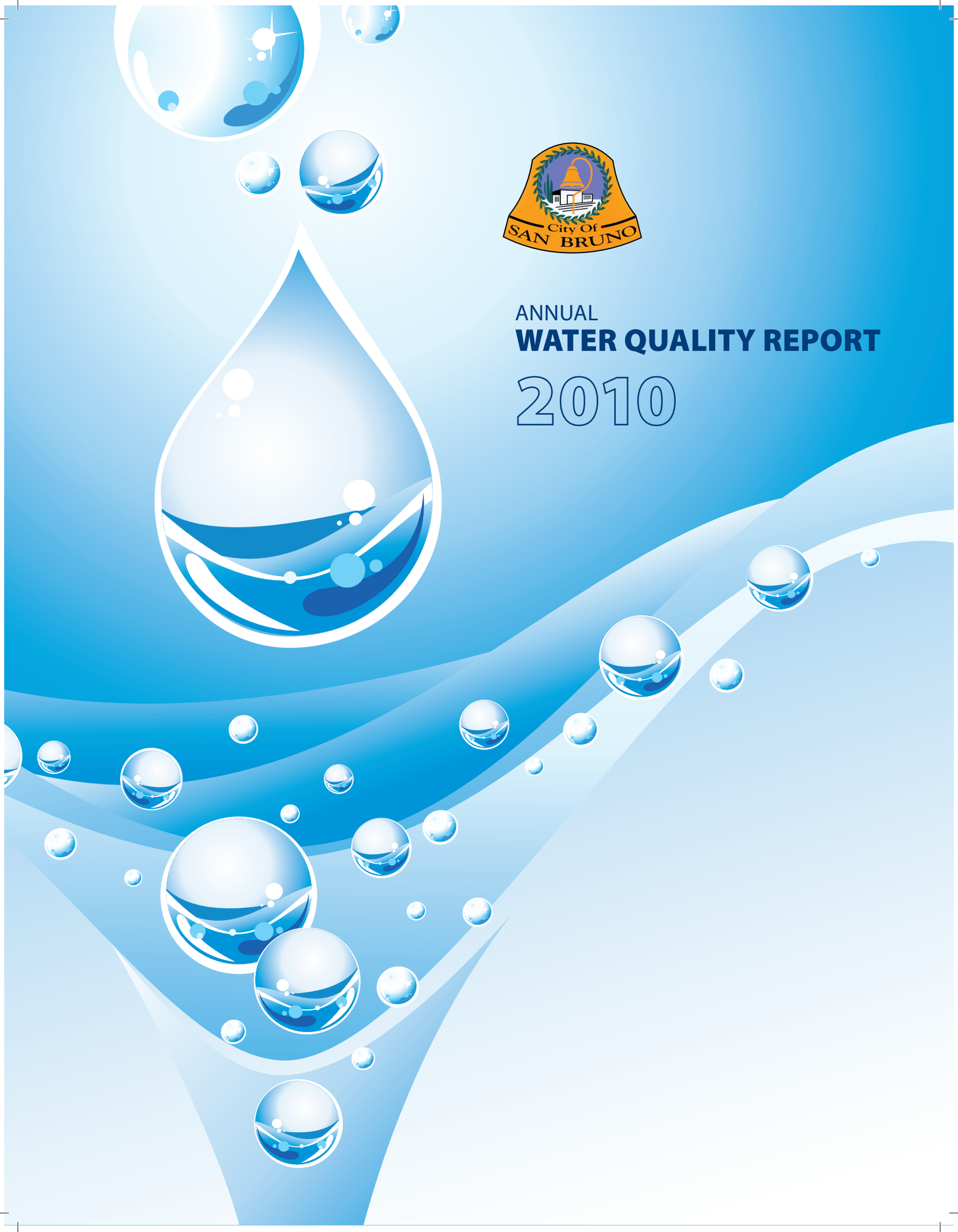
The City of Millbrae continually monitors all five main entry points to our distribution system and also other key points in the distribution system such as our tank sites and pump stations. These sites are monitored by our computerized SCADA (Supervisory Control and Data Acquisition) system that provides our water division managers with continuous automated water quality information.

The Millbrae water division maintenance staff flushes dead-end main pipes located throughout the city on a quarterly schedule (minimum) to ensure our water mains remain clean. We also manage a capital replacement program which progressively and continually ensures our water main pipes and lines remain in top order. These programs assure that water is reliably delivered at the highest quality possible.

In addition, the Millbrae water division, along with the San Mateo County Environmental Health Department, administers and manages a cross-connection prevention program to eliminate possible contamination to our drinking water through backflow prevention devices. The program includes yearly testing of all city-owned backflow devices and monitoring of compliance on privately owned backflow devices*.

*A note to those residents and business owners who have backflow prevention devices: State regulations require that all backflow prevention devices be tested annually by a certified inspector.

In 2010, the City began the design phase of an enclosure around the Larkspur Water Pump Station and construction should take place in 2011. Also, the design of the interior and exterior storage tank recoating and painting has commenced. Geotechnical work is progressing on the project and is expected to be completed in the summer of 2011. The recoating and painting work should begin soon after in the fall of 2011.



ANNUAL

WATER QUALITY REPORT

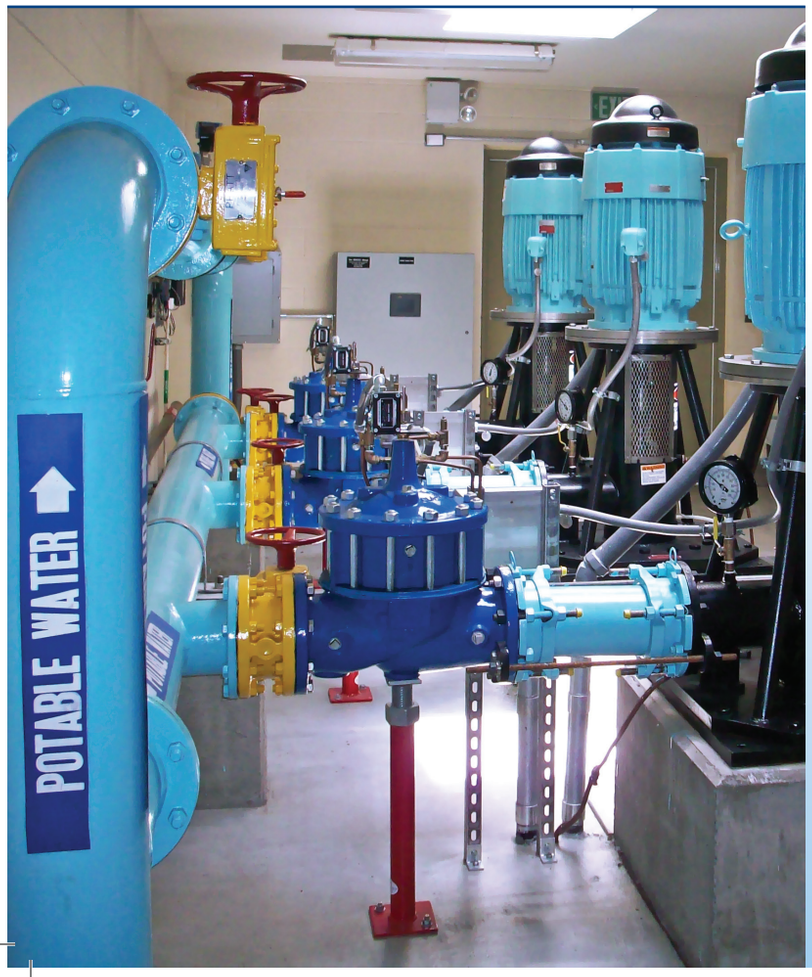
2010

Where City's Water Comes From

Throughout this report customers will be able to find useful information specifically related to the City of San Bruno water system, as well as information related to drinking water in general. The primary mission of this report is to summarize the past year's water quality data that are found in the tables at the end of this brochure. You will also find valuable information about City's current operations as well as future changes or improvements to the water system. The City of San Bruno continues its commitment to provide you with safe, high quality drinking water.

Sources of The City's Water

The supply of water for the City of San Bruno is derived from two primary sources, surface water and deep wells. Groundwater from the City's five wells is blended throughout the distribution system with water purchased from the San Francisco Public Utilities Commission (SFPUC). The sources of drinking water (both tap water and bottled water) include rivers, lakes, oceans, streams, ponds, reservoirs, springs, and wells. For the SFPUC system, the major water source originates from spring snowmelt flowing down the Tuolumne River to the Hetch Hetchy Reservoir, where it is stored. This pristine Sierra water source meets all federal and state criteria for watershed protection. The SFPUC also maintains stringent disinfection treatment practices, extensive bacteriological-quality monitoring, and high operational standards. As a result, the California Department of Public Health and USEPA have granted the Hetch Hetchy water source a filtration exemption. In other words, the source is so clean and protected that the SFPUC is not required to filter water from the Hetch Hetchy Reservoir.



The Hetch Hetchy water is supplemented with surface water from two local watersheds. Rainfall and runoff from the Alameda Watershed, spanning more than 35,000 acres in Alameda and Santa Clara counties, are collected in the Calaveras and San Antonio reservoirs and treated at the Sunol Valley Water Treatment Plant before distribution. Rainfall and runoff from the 23,000-acre Peninsula Watershed in San Mateo County are stored in Crystal Springs, San Andreas, and Pilarcitos reservoirs and treated at the Harry Tracy Water Treatment Plant before distribution.

In 2010, the Hetch Hetchy Watershed provided the majority of our total water supply, with the remainder contributed by the local watersheds.

Safeguarding City water supply

Securing the City's water facilities is a top priority. Residents can be assured that the City of San Bruno is taking precautions to protect the public water supply against a possible terrorist attack. We are working with law enforcement agencies, public health officials, other water utilities, and the Department of Homeland Security to ensure City's water supply is protected.

Source Protection

Source protection is the primary barrier, the first line of defense against contamination of your drinking water at its source. Hetch Hetchy Reservoir, which is the largest reservoir in the SFPUC system, is located in Yosemite National Park. This reservoir provides approximately 94 percent of the total water supply to all twenty-nine Bay Area wholesale costumers. Spring snowmelt flows down the Tuolumne River and fills the reservoir. The high quality Hetch Hetchy water supply meets all federal and state criteria for watershed protection, disinfection treatment, bacteriological quality and operational standards. The SFPUC strictly controls activities on the watershed lands around their reservoirs, limiting activities to those compatible with maximum protection of the water quality.

Protecting Our Watersheds

The SFPUC aggressively protects the natural water resources entrusted to its care. Its annual Hetch Hetchy Watershed survey evaluates the sanitary conditions, water quality, potential contamination sources, and the results of watershed management activities by the SFPUC and its partner agencies, including the National Park Service, to reduce or eliminate contamination sources.

The SFPUC also conducts sanitary surveys of the local Alameda and Peninsula watersheds every five years. These surveys identified wildlife and human activity as potential contamination sources.

The reports are available for review at the CDPH's San Francisco District office (510-620-3474).

San Bruno's groundwater is drawn from a deep aquifer more than 200 feet below the surface. It is protected from contamination by impervious layers of clay deep in the ground. The soil layers filter contaminants borne by surface water and shallow groundwater that may eventually reach the aquifer over several centuries of time before it reaches the well locations. The wells are constructed to meet strict standards imposed by San Mateo County Environmental Health Division to ensure that no surface water or shallow groundwater can enter the aquifer at those points. In cooperation with San Mateo County Environmental Health Division, San Bruno participates in a wellhead protection program established to ensure the long-term protection of the quality of San Bruno's groundwater resources.

Source water assessments were conducted for the City of San Bruno water system in June, 2008.
The sources are considered most vulnerable to the following activities not associated with any detected contaminants: Automobile - Repair shops, Sewer collection systems, Military installations, Utility stations - maintenance areas and Dry cleaners.

Possible Contaminating Activities (PCA) See Web site
http://swap.ice.ucdavis.edu/TSinfo/TSsearch.asp

Water Treatment

Water treatment is the next layer of protection of the City's drinking water. Throughout 2010, the City's well water was disinfected with chloramine, a combination of chlorine and ammonia at the wellhead. Also, City well water is sampled daily to ensure the health and safety of City's consumers. In addition, the City's Lions Field Well and Forest Lane Well are equipped with a filtering plant to remove iron and manganese and adjust pH levels prior to distribution to City's customers. This is to ensure that water from this particular well meets or exceeds all Drinking Water Standards as set by the California Department of Public Health (CDPH).

Water System Operations

Effective operation and maintenance of the distribution system ensures that the water maintains its quality as it travels through the system to your tap. The disinfectant residual in the water after treatment prevents the regrowth of microbial organisms during storage and transmission of water in the distribution system. The flushing of City's water mains and rotation of stored supplies also keeps the water fresh and limits the possibility for growth of such organisms. City of San Bruno conducts mandatory weekly water quality testing of the distribution system to ensure that the City's drinking water continues to be safe and healthy.

The City of San Bruno also maintains an active cross connection control program to prevent the intrusion of potentially harmful materials into the drinking water system. Cross connection control is done by isolating hazards such as boilers, cooling towers, and fire sprinklers from the drinking water supply by installing approved backflow prevention devices.

Fluoride in the City's Drinking Water

Water supplied to The City of San Bruno by the SFPUC has been fluoridated since 1965. SFPUC completed a new fluoridation facility in the East Bay in September 2005; the SFPUC fluoridates the drinking water of its entire suburban wholesale service area to protect their customers' dental health. Because the SFPUC water supply that the City of San Bruno purchases is blended with the City's well water that is non-fluoridated, the water that you receive at your home may contain fluoride that is below the optimal level.

For more information about fluoride, contact your water service provider, or visit the SFPUC website at sfwater.org/fluoride. Local county health departments are also a good source of information about fluoride. Here are some phone numbers you may call:

SFPUC Fluoride Information Line	**(866) 668-6008**
San Mateo County Health Department	**(650) 372-8572**
County of Santa Clara Health Department	**(408) 885-3980**

Special Health Needs

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons, such as those with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly people, and infants can be particularly at risk from infections.

These people should seek advice about drinking water from their health care providers. USEPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline 800-426-4791 or at **www.epa.gov/safewater.**

Water Quality: Contaminants and Regulations

The SFPUC's Water Quality Division regularly collects and tests water samples from reservoirs and designated sampling points throughout the system to ensure that the SFPUC's water meets or exceeds federal and state drinking water standards. In 2010, Water Quality staff conducted more than **58,750** drinking water tests in the transmission and distribution systems. This monitoring effort is in addition to the extensive treatment process control monitoring performed by our certified and knowledgeable treatment plant staff and online instruments. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Such substances are called contaminants. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk.

In order to ensure that tap water is safe to drink, the United States Environmental Protection Agency (USEPA) and California Department of Public Health (CDPH) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. CDPH regulations also establish limits for contaminants in bottled water that provide the same protection for public health. More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline 800-426-4791.

Water Quality Data for Year 2010

The adjacent table below lists drinking water contaminants detected in 2010. Contaminants below detection limits are not shown. In addition to the contaminants' names, applicable drinking water standards or regulatory action levels, ideal

goals for public health, and levels detected in water, the table also includes the information about the typical contaminant sources and footnotes explaining the findings..The State allows the SFPUC to monitor for some contaminants less than once per year because their concentrations do not change frequently. The SFPUC received from the State a monitoring waiver for some contaminants that were absent in the water.

Contaminants that may be present in source water include:

- **Microbial contaminants**, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- **Inorganic contaminants**, such as salts and metals, that can be naturally occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- **Pesticides and herbicides** that may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- **Organic chemical contaminants**, including synthetic and volatile organic chemicals, that are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, agricultural application, and septic systems.
- **Radioactive contaminants**, that can be naturally occurring or be the result of oil and gas production and mining activities.

Unregulated Contaminant Monitoring helps the U.S. EPA and CDPH to determine where certain contaminants occur and whether the contaminants need to be regulated. During 2005, the SFPUC and the City of San Bruno monitored as many as twelve unregulated contaminants including MTBE, perchlorate, herbicides, and pesticides. These contaminants were not detected in any of SFPUC or City of San Bruno water supplies.

In making significant modifications to its disinfectant processes, the City integrated all of the disinfection equipment into its Supervisory Control and Date Acquisition (SCADA) system, thereby adding another level of safety to drinking water quality. Other improvements include pipelines, regulating stations, and an additional well that will further provide the system's managers with more flexibility and capacity to operate the system to the best advantage of the customer.

The City of San Bruno Nitrate Monitoring Requirements at Well No.16 were not met in 2010

In March 2010 water samples were taken at four City wells to meet the nitrate testing requirements of the California Department of Public Health (CDPH).

All samples were sent to the City's independent third-party laboratory for analysis. The laboratory unintentionally omitted the test results of the sample from Well No. 16. Because the absence of the test results was not immediately noticed by City employees, the City received a violation from the CDPH.

We are required to monitor your drinking water for specific contaminants on a regular basis. Results of regular monitoring are an indicator of whether or not our drinking water meets health standards. During 2010, we did not monitor or test for nitrate at Well No.16 and therefore, cannot be sure of the quality of our drinking water during that time.

Nitrate levels at all of the City wells including Well No.16 have always been far below the Maximum Contaminate Level (MCL) of 45 mg/l. However, failing to detect the laboratory's error resulted in water quality monitoring requirements not being met for 2010. Even though this failure was not an emergency and did not impact the quality of your water, as our customers, you have the right to know what happened and what we did to correct this situation.

1. The City took a new nitrate sample at Well No.16 on January 24, 2011. The sample results were 1.0 mg/l, far below the MCL of 45 mg/l.

2. The City has established a Corrective Action Plan that has been approved by the CDPH. The Correction Action Plan will help prevent any further sampling errors.

If you have any questions, please contact Water Systems and Conservation Manager Mark Reinhardt at (650) 616-7162.

What you should know about Cryptosporidium & Giardia Lamblia

Cryptosporidium is a parasitic microbe found in most surface water. The SFPUC regularly tests for this waterborne pathogen, and found it at very low levels in source water and treated water in 2010. However, current test methods approved by the USEPA do not distinguish between dead organisms and those capable of causing disease. Ingestion of *Cryptosporidium* may produce symptoms of nausea, abdominal cramps, diarrhea, and associated headaches. *Cryptosporidium* must be ingested to cause disease, and it may be spread through means other than drinking water.

Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants, including *Cryptosporidium* and *Giardia Lamblia*. The presence of small amounts of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects may be obtained by calling the U.S. EPA Safe Drinking Water Hotline at (800) 426-4791.

Check Records Arsenic

On February 22, 2002, a new arsenic standard was adopted by the USEPA, setting the allowable level of arsenic in drinking water at 10ppb. The level was lowered from the previous standard of 50 ppb, in light of new studies linking arsenic in water to bladder, lung and skin cancer, as well as kidney and liver cancer and other nervous and vascular system complications. The new rule requires that all water systems be in compliance by January 23, 2006.

Reducing Lead from Plumbing Fixtures

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The City of San Bruno Water System is responsible for providing high-quality drinking water, but cannot control the variety of materials used in your household or building plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline 800-426-4791, or at **www.epa.gov/safewater/lead.**

Definitions to Understand this Report

The table on the right lists all 2010 detected drinking water contaminants and the information about their typical sources. Contaminants below detection limits are not shown, in accord with the CDPH guidance.

Key Water Quality Terms

Following are definitions of key terms noted on the adjacent water quality data table. These terms refer to the standards and goals for water quality described below.

Public Health Goal (PHG): The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Environmental Protection Agency.

Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the USEPA.

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs or MCLGs as is economically and technologically feasible. Secondary MCLs (SMCLs) are set to protect the odor, taste, and appearance of drinking water.

Maximum Residual Disinfectant Level (MRDL): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

Primary Drinking Water Standard (PDWS): MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.

Turbidity: A water clarity indicator that is also used to indicate the effectiveness of the filtration plants. High turbidity can hinder the effectiveness of disinfectants.

Regulatory Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.
Cryptosporidium is a parasitic microbe found in most surface water. The SFPUC regularly tests for this waterborne pathogen, and found it at very low levels in source water and treated water in 2010. However, current test methods approved by the USEPA do not distinguish between dead organisms and those capable of causing disease. Ingestion of Cryptosporidium may produce symptoms of nausea, abdominal cramps, diarrhea, and associated headaches. Cryptosporidium must be ingested to cause disease, and it may be spread through means other than drinking water.

Secondary Drinking Water Standards (SDWS)
MCLs for contaminants that affect taste, odor, or appearance of the drinking water. Contaminations with SDWSs do not affect the health at the MCL levels.

Variances and Exemptions
Department permission to exceed an MCL or not comply with a treatment technique under certain conditions.

Waiver
State permission to decrease the monitoring frequency for a particular contaminant.

Additional Definitions:

ND: Not detectable at testing limit.

ppm: parts per million or milligrams per liter (mg/L)

ppb: parts per billion or micrograms per liter (ug/L)

pCi/L: picocuries per liter (a measure of radiation)

City of San Bruno Water Quality Data for Year 2010 [1]

DETECTED CONTAMINANTS	Unit	MCL	PHG or (MCLG)	SFPUC Range or Level Found	SFPUC Average or (Max)	San Bruno Range or Level Found	San Bruno Average or (Max)	Typical Sources in Drinking Water
TURBIDITY [2]								
For Unfiltered Hetch Hetchy Water	NTU	5	NA	0.2 - 0.6 [3]	[4.9] [4]			Soil run-off
For Filtered Water from Sunol Valley Water Treatment Plant (SVWTP)	NTU	1 [6]	NA	-	[0.54]			Soil run-off
	_	min 95% of samples ≤ 0.3 NTU [5]	NA	97.6% - 100%	-	NA		Soil run-off
For Filtered Water from Harry Tracy Water Treatment Plant (HTWTP)	NTU	1 [5]	NA	-	[0.19]			Soil run-off
	_	min 95% of samples ≤ 0.3 NTU [5]	NA	100%	-			Soil run-off
DISINFECTION BY-PRODUCTS								
Total Trihalomethanes (TTHMs)	ppb	80	NA	14 - 92	[40] [6]	<0.5 - 33.7	9.5 [6]	By-product of drinking water chlorination
Total Haloacetic Acids (HAAs)	ppb	60	NA	7 - 55	[25] [6]	<2 - 25.4	5.4 [6]	By-product of drinking water chlorination
Total Organic Carbon (TOC) [7]	ppm	TT	NA	2.4 - 3.2	2.7	NA	NA	Various natural and man-made sources
MICROBIOLOGICAL								
Total Coliform	%	≤ 5.0% of monthly samples	[0]	-	-	0	0	Naturally present in the environment
Giardia lamblia	cyst/L	TT	[0]	ND - 0.06	[0.06]	0	0	Naturally present in the environment
INORGANIC CHEMICALS								
Fluoride (source water) [8]	ppm	2.0	1	ND - 0.7	0.3 [9]	0.1 - 0.14	0.11	Erosion of natural deposits
Chlorine (including free chlorine and chloramine)	ppm	MRDL = 4.0	MRDLG = 4	1.8 - 2.4	2.0	2.5 - 2.8	2.5	Drinking water disinfectant added for treatment

CONSTITUENTS WITH SECONDARY STANDARDS	Unit	SMCL	PHG	Range	Average	Range	Average	Typical Sources in Drinking Water
Chloride	ppm	500	NA	3 - 16	9.5	58 - 110	79.45	Runoff / leaching from natural deposits
Color	unit	15	N/A	<5 - 6	<5	0 - 5	3.75	Naturally-occurring organic materials
Specific Conductance	µS/cm	1600	NA	33 - 316	179	520 - 870	683.75	Substances that form ions when in water
Sulfate	ppm	500	NA	1.6 - 38.7	18.2	26 - 79	46.32	Runoff / leaching from natural deposits
Total Dissolved Solids	ppm	1000	NA	27 - 174	95	300 - 480	383.5	Runoff / leaching from natural deposits
Turbidity	NTU	5	NA	0.07 - 0.33	0.16	0.1 - 58	0.46	Soil runoff
Iron	ppm	0.3	NA	ND	ND	0.01 - 0.03	15	Leaching from natural deposits
Manganese	ppm	0.05	NA	ND	ND	0.02 - 0.04	0.03	Leaching from natural deposits

LEAD AND COPPER RULE STUDY [11]	Unit	AL	PHG	Range	90th Percentile	Range	90th Percentile	Typical Sources in Drinking Water
Copper	ppb	1300	170	N/A	N/A	2.6 - 972	550	Corrosion of household plumbing systems
Lead	ppb	15	2	N/A	N/A	<1 - 3.2	1.8	Corrosion of household plumbing systems

OTHER WATER QUALITY PARAMETERS	Unit	ORL	Range	Average	Range	Average
Alkalinity (as $CaCO_3$)	ppm	NA	8 - 98	8 - 98	130 - 220	170
Boron	ppb	NA	<100 - 102	<100	ND	ND
Bromide	ppb	NA	<10 - 16	<10 - 17	0.1 - 0.5	0.4
Calcium (as Ca)	ppm	NA	2 - 26	12	31 - 99	54.75
Chlorate [10]	ppm	(800) NL	92 - 357	150	NA	NA
Hardness (as $CaCO_3$)	ppm	NA	8 - 104	53	170 - 310	225
Magnesium	ppm	NA	0.3 - 9	4.6	23 - 41	30.6
pH	-	NA	8.2 - 8.7	8.5	7.43 - 7.56	7.51
Potassium	ppm	NA	0.34 - 1.2	0.6	0 - 5.3	1.3
Silica	ppm	NA	4.1 - 7.6	5.7	NA	NA
Sodium	ppm	NA	3 - 22	13	40 - 58.2	48.3

KEY:

< / ≤ = less than / less than or equal to
AL = Action Level
Max = Maximum
NA = Not Available
ND = Non Detected
NL = Notification Level
NS = No Standard
NTU = Nephelometric Turbidity Unit
ORL = Other Regulatory Level
ppb = parts per billion
ppm = parts per million
TT = Treatment Technique
Min = Minimum
µS/cm = microSiemens / centimeter

(1) All results met State and Federal drinking water health standards.

(2) Turbidity is a water clarity indicator; it also indicates the effectiveness of the filtration plants.

(3) Turbidity is measured every four hours. These are monthly average turbidity values.

(4) This is the highest turbidity of the unfiltered water served to customers in 2010. The switch of San Joaquin Pipelines and rate change caused elevated turbidities as a result of sediment resuspension in the pipelines. The turbidity spike was not observed further downstream at Alameda East.

(5) There is no MCL for turbidity. The limits are based on the TT requirements in the State drinking water regulations.

(6) This is the highest quarterly running annual average value.

(7) Total organic carbon is a precursor for disinfection byproduct formation. The TT requirement applies to the filtered water from the SVWTP only.

(8) The SFPUC adds fluoride to the naturally occurring level to help prevent dental caries in consumers. The CDPH requires our fluoride levels in the treated water to be maintained within a range of 0.8 ppm - 1.5 ppm. In 2010, the range and average of our fluoride levels were 0.6 ppm - 1.5 ppm and 1.0 ppm, respectively.

(9) The naturally occurring fluoride levels in the Hetch Hetchy and SVWTP raw water were ND and 0.15 ppm, respectively. The HTWTP raw water had elevated fluoride levels of 0.7 ppm - 0.9 ppm due to the continued supply of the fluoridated Hetch Hetchy & SVWTP treated water into the Lower Crystal Springs Reservoir, which supplies water via the San Andreas Reservoir to the HTWTP for treatment.

(10) There were no chlorate detected in the raw water sources except the Crystal Springs and San Andreas reservoirs, where the detected chlorate were 81 ppb and 57 ppb, respectively. The chlorate levels in both reservoirs are due to the transfer of the disinfected Hetch Hetchy water and SVWTP effluent into the Crystal Springs Reservoir. The detected chlorate in treated water is a degradation byproduct of sodium hypochlorite, the primary disinfectant used by SFPUC for water disinfection.

(11) Latest round of Lead and Copper Rule monitoring was in 2010.

Note: Additional water quality data may be obtained by calling the City of San Bruno Water Division at (650) 616-7162

Consumer Confidence Report

A public service provided by the City of San Bruno, the Peninsula City of choice in which to live, learn, work, shop and play.

The City of San Bruno is proud to provide our customers with the annual Consumer Confidence Report (CCR). This year's report is in compliance with new regulations of the 1998 Safe Drinking Water Act (SDWA) reauthorization, that charges the U.S. Environmental Protection Agency (U.S.EPA) with updating and strengthening the tap water regulatory program. This report presents water quality and supply information for 2010. During 2010, the City and the San Francisco Public Utilities Commission (SFPUC) monitored the water quality of both source and treated water supplies. The City of San Bruno wants you, our customer, to know that your water system has met all water quality standards established by the U.S.EPA and the California Department of Public Health (CDPH).

How Can the Public Be Involved?

Meetings of the City of San Bruno City Council begin at 7:00 PM on the second and fourth Tuesdays of each month and are open to the public. Meetings are held at the San Bruno Senior Center located at 1555 Crystal Springs Road.

If you have any questions or need further information, please feel free to contact the City of San Bruno Water Division at (650) 616-7162, or by mail at City of San Bruno Water Division, 567 El Camino Real, San Bruno, CA 94066-4247. A copy of the 2010 Consumer Confidence Report will also be posted on the City's website at www.sanbruno.ca.gov.

Decisions about SFPUC water quality issues are made from time to time in public meetings held at San Francisco City Hall, 1 Doctor Carlton B. Goodlett Place, Room 400, San Francisco CA 94102. Inquiries about these meetings may be directed to the Office of the Commission Secretary at (415) 554-3165. Additional information about the SFPUC water quality may be obtained by calling (877) 737-8297, or by going to their website at www.sfwater.org.

Tanslation Languages

This report contains important information about your drinking water. Translate it, or speak with someone who understands it.
Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien.
Mahalaga ang impormasyong ito. Mangyaring ipasalin ito.

此份有关你的食水报告,内有重要资料和讯息,请找

他人为你翻译及解释清楚。

ANNUAL WATER QUALITY REPORT

2010

City of San Bruno
Public Works Department
Water Division
567 El Camino Real
San Bruno, CA 94066-4247

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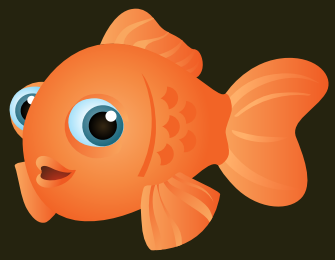
Reliability and Quality

2010 Conservation Update
and Water Quality Report

Bayshore District
South San Francisco



Reliability and Quality Water is not just a thirst quencher — it's an essential, irreplaceable natural resource. In this report, you'll see how we can work together to ensure that we have a reliable supply for today and tomorrow. You'll also find important information about the quality of water we provide to you and your family.

Use Water Wisely. It's Essential.

About Your Water System

Cal Water has provided high-quality water utility services in South San Francisco since 1931. In 2009, water for our customers was purchased from the San Francisco Public Utilities Commission (SFPUC), and additional water was provided by five groundwater sources. Our South San Francisco system includes 144 miles of pipeline, 12 storage tanks, one collecting tank, and 20 booster pumps. Cal Water proactively maintains and upgrades its facilities to ensure a reliable, high-quality supply.

Bayshore District
341 North Delaware Street, San Mateo, CA 94401-1727
(650) 558-7800 infoBAY@calwater.com
www.calwater.com

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At California Water Service Company (Cal Water), we know the value of water. Water is the lifeblood of every community and an integral part of our lives. It does so much more than quench our thirst; it also enables us to stay clean, grow food, fight fires, and manufacture products. It is a precious, finite resource that we must conserve and protect. To that end, we provide information in the first part of this report to help you use water as efficiently as possible. We hope you will take advantage of the programs, free devices, and tips we offer to help you save water in your home.

After the conservation section, you'll find important facts about your water quality. We are committed to providing safe, high-quality water to you and your family. Inside, you'll get information about our rigorous monitoring and testing programs, and you will see how your water compares to state and federal water quality standards. **Most importantly, this report confirms that your water met or surpassed all primary and secondary water quality standards during this reporting period.**

If you have any questions, suggestions, or concerns, please contact our local Customer Center, either by phone or through the contact link on our web site. Also, please watch for bill inserts (which are also available online for customers using paperless billing), where you will find announcements of any water-related public meetings or workshops, as well as important information about your water. Additional information and time-sensitive announcements about your water can be found at www.calwater.com.

Sincerely,

Tony Carrasco

District Manager
Bayshore District

Conservation: It's Not Just for Droughts Anymore

If you've lived in California for any length of time, you know that droughts come and go. When droughts come, we're all pretty conscientious about our water use. When droughts go, it's easy to fall back into our water-wasting ways. But we can't afford to do that this time around, and here's why.

Growing Population We have the same amount of water today as we did when the dinosaurs roamed the earth, and yet, the state's population continues to grow.

Delta in Trouble Nearly two-thirds of Californians receive water transported through the Sacramento-San Joaquin Delta, and it's in trouble. The network of waterways and levees that make up the Delta need significant investment, and even then, flowing too much water through the Delta could hurt sensitive ecosystems.

Colorado River Must Be Shared We depend upon water from the Colorado River, but other states have claimed their share, and California has been ordered to reduce its take.

Groundwater Sustainability Groundwater is an important resource across the state. We need to reduce our use to ensure that we don't harm underground aquifers.

20 by 2020 In response to these challenges, the California Legislature passed a law in 2009 requiring a 20% reduction in per-person water use by 2020, with an interim required reduction of 10% by 2015.

Tiered Rates The California Public Utilities Commission has approved a tiered-rate structure to encourage Cal Water customers to conserve, which means when you use more, you pay more.

Conservation isn't difficult, but it is essential. Read on to see how you can help us ensure a reliable supply for you and for future generations.

Make a Big Impact in Your Own Backyard

A significant portion of urban residential water use — more than half in most cases — occurs outdoors. That means you can make a big difference by using water efficiently in your own backyard. It all boils down (no pun intended) to reducing evaporation, avoiding runoff, and watering only as much as your landscape needs.

- Select native plants whenever possible. Consult your local nursery or visit www.calwater.com for a list of water-friendly plants.
- Wait until fall or winter to plant. New plants require more water than established growth.
- Keep low-water-using plants away from "thirsty" plants.
- Keep shade plants in the shade. This will help prevent them from drying out.
- Place water-loving plants at the bottom of slopes where they will benefit from water runoff.
- Use mulch to reduce evaporation.
- Water at dawn or dusk, when temperatures are lower; also, be aware of any ordinance your city may have about when you can water.
- Install a rain sensor or turn off automatic sprinklers when it rains.
- Check your sprinklers regularly for broken heads, leaks, and overspray.
- Lawn requires more water than native plants, but if you do have grass, water it only when necessary; if you step on the grass and it springs right back up, it probably doesn't need water.

Save Water without Breaking a Sweat

No matter where you live — single-family home, duplex, condominium, or apartment — you have many opportunities to save water. And it's easy. Here are a few ways you can save water without breaking a sweat.

- Put your food waste into a compost pile or trash can instead of the garbage disposal, which requires flowing water.
- When you're making coffee, tea, or other water-based beverages, make only as much as you can drink. This not only saves the amount of water left in the pot, it also saves the water that is used to produce the coffee and tea in the first place.
- If you like to take baths (and who doesn't?), plug the tub before you start the water. Even if the water takes time to heat up, you can adjust the temperature as the water runs.
- If you have a pool, keep it covered when not in use.
- Never let water run right from the faucet to the drain. If you can't simply turn it off, maybe you can capture the water for later use somewhere else. Your ficus won't mind!
- Use a commercial car wash instead of washing your car yourself. Modern car washes are generally very water-efficient.
- You can find many more tips online in the Conservation section of www.calwater.com. If you have questions or a conservation tip of your own you'd like to share, please e-mail us at conservation@calwater.com.

Get a Conservation House Call

Could you use some help finding water-saving opportunities around your home? If you live in a single-family residence, why not sign up for a free residential water-use survey? You'll get expert advice with no strings attached — there's nothing to buy and no obligation to make any changes you don't want to make. If you sign up, on the day of your appointment, a trained water conservation specialist from WaterWise will come to your home and help you find ways to reduce your water usage.

For example, the specialist will:

- Show you how to read your meter and check for leaks.
- Check the flow rates of your faucet aerators and showerhead fixtures.
- Check for toilet leaks and measure your toilets' existing flush rate volumes.
- Provide information on rebates available for toilets, washing machines, and other high-efficiency appliances.
- Check the flow rates of your water-using appliances (such as clothes washers and dishwashers).
- Conduct a soil probe test in your yard to determine soil texture.
- Look for existing plumbing fixtures (such as showerheads, faucet aerators, and toilet flappers) that are using water inefficiently. If they qualify, the specialist will replace them with new, high-efficiency ones at no cost to you.
- Review your landscaping and recommend optimal watering methods and schedules.
- Check your sprinkler system and look for broken heads and/or lateral lines.
- Install water-efficient pop-up spray nozzles on your sprinklers, if your existing devices qualify for replacement, at no cost to you.

To take advantage of this free service, call our contractor, WaterWise, at (866) 685-2322. A representative will confirm your eligibility and schedule your survey.

Take Advantage of Available Rebates

To encourage water conservation in the home, Cal Water offers rebates on a number of qualified water-efficient appliances (available until funds are depleted).

High-efficiency toilet: (Rebate available when replacing a toilet using 3.5 gallons per flush or more) High-efficiency toilets (HETs) are defined as fixtures that flush at 20% below the 1.6-gallons-per-flush (gpf) U.S. maximum or less, equating to a maximum of 1.28 gpf. (The HET category includes dual-flush toilets). The average water savings for one HET is estimated to be 38 gallons per day (gpd).

High-efficiency clothes washer: High-efficiency clothes washers use 35-50% less water and approximately 50% less energy than traditional washers.

Cal Water offers these rebates through partnerships with the Bay Area Water Supply & Conservation Agency (BAWSCA) and PG&E. Additional rebates may be available. For more information, disclaimers, and application instructions, please see the Residential Rebates section of Cal Water's web site at www.calwater.com/conservation.

Request a Free Conservation Kit

Cal Water offers conservation kits to customers at no charge (while supplies last). These kits contain several items, including:

- High-efficiency showerheads with a flow rate of 2 gallons per minute,
- Kitchen faucet aerators with a flow rate of 1.5 gallons per minute,
- Bathroom faucet aerators with a flow rate of 1 gallon per minute,
- Hose shut-off nozzles, and
- Dye tablets to help you check for toilet leaks.

Visit www.calwater.com/kit to customize your kit and have it mailed to your service address.

If you are a property manager or require conservation supplies for multiple units or homes, e-mail your request to the Conservation Department at conservation@calwater.com.

Fix a Leak and Save a Lot

Leaks are sneaky. They waste a lot of water and can have a real impact on your water bill. To check your home for leaks, begin by turning off all the faucets and water-using appliances in your home. Then locate your water meter (usually at the curb of your home) and watch the large test hand (in red in the accompanying picture) for about 15 minutes. If the hand moves during that time, you have a leak.

Leaks can occur in pipes, faucets, hoses, sprinkler systems, sprinkler timers, water softeners, water heaters, and water filtration units, but the most common culprit for indoor leaks is the toilet. To find out if your toilet leaks, listen for the sound of running water. You can also place a dye tablet (available at no charge through calwater.com) or a few drops of food coloring in the tank. Don't flush the toilet. If colored water makes its way into the bowl, the toilet is leaking.

Other indications of household leaks include:

- Dripping faucets
- Unusual wet spots in the house or yard
- Discoloration spreading on a ceiling
- Rooms that are unusually or unseasonably warm or humid
- A pool that loses water more quickly than it used to

It's up to Cal Water to fix leaks in the water system leading up to your meter, but it's up to you to take care of any leaks leading from the meter to your home. And the meter is a great place to start.

300,000 Steps to Ensuring Water Quality

Protecting customer health and safety is Cal Water's highest priority, and we are vigilant in our efforts to ensure that our water meets or surpasses state and federal water quality standards. But how are these standards set?

The Safe Drinking Water Act, passed by Congress in 1974, authorizes the United States Environmental Protection Agency (USEPA) to set national standards for drinking water quality based on sound science that weighs potential health risks, available technology, and costs. The USEPA then reviews every regulated constituent every six years to determine whether the standard should be updated. The USEPA also evaluates emerging contaminants, and we conduct extensive testing for emerging contaminants to provide the USEPA with data.

At a minimum, the California Department of Public Health (CDPH) must adopt and enforce USEPA standards. If it chooses, it can set even more stringent standards, and CDPH often does (for fluoride, chromium, MTBE, and perchlorate, for example). Similar to the USEPA, CDPH takes a methodical approach to setting standards.

First, CDPH receives a Public Health Goal for a constituent from the California Environmental Protection Agency's Office of Environmental Health Hazard Assessment (OEHHA), which is the level of a contaminant at which there are no known health effects. CDPH then determines how prevalent the contaminant is, whether commercial laboratories have the technology to analyze and detect the contaminant at the goal level, and what the costs would be to monitor and treat the contaminant to meet the goal level. It eventually sets the standard as close as is technically and economically feasible to the Public Health Goal, while placing the greatest emphasis on protecting public health.

And that's just the standard-setting process. Once a standard is in place, it is up to Cal Water's team of engineers, scientists, and water professionals to ensure that your water meets that standard. From the sampling stations that enable our certified water professionals to get the most accurate test results possible, to the state-of-the-art laboratory where our scientists conduct 300,000 tests per year, the goal is simple: meet or surpass every standard, every day, in every system.

Know What's Happening with Your Water

Most of us don't think much about our water as long as we have a clean and plentiful supply when we need it. But considering how important water is to our health, safety, and well-being, it's good to know a few basics. In previous sections, we have provided information on using this limited resource wisely. Here, we offer some information on common water quality issues.

Sand or Sediment in the Water

Dirt or sand can occur naturally in groundwater or get into water lines during repairs. Cal Water flushes water lines to help remove dirt and sand from the water when necessary, but sometimes sediment makes its way into home plumbing. If you notice particles in your water — or if a faucet has not been used for a period of time and rust or residue from pipes has collected, discoloring your water — let the water run for a minute and it should return to normal. (Water savers: While the faucet runs, collect the water in a bucket for use in your garden.) After the water returns to normal, remove your faucet's aerator and rinse it to remove collected sediment.

Water Heaters

It is important to maintain your water heater as directed by the manufacturer. Not doing so can lead to wasted energy, mineral buildup, and water quality problems. If you detect an odor in your hot water that is not present in your cold water, you may need to adjust, flush, or repair your water heater. Check with the manufacturer for details.

Milky Water

Milky or bubbly water is generally caused by harmless air bubbles. If the water is allowed to sit, the air will dissipate and the water will clear.

Home Treatment Devices

According to the United States Environmental Protection Agency, home treatment devices are rarely necessary for health reasons, but if you choose to install one, be sure to follow the manufacturer's maintenance instructions. Improperly maintained units can cause water quality problems, such as bacteria growing in carbon filters that are not replaced as recommended.

Spots on Dishes

Spots are caused by minerals in hard water that remain after the water has evaporated. The spots can be reduced by a dishwasher rinse agent.

Weird Coffee

If your coffee has an oily appearance, try cleaning your coffee maker with vinegar and water as directed by the manufacturer.

Chlorine Smell

In many places, drinking water is treated to prevent the spread of germs that can cause serious illness. Sometimes, this disinfection may give your water a chlorine taste or smell. If it does, try refrigerating your water before drinking it.

When to Contact Cal Water

Of course, we are here to help. Your Customer Center can be reached at the phone number on the back of this brochure or through the "Contact us" link at www.calwater.com.

Be sure to contact your Customer Center if:

- Your water has color or sediment that does not go away after you let your faucets run, or bubbles or a milky appearance that doesn't dissipate when the water sits.
- You detect an odor in both your hot and cold water.
- You have a water emergency or notice a water emergency — such as a broken fire hydrant — in your neighborhood.

Protecting the Water Supply

One of our most important responsibilities is protecting our water sources from pollution and contamination, and you can help.

If you have a garden, be aware that fertilizer and other chemicals can get into the groundwater if used excessively. Even organic products contain substances that can cause water quality problems. Work with a gardener or nursery to make sure that you are using appropriate amounts of anything that could impact the environment.

If you take medication, you can also help protect our water supply by responsibly disposing of drugs that are expired or no longer needed. Do not flush them down the toilet or put them in the sink. Instead, contact a pharmacy, your doctor, or the drug's manufacturer for safe disposal instructions. Or, check to see if your city or county participates in National Drug Take-Back Day.

Read All About It: Two Current Quality Issues

Two constituents have been in the news lately: perchlorate and chromium-6 (hexavalent chromium).

Cal Water tests its water for both of these constituents. Although the USEPA has not yet established a standard for perchlorate, the California Department of Public Health (CDPH) has. Cal Water must meet or surpass the state maximum contaminant level (MCL) for perchlorate, which is 6 parts per billion (ppb).

Although there is no state standard for chromium-6, there is a state standard for total chromium (chromium-6 + chromium-3). Because chromium-6 is a subset of total chromium, chromium-6 levels could not possibly exceed total chromium levels. Cal Water meets or surpasses the current MCL for total chromium, which is 50 parts per billion (ppb).

We will monitor the USEPA's standard-setting process as we continue to comply with CDPH standards. We support these public health agencies as they take a methodical, scientific approach to determine whether more stringent standards are warranted, and we will take whatever steps are deemed necessary to protect customer health and safety.

Where Chromium-6 Comes From

Chromium-6 occurs naturally at low levels in many ground and surface waters. It is also used to produce stainless steel and textile dyes, preserve wood, and tan leather, among other things. Chromium-6 can cause cancer in humans when inhaled; it is possible that if consumed, saliva and stomach acid might reduce chromium-6 to its unharmful form (chromium-3) in some cases. Public health agencies are studying several scientific issues to determine what the limit for chromium-6 in drinking water should be.

More About Perchlorate

Perchlorate can occur both naturally and through manufacturing, but large concentrations of it are more often associated with fertilizer, military installations, or the manufacturing of rockets, fireworks, flares, automobile air bags, and other things that use solid propellants. It is used medically to treat some thyroid disorders, but it can cause health problems by interfering with iodine uptake into the thyroid gland. Because perchlorate is highly water-soluble, it has the potential to be a groundwater contaminant. California established a drinking water maximum contaminant level of 6 ppb for perchlorate in 2007, which is still one of the strictest perchlorate standards in the country.

Drinking Water Source Assessment and Protection Program (DWSAPP)

By the end of 2002, Cal Water had submitted to the California Department of Public Health a DWSAPP report for each water source in the water system. The DWSAPP report identifies possible sources of contamination to aid in prioritizing cleanup and pollution prevention efforts. All reports are available for viewing or copying at our Customer Center.

The surface water source in your system is considered most vulnerable to the following activities for which no associated contaminant has been detected: gas stations, dry cleaners, and underground storage tanks (confirmed leaking tanks). The San Francisco Public Utilities Commission (SFPUC), which supplies a significant portion of the water for your district, completed such a report in 2000. It found that its watersheds are vulnerable to contaminants associated with wildlife and, to a limited extent, human recreational activity. Historically, the levels of contaminants have been very low in watersheds.

A complete copy of the report may be obtained at the SFPUC web site (www.ci.sf.ca.us/html/wqb.htm) and at the main branch of the San Francisco Public Library.

We encourage customers to join us in our efforts to prevent water pollution and protect our most precious natural resource.

What About Fluoride?

In the United States, water fluoridation has been widely practiced since 1960, and more than 65% of the largest cities in the United States currently have fluoridated drinking water. Fluoride is believed by medical and dental professionals to be a safe, effective way to prevent tooth decay, and water fluoridation is strongly supported by local, state, and national health agencies, including the

Understand Where Contaminants Come From

All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the United States Environmental Protection Agency (USEPA) Safe Drinking Water Hotline at (800) 426-4791.

The sources of drinking water (both tap and bottled) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or human activity. Contaminants that may be present in source water include:

Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.

Inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.

Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.

Organic chemical contaminants, including synthetic and volatile organic chemicals, which are byproducts of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, agricultural application, and septic systems.

Radioactive contaminants, which can be naturally occurring or the result of oil and gas production and mining activities.

In order to ensure that tap water is safe to drink, the USEPA and the California Department of Public Health (CDPH) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. CDPH regulations also establish limits for contaminants in bottled water, which must provide the same protection for public health.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immunocompromised people, such as those with cancer undergoing chemotherapy, those who have undergone organ transplants, those with HIV/AIDS or other immune system disorders, some elderly people, and infants, can be particularly at risk from infections. These people should seek advice from their health care providers about drinking water. USEPA/Centers for Disease Control and Prevention (CDC) guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline at (800) 426-4791.

American Medical Association, American Dental Association, California Department of Public Health, and Centers for Disease Control and Prevention.

However, since 1960, there has been a significant change in the amount of fluoride that the average American ingests from other sources (such as toothpaste). For this reason, the Department of Health and Human Services (HHS) is considering lowering the recommended level of fluoride in fluoridated water to 0.7 parts per million (ppm) from its current range of 0.7 to 1.2 ppm. The U.S. Environmental Protection Agency (USEPA) has also announced that it is considering reducing the maximum contaminant level (MCL) for fluoride, which is currently 4.0 ppm. The state of California's MCL for fluoride is 2.0 ppm.

Some water has naturally occurring fluoride, and Cal Water is required by law to add fluoride if fluoride is below optimal levels and funding from federal grants or other sources becomes available. This means that fluoride levels vary among Cal Water's many systems. In some places, natural fluoride exists at levels above the MCL and must be removed. In others, Cal Water delivers a mix of fluoridated and non-fluoridated water, resulting in water that contains fluoride at less than optimal levels for dental health. And in some places, Cal Water provides water that is fluoridated to the level recommended by medical and dental professionals to prevent tooth decay.

Fluoride In Your Area

We blend water from our surface-water treatment plant that contains natural fluoride with fluoridated water purchased from SFPUC.

More information about fluoridation, oral health, and current issues can be found on the CDPH web site at www.cdph.ca.gov/certlic/drinkingwater/Pages/Fluoridation.aspx. For general information on water fluoridation, visit us online at www.calwater.com.

Put the Standards Into Perspective

Water quality standards become increasingly stringent as technology advances, enabling us to detect increasingly minute quantities of substances in water. Most substances are limited on a "parts per million" or "parts per billion" basis. To put that into perspective…

One part per million is:

- One inch in a journey of almost 16 miles.
- A 2.5-inch square on a football field.
- One half of one word in *War and Peace.*

One part per billion is:

- One inch in six round trips from Los Angeles to New York.
- Three seconds out of 100 years.
- Three tenths of one inch of the Great Wall of China.

Water Hardness

Water's "hardness" is a measure of the amount of minerals (generally calcium and magnesium) it contains. Water is considered soft if its hardness is less than 75 parts per million (ppm), moderately hard at 75 to 150 ppm, hard at 150 to 300 ppm, and very hard at 300 ppm or higher.

Hard water is generally not a health concern, but it can have an impact on how well soap lathers and is significant for some industrial and manufacturing processes. Hard water may also lead to mineral buildup in pipes or water heaters.

Some people with hard water opt to buy a water softener for aesthetic reasons. However, some water softeners add salt to the water, and this can cause problems at wastewater treatment plants. People on low-sodium diets should be aware that some water softeners increase the sodium content of the water.

Water Main Flushing

"Flushing" is a procedure in which certain fire hydrants are opened under controlled conditions to remove minerals and sediment that build up in water lines over time or enter during water line repairs. Fire hydrants are also sometimes opened in order to ensure that they are operating properly. Because of our focus on water conservation, Cal Water only conducts flushing when necessary to ensure good water quality or when local fire agencies require fire protection data.

Although it may seem wasteful to the casual observer, flushing is an important — and necessary — water utility activity. It is endorsed by the American Water Works Association and conducted in accordance with guidelines set by the California Department of Public Health.

If flushing is being conducted in your service area, your service should not be interrupted, but you could notice a temporary dip in water pressure. If you notice any discoloration or sediment in your water after we have flushed, please allow water to run from your outside hose bib until it clears.

Know the Lingo: Key Definitions

Public Health Goal (PHG): The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Environmental Protection Agency's Office of Environmental Health Hazard Assessment.

Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the United States Environmental Protection Agency (USEPA).

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. Primary MCLs protect public health and are set as close to the PHGs (or MCLGs) as are economically and technologically feasible. Secondary MCLs relate to the odor, taste, and appearance of drinking water.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

Maximum Residual Disinfectant Level (MRDL): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Notification Level (NL): A health-based advisory level for an unregulated contaminant in drinking water. It is used by the California Department of Public Health to provide guidance to drinking water systems.

Primary Drinking Water Standard (PDWS): MCLs and MRDLs for contaminants that affect health, along with their monitoring, reporting, and water treatment requirements.

Regulatory Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other required action by the water provider.

Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.

Lead in Water

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water comes primarily from materials and components associated with service lines and home plumbing.

The water delivered by Cal Water to your meter meets all water quality standards, but your home plumbing can affect water quality. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to two minutes before using water for drinking or cooking.

If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline or at www.epa.gov/safewater/lead.

Primary Drinking Water Standards

Radiological	Year Tested	Unit	MCL (SMCL)	PHG (MCLG)	Exceeded Standard?	Cal Water South San Francisco Range	Cal Water South San Francisco Average	SFPUC Supply Range	SFPUC Supply Average	Source of Substance
Gross alpha particle activity	2007–2008	pCi/L	15	(0)	No	ND–11	2.35			Erosion of natural deposits
Radium 228	2008	pCi/L	5	0.019 (0)	No	ND–1.44	0.61			Erosion of natural deposits

Inorganic Chemicals	Year Tested	Unit	MCL (SMCL)	PHG (MCLG)	Exceeded Standard?	Cal Water South San Francisco Range	Cal Water South San Francisco Average	SFPUC Supply Range	SFPUC Supply Average	Source of Substance
Arsenic	2009	ppb	10	0.004	No	ND–9.3	3.1			Erosion of natural deposits; runoff from orchards; glass and electronics production wastes
Total Chromium	2009	ppb	50	100	No	ND–18	6			Discharge from steel and pulp mills and chrome plating; erosion of natural deposits
Fluoride	2009	ppm	2	1	No	ND–0.14	0.08	ND–0.7	0.3	Erosion of natural deposits; water additive that promotes strong teeth; discharge from fertilizer and aluminum factories
Nitrate (as nitrate)	2010	ppm	45	45	No	ND–6	2.7			Runoff and leaching from fertilizer use; leaching from septic tanks and sewage; erosion of natural deposits
Selenium	2009	ppb	50	(50)	No	5–9.6	6.83			Discharge from petroleum, glass, and metal refineries; erosion of natural deposits; discharge from mines and chemical manufacturers; runoff from livestock lots (feed additive)

	Year Tested	Unit	MCL (SMCL)	PHG (MCLG)	Exceeded Standard?	Cal Water South San Francisco Highest Level	Cal Water South San Francisco Lowest Monthly Percent	SFPUC Supply Highest Level	SFPUC Supply Lowest Monthly Percent	Source of Substance
Turbidity (surface water not requiring filtration)[1]	2010	NTU	5	n/a	No	n/a		4.9	100	Soil runoff
Turbidity (surface water requiring filtration)[2]	2010	NTU	TT	n/a	No	n/a		0.54	97.6	Soil runoff

Disinfection Byproducts	Year Tested	Unit	MCL (SMCL)	PHG (MCLG)	Exceeded Standard?	Cal Water South San Francisco Range	Cal Water South San Francisco Highest Annual Average	SFPUC Supply Range	SFPUC Supply Highest Annual Average	Source of Substance
Total haloacetic acids	2010	ppb	60	n/a	No	5.9–87.2	25.36	5.9–87.2	25.36	Byproduct of drinking water chlorination
Total trihalomethanes	2010	ppb	80	n/a	No	10.9–42.2	30.65	10.9–42.2	30.65	Byproduct of drinking water chlorination

Disinfectant and DBP Precursor	Year Tested	Unit	MRDL	MRDLG	Exceeded Standard?	Cal Water South San Francisco Range	Cal Water South San Francisco Average	SFPUC Supply Range	SFPUC Supply Average	Source of Substance
Chloramine	2010	ppm	4	4	No	0.3–2.77	2.0	0.3–2.77	2.0	Drinking water disinfectant added for treatment

Other Regulated Substances

Metals	Year Tested	Unit	AL	PHG (MCLG)	Exceeded Standard?	Cal Water South San Francisco 90th Percentile	Cal Water South San Francisco Samples > AL	SFPUC Supply 90th Percentile	SFPUC Supply Samples > AL	Source of Substance
Copper	2010	ppm	1.3	0.3	No	0.06	0 of 30	0.06	0 of 30	Internal corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives

Secondary Drinking Water Standards and Unregulated Compounds

Inorganic Chemicals	Year Tested	Unit	SMCL	PHG (MCLG)	Exceeded Standard?	Range	Average	Range	Average	Source of Substance
Calcium	2009	ppm	n/a	n/a	No	56–76	64	2–26	12	Erosion of natural deposits
Chloride	2009	ppm	500	n/a	No	110–140	123.33	3–16	9.5	Erosion of natural deposits; seawater influence
Chromium-6	2010	ppb	n/a	n/a	No	ND–16	4.34			Discharge from steel and pulp mills and chrome plating; erosion of natural deposits
Color	2009–2010	Units	15	n/a	No	ND–1	0.6	<5–6	<5	Naturally occurring organic matter
Hardness	2009	ppm	n/a	n/a	No	380–400	390	8–104	53	Erosion of natural deposits
Magnesium	2009	ppm	n/a	n/a	No	48–64	56.33	0.3–9	4.6	Erosion of natural deposits
Manganese	2010	ppb	50	n/a	No	ND–2.5	0.52			Leaching from natural deposits
Odor	2009	Units	3	n/a	No	ND–1	0.33			Naturally occurring organic matter
pH	2010	Units	n/a	n/a	No	6.91–7.8	7.24	8.2–8.7	8.5	Inherent characteristic of water
Sodium	2009	ppm	n/a	n/a	No	72–86	77	3–22	13	Erosion of natural deposits; seawater influence
Specific conductance	2009	µS/cm	1600	n/a	No	1000–1100	1066.67	33–316	179	Erosion of natural deposits; seawater influence
Sulfate	2009	ppm	500	n/a	No	85–150	107.67	1.6–38.7	18.2	Runoff/leaching from natural deposits; industrial wastes
Total dissolved solids	2009	ppm	1000	n/a	No	600–690	643.33	27–174	95	Runoff/leaching from natural deposits
Turbidity (groundwater)	2009	NTU	5	n/a	No	ND–0.34	0.08			Soil runoff

1 The turbidity standard for unfiltered supplies is 5 NTU. Turbidity is a measure of the cloudiness of water. We monitor it because it is a good indicator of water quality. High turbidity can hinder the effectiveness of disinfectants.

2 For surface water systems, the treatment technique dictates that the turbidity level of the filtered water be less than or equal to 0.3 NTU in 95% of the measurements taken each month and shall not exceed 1 NTU at any time. Turbidity is a measurement of the cloudiness of water. We monitor it because it is a good indicator of the effectiveness of our filtration system.

How to Read This Table

Cal Water tests your water for more than 140 regulated contaminants and dozens of unregulated contaminants. A list of regulated contaminants can be found in the Water Quality section of calwater.com. The table in this report lists only those contaminants that were detected.

In the table, water quality test results are divided into two main sections: "Primary Drinking Water Standards" and "Secondary Drinking Water Standards and Unregulated Compounds." Primary standards protect public health by limiting the levels of certain constituents in drinking water. Secondary standards are set for substances that could affect the water's taste, odor, or appearance. Selected unregulated substances (hardness and sodium, for example) are listed for your information.

µS/cm = measure of specific conductance
n/a = not applicable
ND = not detected
NTU = nephelometric turbidity unit
pCi/L = picoCuries per liter (measure of radioactivity)
ppb = parts per billion (micrograms per liter)
ppm = parts per million (milligrams per liter)
ppt = parts per trillion (nanograms per liter)
SMCL = secondary maximum contaminant level

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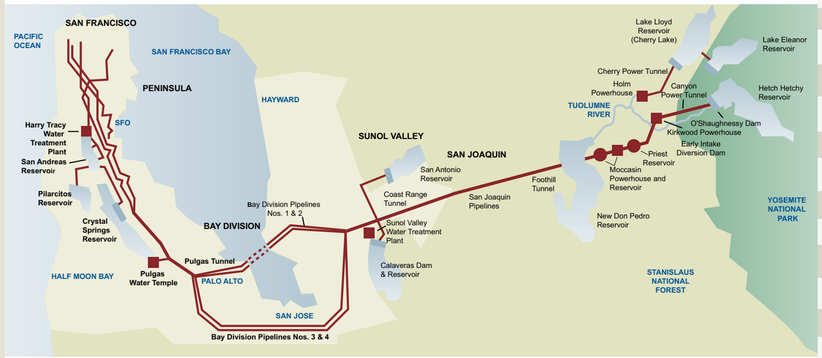
Inside:

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien.

Hetch Hetchy
Regional Water System

Operated by San Francisco Water, Power and Sewer



This report contains important information about your drinking water. Translate it, or speak with someone who understands it.

Este informe contiene información muy importante sobre su agua potable. Tradúzcalo o hable con alguien que lo entienda bien.

Mahalaga ang impormasyong ito. Mangyaring ipasalin ito.

این اطلاعیه شامل اطلاعات مهمی راجع به آب آشامیدنی است. اگر نمیتوانید این اطلاعات را بزبان انگلیسی بخوانید لطفاً از کسی که میتواند یاری بگیرید تا مطالب را برای شما به فارسی ترجمه کند.

Cé rapport contient des information importantes concernant votre eau potable. Veuillez traduire, ou parlez avec quelqu' un qui peut le comprendre.

"هذا التقرير يحتوي على معلوماً ت مهّمة تتعلق بمياه الشفة (أو الشرب). ترجم التقرير أو تكلم مع شخص يستطيع أن يفهم التقرير."

Данный рапорт содержит важную информацию о вашей питьевой воде. Переведите его или проконсультируйтесь с тем, кто его понимает.

הדו"ח הזה מכיל מידע חשוב לגבי מי השתייה שלך
תרגם את הדו"ח או דבר עם מישהו שמבין אותו

此份水質報告, 內有重要資訊。請找他人為你翻譯和解說清楚。

Chi tiết này thật quan trọng. Xin nhờ người dịch cho quý vị.

Dieser Bericht enthält wichtige Informationen über Ihr Trinkwasser. Bitte, übersetzen Sie sie, oder sprechen Sie mit jemandem, der sie versteht.

Questo rapporto contiene informazioni inportanti che riguardano la vostra aqua potabile. Traducetelo, o parlate con una persona qualificata in grado di spiegarvelo.

この情報は重要です。翻訳を依頼してください。

เอกสารฉบับนี้มีข้อมูลสำคัญเกี่ยวกับน้ำดื่ม ควรแปลข้อความหรือถามบุคคลที่มีความรู้ในเรื่องนี้

यह सूचना महत्वपूर्ण है । कृपा करके किसी से :इसका अनुवाद करायें ।

이 안내는 매우 중요합니다. 본인을 위해 번역인을 사용하십시요.

Η κατωθεν αναφορα παρουσιαζη σπουδαιες πληροφοριες για το ποσιμο νερο σας. Παρακαλω να το μεταφρασετε η να το σξολειασετε με καποιον που το καταλαβαινη απολητως.

San Francisco Water Power Sewer
Services of the San Francisco Public Utilities Commission

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查看本文中譯版, 請瀏覽我們的網頁:
www.sfwater.org/quality

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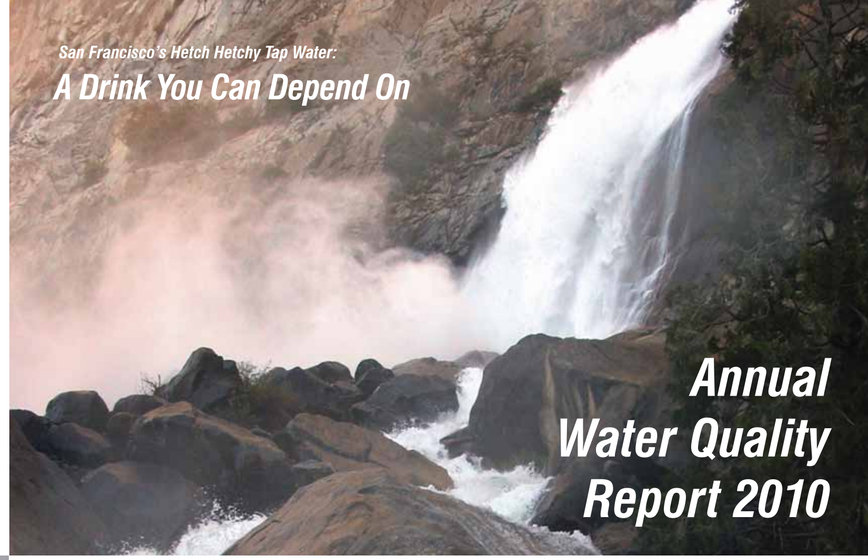


San Francisco's Hetch Hetchy Tap Water:

A Drink You Can Depend On

Annual Water Quality Report 2010

We safeguard the pristine quality of our local watersheds.

Protecting Our Watersheds

We actively protect the natural water resources entrusted to our care. Our annual Hetch Hetchy Watershed survey evaluates the sanitary conditions, water quality, potential contamination sources, and the results of watershed management activities with partner agencies (such as the National Park Service and US Forest Service). We also conduct sanitary surveys every five years to detect and track sanitary concerns for the Bay Area watersheds and the approved standby water sources in Early Intake Watershed, which includes Cherry Lake and Lake Eleanor. The surveys identified wildlife, stock, and human activities as potential contamination sources. They are available for review at the CDPH San Francisco District office, 510-620-3474.

Our Drinking Water Sources

The sources of drinking water (both tap water and bottled water) include rivers, lakes, oceans, streams, ponds, reservoirs, springs, and wells. For our system, the major water source originates from spring snowmelt flowing down the Tuolumne River to the Hetch Hetchy Reservoir, where it is stored. This pristine Sierra water source meets all federal and state criteria for watershed protection. We also maintain stringent disinfection treatment practices, extensive bacteriological-quality monitoring, and high operational standards. As a result, the CDPH and USEPA have granted the Hetch Hetchy water source a filtration exemption. In other words, the source is so clean and protected that we are not required to filter water from the Hetch Hetchy Reservoir.

The Hetch Hetchy water is supplemented with surface water from two local watersheds. Rainfall and runoff from the Alameda Watershed - within the greater 128,424-acre Southern Alameda Creek Watershed and spanning more than 35,000 acres in Alameda and Santa Clara counties - are collected in the Calaveras and San Antonio reservoirs and treated at the Sunol Valley Water Treatment Plant.

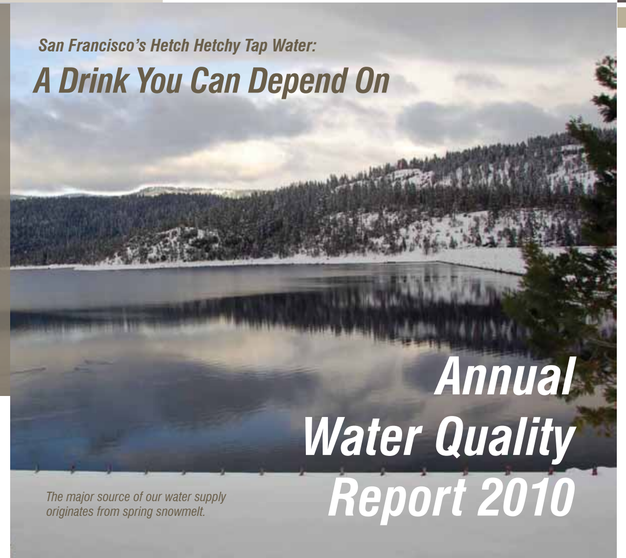
Rainfall and runoff from the 23,000-acre Peninsula Watershed in San Mateo County are stored in Crystal Springs, San Andreas, and Pilarcitos reservoirs and treated at the Harry Tracy Water Treatment Plant.

In 2010, the Hetch Hetchy Watershed provided the majority of our total water supply, with the remainder contributed by the two local watersheds.

In this issue:

This state-mandated annual report contains important information on the quality of your drinking water.

San Francisco Water Power Sewer
Services of the San Francisco Public Utilities Commission



San Francisco's Hetch Hetchy Tap Water:

A Drink You Can Depend On

Annual Water Quality Report 2010

The major source of our water supply originates from spring snowmelt.

Water quality policies are decided at Commission hearings, held the second and fourth Tuesdays of each month at 1:30 pm at San Francisco City Hall, Room 400. For more information **visit www.sfwater.org**.

For more information about the contents of this report, contact **Michele Liapes, 415-554-3211, mliapes@sfwater.org,** or visit us online at **www.sfwater.org/quality**.

Call **311** to report water, power or sewer issues.

San Francisco Water Power Sewer
Services of the San Francisco Public Utilities Commission

Dear Customer

We are proud to bring you some of the highest-quality drinking water in the country—pristine Sierra snowmelt from the Hetch Hetchy Reservoir plus waters from protected local watersheds.

In 2010, as in years past, our water met or exceeded federal and state standards for drinking water. This annual Water Quality Report, which the State of California mandates that we send to every customer, contains important information about your drinking water.

This summer we made our great Hetch Hetchy tap water even better by completing California's largest ultraviolet disinfection facility. This project is part of our ongoing $4.6 billion seismic and reliability upgrade to the Hetch Hetchy Regional Water System that supplies water to 2.5 million people in the Bay Area. I'm proud to report that this program, launched in 2005, is currently under budget and on schedule to meet our 2015 completion date.

All our work ensures that you, our customers, can count on pristine Hetch Hetchy water to start the day, award-winning sewer service to protect the bay, and clean, renewable power to keep the city lights running.

We look forward to reliably serving you in the years to come. Thank you for your continued support.

Ed Harrington
General Manager

Want to learn more about drinking water regulations?
Visit the CDPH website **www.cdph.ca.gov** or the USEPA website **www.epa.gov**.

Water Quality:

Contaminants and Regulations

Our Water Quality Division regularly collects and tests water samples from reservoirs and designated sampling points throughout the system to ensure that the water delivered to you meets or exceeds federal and state drinking water standards. In 2010, Water Quality staff conducted more than 108,080 drinking water tests in the transmission and distribution systems. This monitoring effort is in addition to the extensive treatment process control monitoring performed by our certified and knowledgeable treatment plant staff and online instruments.

As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity. Such substances are called contaminants. Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk.

In order to ensure that tap water is safe to drink, the United States Environmental Protection Agency (USEPA) and California Department of Public Health (CDPH) prescribe regulations that limit the amount of certain contaminants in water provided by public water systems. CDPH regulations also establish limits for contaminants in bottled water that provide the same protection for public health. More information about contaminants and potential health effects can be obtained by calling the USEPA's Safe Drinking Water Hotline **800-426-4791**.

Contaminants that may be present in source water include:

- Microbial contaminants, such as viruses and bacteria, that may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- Inorganic contaminants, such as salts and metals, that can be naturally occurring or result from urban stormwater runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- Pesticides and herbicides that may come from a variety of sources such as agriculture, urban stormwater runoff, and residential uses.
- Organic chemical contaminants, including synthetic and volatile organic chemicals, that are by-products of industrial processes and petroleum production, and can also come from gas stations, urban stormwater runoff, agricultural application, and septic systems.
- Radioactive contaminants, that can be naturally occurring or be the result of oil and gas production and mining activities.

At the Millbrae Water Quality Laboratory research chemist David Nehrkorn tests for minute amounts of organic compounds in a water sample.

Special Health Needs

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons, such as those with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly people, and infants can be particularly at risk from infections.

These people should seek advice about drinking water from their health care providers. USEPA/Centers for Disease Control (CDC) guidelines on appropriate means to lessen the risk of infection by *Cryptosporidium* and other microbial contaminants are available from the Safe Drinking Water Hotline **800-426-4791** or at **www.epa.gov/safewater.**

City of San Francisco Water Quality Data for Year 2010

The table below lists all 2010 detected drinking water contaminants and the information about their typical sources. Contaminants below detection limits are not shown, in accord with CDPH guidance. The CDPH allows us to monitor for some contaminants less than once per year because their concentrations do not change frequently. We also received from the CDPH a monitoring waiver for some contaminants that were absent in the water.

DETECTED CONTAMINANTS	UNIT	MCL	PHG OR (MCLG)	RANGE OR LEVEL FOUND	AVERAGE OR [MAX]	MAJOR SOURCES IN DRINKING WATER
TURBIDITY						
For Unfiltered Hetch Hetchy Water	NTU	5	N/A	0.2 - 0.6 [1]	[4.9] [2]	Soil runoff
For Filtered Water from Sunol Valley Water Treatment Plant (SVWTP)	NTU	1 [3]	N/A	-	[0.54]	Soil runoff
	-	min 95% of samples ≤0.3 NTU [3]	N/A	98% - 100%	-	Soil runoff
For Filtered Water from Harry Tracy Water Treatment Plant (HTWTP)	NTU	1 [3]	N/A	-	[0.19]	Soil runoff
	-	min 95% of samples ≤0.3 NTU [3]	N/A	100%	-	Soil runoff
DISINFECTION BYPRODUCTS AND PRECURSOR						
Total Trihalomethanes	ppb	80	N/A	23 - 52	[39] [4]	Byproduct of drinking water chlorination
Haloacetic Acids	ppb	60	N/A	15 - 39	[28] [4]	Byproduct of drinking water chlorination
Total Organic Carbon [5]	ppm	TT	N/A	2.4 - 3.2	2.7	Various natural and man-made sources
MICROBIOLOGICAL						
Total Coliform	-	NoP ≤5.0% of monthly samples	(0)	-	[0]	Naturally present in the environment
Giardia lamblia	cyst/L	TT	(0)	ND - 0.06	[0.06]	Naturally present in the environment
INORGANIC CHEMICALS						
Fluoride (source water) [6]	ppm	2.0	1	ND - 0.9	0.3 [7]	Erosion of natural deposits
Chloramine (as chlorine)	ppm	MRDL = 4.0	MRDLG = 4	0.12 - 3.1	[1.9] [4]	Drinking water disinfectant added for treatment
CONSTITUENTS WITH SECONDARY STANDARDS	**UNIT**	**SMCL**	**PHG**	**RANGE**	**AVERAGE**	**TYPICAL SOURCES OF CONTAMINANT**
Chloride	ppm	500	N/A	3 - 16	9.5	Runoff / leaching from natural deposits
Color	unit	15	N/A	<5 - 6	<5	Naturally occurring organic materials
Specific Conductance	µS/cm	1600	N/A	33 - 316	179	Substances that form ions when in water
Sulfate	ppm	500	N/A	1.6 - 38.7	18.2	Runoff / leaching from natural deposits
Total Dissolved Solids	ppm	1000	N/A	27 - 174	95	Runoff / leaching from natural deposits
Turbidity	NTU	5	N/A	0.07 - 0.33	0.16	Soil runoff
LEAD AND COPPER [8]	**UNIT**	**AL**	**PHG**	**RANGE**	**90TH PERCENTILE**	**MAJOR SOURCES IN DRINKING WATER**
Copper	ppb	1300	300	12 - 152	66	Corrosion of household plumbing systems
Lead	ppb	15	0.2	<1 - 16.6	6.9	Corrosion of household plumbing systems
OTHER WATER QUALITY PARAMETERS	**UNIT**	**ORL**	**RANGE**	**AVERAGE**		**KEY:**
Alkalinity (as $CaCO_3$)	ppm	N/A	8 - 98	49		< / ≤ = less than / less than or equal to **AL** = Action Level **Max** = Maximum **Min** = Minimum **N/A** = Not Available **ND** = Non-detect **NL** = Notification Level **NoP** = Number of Coliform-Positive Sample **NTU** = Nephelometric Turbidity Unit **ORL** = Other Regulatory Level **ppb** = part per billion **ppm** = part per million **µS/cm** = microSiemens / centimeter
Bromide	ppb	N/A	<10 - 17	<10		
Calcium (as Ca)	ppm	N/A	2 - 26	12		
Chlorate [9]	ppb	(800) NL	92 - 357	150		
Hardness (as $CaCO_3$)	ppm	N/A	8 - 104	53		
Magnesium	ppm	N/A	0.3 - 9	4.6		
pH	-	N/A	8.2 - 8.7	8.5		
Potassium	ppm	N/A	0.34 - 1.2	0.6		
Silica	ppm	N/A	4.1 - 7.6	5.7		
Sodium	ppm	N/A	3 - 22	13		

NOTES: (1) Turbidity is measured every four hours. These are monthly average turbidity values. **(2)** This is the highest turbidity of the unfiltered water served to customers in 2010. The switch of San Joaquin Pipelines and rate change caused elevated turbidities as a result of sediment resuspension in the pipelines. The turbidity spike was not observed further downstream at Alameda East. **(3)** There is no MCL for turbidity. The limits are based on the TT requirements in the State drinking water regulations. **(4)** This is the highest quarterly running annual average value. **(5)** Total organic carbon is a precursor for disinfection byproduct formation. The TT requirement applies to the filtered water from the SVWTP only. **(6)** We add fluoride to the naturally occurring level to help prevent dental caries in consumers. The CDPH requires our fluoride levels in the treated water to be maintained within a range of 0.8 ppm - 1.5 ppm. In 2010, the range and average of our fluoride levels were 0.6 ppm - 1.5 ppm and 1.0 ppm, respectively. **(7)** The naturally occurring fluoride levels in the Hetch Hetchy and SVWTP raw water were ND and 0.15 ppm, respectively. The HTWTP raw water had elevated fluoride levels of 0.7 ppm - 0.9 ppm due to the continued supply of the fluoridated Hetch Hetchy & SVWTP treated water into the Lower Crystal Springs Reservoir, which supplies water via the San Andreas Reservoir to the HTWTP for treatment. **(8)** The most recent Lead and Copper Rule monitoring was in August 2009. One of the 59 water samples collected at consumer taps had lead concentration above the Action Level. **(9)** There was no chlorate detected in the raw water sources except the Crystal Springs and San Andreas reservoirs, where the detected chlorate was 81 ppb and 57 ppb, respectively. The chlorate levels in both reservoirs are due to the transfer of the disinfected Hetch Hetchy water and SVWTP effluent into the Crystal Springs Reservoir. The detected chlorate in treated water is a degradation byproduct of sodium hypochlorite, the primary disinfectant we use for water disinfection.

Note: The blend of different water sources has been variable and has resulted in varying water quality due to system improvements and operational constraints. Additional water quality data may be obtained by calling the Water Quality Division toll free number at **877-737-8297**.

Key Water Quality Terms

Following are definitions of key terms noted on the adjacent water quality data table. These terms refer to the standards and goals for water quality described below.

Public Health Goal (PHG): The level of a contaminant in drinking water below which there is no known or expected risk to health. PHGs are set by the California Environmental Protection Agency.

Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs are set by the USEPA.

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. Primary MCLs are set as close to the PHGs or MCLGs as is economically and technologically feasible. Secondary MCLs (SMCLs) are set to protect the odor, taste, and appearance of drinking water.

Maximum Residual Disinfectant Level (MRDL): The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

Maximum Residual Disinfectant Level Goal (MRDLG): The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.

Primary Drinking Water Standard (PDWS): MCLs and MRDLs for contaminants that affect health along with their monitoring and reporting requirements, and water treatment requirements.

Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.

Turbidity: A water clarity indicator that is also used to indicate the effectiveness of the filtration plants. High turbidity can hinder the effectiveness of disinfectants.

Regulatory Action Level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements that a water system must follow.

Cryptosporidium is a parasitic microbe found in most surface water. We regularly test for this waterborne pathogen, and found it at very low levels in source water and treated water in 2010. However, current test methods approved by the USEPA do not distinguish between dead organisms and those capable of causing disease. Ingestion of *Cryptosporidium* may produce symptoms of nausea, abdominal cramps, diarrhea, and associated headaches. *Cryptosporidium* must be ingested to cause disease, and it may be spread through means other than drinking water.

Reducing Lead from Plumbing Fixtures

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. We are responsible for providing high-quality drinking water, but cannot control the variety of materials used in your household or building plumbing components. There are no known lead service lines in the San Francisco water distribution system. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the Safe Drinking Water Hotline **800-426-4791**, or at **www.epa.gov/safewater/lead**.

In addition to efforts to protect water sources from lead contamination, we have taken the following actions to minimize customer exposure to lead in water by:

- Replacing brass meters with lead-free meters.
- Partnering with the San Francisco Department of Public Health to offer free lead tests for clients enrolled in the Women, Infants and Children (WIC) program. Eligible clients should call the WIC program and request a voucher for a free lead test of their tap water.
- Offering customers low-cost water testing for lead ($25 per tap). Call **877-737-8297**.
- Offering lead-free kitchen faucets to San Francisco customers at a discounted price of $10 each ($110 wholesale value). For more information, please visit **http://faucet.sfwater.org.**

San Francisco Drinking Water on Tap at New Water-Bottle Refill Stations

Fifteen new and innovative water-bottle refill stations are now available in public places throughout San Francisco, from the Marina Green to Golden Gate Park and the airport. The sleek blue installations shoot water straight down into an empty container, giving runners, cyclists, pedestrians and other residents or visitors free access to San Francisco's high-quality tap water.

The stations enable people to reuse their own containers rather than buying bottled water and discarding the empty plastic containers into the landfill, where they leak toxic additives into the soil. The manufacture and shipping of bottled water products also release pollutants into the atmosphere.

APPENDIX C – MONITORING PROTOCOLS

South Westside Basin
Groundwater Monitoring Plan

Draft

TABLE OF CONTENTS

SECTION 1 INTRODUCTION

This Monitoring Plan is developed as part of the South Westside Basin Groundwater Management Plan (GWMP). Monitoring is currently performed by individual agencies either to meet regulatory requirements or on a voluntary basis. The Monitoring Plan is intended to meet local needs as well as to support compliance with the guidelines of the California Groundwater Elevation Monitoring Program authorized by SBx7 6.

It is important that monitoring protocols and frequencies be adhered to over the long-term. As such, the protocols and frequencies are defined to be realistic for agencies that have limited funds and personnel for monitoring activities. Should an agency feel that the monitoring is an undue burden, they should request revision to the requirements in the Plan so that the most critical monitoring can be identified for continuation, while less critical monitoring can be ceased or curtailed.

This Monitoring Plan is intended to meet the current and future needs for:

- Compliance with the Groundwater Management Plan (GWMP) Basin Management Objectives, including:
  - Groundwater levels
  - Groundwater quality
  - Land subsidence
- Trend analysis of groundwater level and groundwater quality
- Analysis of flow direction, including
  - Detection of seawater intrusion
  - Migration of poor quality groundwater
  - Identification of sources of recharge
- Future estimates of change in storage and other groundwater budget components
- Groundwater projects that will required baseline water level and water quality data for planning and operational monitoring, including
  - Recycled water programs
  - Conjunctive use programs
- Groundwater modeling efforts, which rely heavily on historical data
- Installation of future monitoring or production wells
- Compliance with guidelines of SBx7 6

The details of this plan are based largely on two previous documents, an unadopted groundwater management plan for the Westside Basin and an unadopted draft groundwater management plan for the North Westside Basin. These documents were updated based on changes in the basin and in monitoring needs since the development of those documents.

SECTION 2 GROUNDWATER LEVELS AND QUALITY

The location and frequency of sampling requires foresight into the data needs of the future. Today's monitoring is typically of little use until or unless there is a long period of record to analyze trends and a large dataset to analyze spatial variability. Decisions to monitor for water levels and water quality today can greatly improve the ease and accuracy of future water planning efforts.

LOCATIONS

Locations are selected to meet the previously stated goals. Locations include sites selected for the following two primary categories:

- Basin Conditions: These locations are necessary to accurately represent regional basin conditions.
- Coastal Monitoring: These locations are necessary for detection of seawater intrusion at coastal and bayside locations.

WATER LEVELS

Water level will be monitored semiannually through static water level monitoring events. The events will be scheduled for April and October and require coordination and cooperation between the South Westside Basin agencies, SFPUC, and voluntarily participating private well owners.

Wells currently being monitored for water levels are owned by water agencies, the USGS, and United Airlines. Private wells may be added to the well network in the future. Efforts will be made to encourage voluntary participation by owners of private groundwater wells to fill data gaps, notably in the Colma area. Materials to develop the voluntary program are contained in Attachment 1.

A list of wells to be included in monitoring activities for groundwater levels, with well owner, is provided in Table C-1 and shown on Figure C-1. Coordination with well owners will be required to ensure full participation. Figure C-1 distinguishes between short-screened monitoring wells and other wells used for monitoring (i.e., active or inactive production wells). The short-screened monitoring wells are ideal for accurately identifying water levels and water quality in the multilayered aquifer system. Figure C-1 further shows gaps in the short-screened monitoring well network, notably in near the San Bruno wellfield and to the northwest of the CalWater wellfield. The Burlingame and Millbrae areas in general are lacking in monitoring wells. Efforts are needed to add wells such as Burlingame's Washington Park well, cemetery and golf course wells, and to install dedicated short-screened monitoring wells.

Table C-1 Wells Monitored for Water Levels

Well	Well Owner	Type	X	Y	Elevation (ft)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	Total Depth (ft bgs)	Date Installed
SS 1-02	CalWater	P	6002654	2067151	38.52			275	<1923
SS 1-14	CalWater	P	6002975	2067137	41.29	69	500	547	1923
SS 1-15	CalWater	P	6002414	2067036	36.25	120	535	539	1925
SS 1-17	CalWater	P	6002288	2067486	32.36	150	460	478	1939
SS 1-18	CalWater	P	6001775	2067635	44.73	231	578	535	
SS 1-19	CalWater	P	6003216	2067282	30.81	216	528	528	1974
SS 1-20	CalWater	P	6002565	2067324	39.28	380	580	602	1973
SS 1-21	CalWater	P	6002082	2067920	44.73	370	580	620	1975
DC-1 (Westlake)	Daly City		5987458	2082018	114.42	190	370		
DC-3	Daly City	M	5988531	2081853	112.73	170	414		
DC-8	Daly City		5991977	2082370	212.92	200	479		
DC-9	Daly City		5991979	2082478	237.07				
A Street Well	Daly City	P	5992408	2078206	189.69	400	580	590	
Jefferson Well	Daly City	P	5991755	2081833	212.9	465	690	700	1991
Vale Well	Daly City	P	5991910	2080289	177.54	420	690	700	1991
Westlake 1	Daly City	P	5988107	2081360	114.42	340	680	702	1954
Westlake 2	Daly City	P	5987621	2081931	114.42	255	369	388	1955
Burlingame-S	San Bruno	M	6019826	2044206	7.42	83	93	98	2006
Burlingame-M	San Bruno	M	6019827	2044206	7.49	151	161	166	2006
Burlingame-D	San Bruno	M	6019826	2044206	7.46	265	270	280	2006
SB-12	San Bruno	P	6006011	2056914	72.85	146	482	478	1960
SB-15	San Bruno	P	6004161	2057061	82.73	300	500	534	1984
SB-16	San Bruno	P	6006684	2058648	49.24	340	550	600	1991

Well	Well Owner	Type	X	Y	Elevation (ft)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	Total Depth (ft bgs)	Date Installed
SB-17	San Bruno	P	6009708	2053648	22.72	300	515	515	1993
SB-18	San Bruno	P	6006719	2051725	82.73	260	460	495	1996
SB-20	San Bruno	P	6009465	2055158	22.73	300	594	624	2002
SFO-S	San Bruno	M	6012376	2058115	10.09	136	146	74	2006
SFO-D	San Bruno	M	6012376	2058115	10.13	64	74	146	2006
13C	UAL	M	6012332	2058386		136	146		2000
13D	UAL	M	6012332	2058386		31.5	41.5		2000
Fort Funston-S	USGS	M	5983395	2088146	189.21	250	270	278	
Fort Funston-M	USGS	M	5983395	2088146	189.28	572	592	602	1989
Thornton Beach MW 225	Daly City	M	5984468	2082885	223.73	195	215		
Thornton Beach MW 360*	Daly City	M	5984468	2082885	223.73	330	350		
Thornton Beach MW 670*	Daly City	M	5984468	2082885	223.73	640	660		
LMMW-6D	SFPUC	M	5987422	2085398	37.74	230	250		1996
Park Plaza MW 460	SFPUC	M	5988908	2081724					
Park Plaza MW 620	SFPUC	M	5988908	2081724					
CUP-10A-160	SFPUC	M	5991609	2077956	197	140	160	171	2008
CUP-10A-250	SFPUC	M	5991609	2077956	196.88	230	250	261	2008
CUP-10A-500	SFPUC	M	5991608	2077957	196.84	480	500	510	2008
CUP-10A-710	SFPUC	M	5991609	2077956	196.84	640	710	720	2008
CUP-18-230	SFPUC	M	5993528	2075682	164.17	210	230	241	2008
CUP-18-425	SFPUC	M	5993528	2075682	164.12	405	425	435	2008

Well	Well Owner	Type	X	Y	Elevation (ft)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	Total Depth (ft bgs)	Date Installed
CUP-18-490	SFPUC	M	5993528	2075682	164.03	469	489	500	2008
CUP-18-660	SFPUC	M	5993527	2075682	163.98	590	660	671	2008
CUP-19-180	SFPUC	M	5994566	2074129	113.95	160	180	191	2008
CUP-19-475	SFPUC	M	5994566	2074128	113.87	455	475	484	2008
CUP-19-600	SFPUC	M	5994566	2074129	113.81	580	600	611	2008
CUP-19-690	SFPUC	M	5994566	2074128	113.77	670	690	699	2008
CUP-22A-140	SFPUC	M	5996282	2070654	99.81	120	140	151	2008
CUP-22A-290	SFPUC	M	5996282	2070654	99.74	270	290	301	2008
CUP-22A-440	SFPUC	M	5996282	2070654	99.61	420	440	451	2008
CUP-22A-545	SFPUC	M	5996282	2070654	99.54	525	545	555	2008
CUP-23-230	SFPUC	M	5997796	2071165	85.13	210	230	240	
CUP-23-440	SFPUC	M	5997796	2071165	85.07	420	440	452	
CUP-23-515	SFPUC	M	5997797	2071165	85	495	515	525	
CUP-23-600	SFPUC	M	5997796	2071165	84.98	580	600	610	
CUP-36-160	SFPUC	M	6002361	2065977	70.16	140	160	170	2008
CUP-36-270	SFPUC	M	6002360	2065677	70.1	250	270	280	2008
CUP-36-455	SFPUC	M	6002360	2065677	70.06	435	455	465	2008
CUP-36-585	SFPUC	M	6002360	2065977	70	535	585	595	2008
SSFLP-MW120	SFPUC	M	6004658	2064310	41.34	110	120	120	2008
SSFLP-MW220	SFPUC	M	6004658	2064310	41.52	200	210	220	2008
SSFLP-MW440	SFPUC	M	6004659	2064310	41.03	360	430	440	2008
SSFLP-MW520	SFPUC	M	6004658	2064310	41.09	500	510	520	2008
MW-CUP-44-1-190	SFPUC	M	6003877	2059298	109.71	170	190	200	
MW-CUP-44-1-300	SFPUC	M	6003877	2059268	109.59	281	301	311	

Well	Well Owner	Type	X	Y	Elevation (ft)	Top of Screen (ft bgs)	Bottom of Screen (ft bgs)	Total Depth (ft bgs)	Date Installed
MW-CUP-44-1-460	SFPUC	M	6003876	2059298	109.72	440	460	470	
MW-CUP-44-1-580	SFPUC	M	6003877	2059298	109.77	525	580	590	
MW-CUP-M-1	SFPUC	M	6013110	2048785					

Notes:

Types: P = current or former production well; M = dedicated monitoring well

ft bgs = feet below ground surface

x/ y projection: California State Plane Zone 3,NAD 83, feet

elevation vertical datum: NAVD88

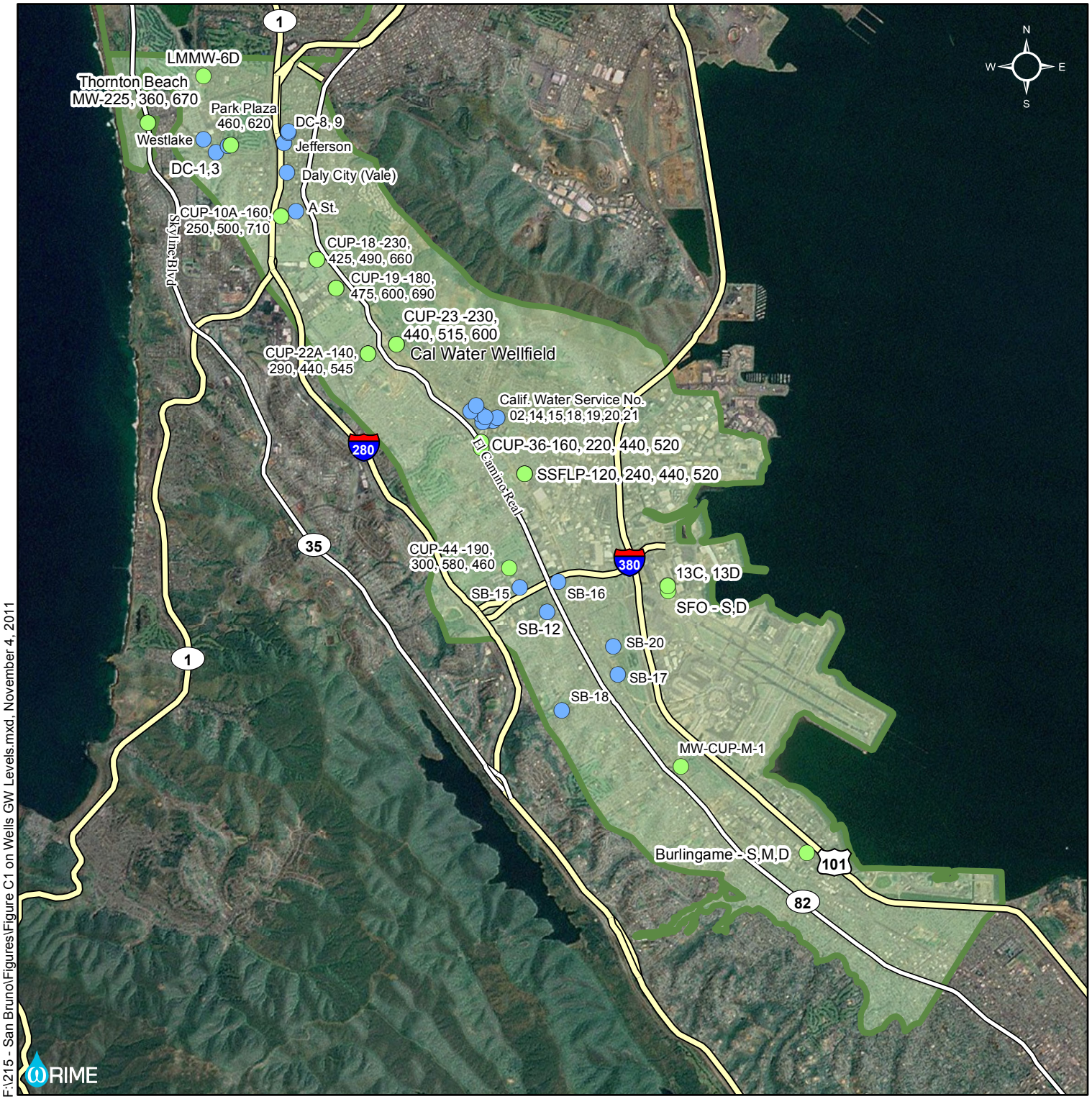


Figure C-1
Wells Monitored for Groundwater Levels

Legend

- Short Screened Wells
- Other Wells
- Highways
- Groundwater Basin
- Plan Area

0 0.5 1 2 Miles

F:\215 - San Bruno\Figures\Figure C1 on Wells GW Levels.mxd, November 4, 2011

ORIME

WATER QUALITY

Water quality is sampled as needed to meet Title 22 requirements, with additional sampling focused in coastal wells to monitor for seawater intrusion. The wells to be sampled are the same as those described in the Water Level section.

Minimally, coastal monitoring wells will be sampled for chloride, TDS, and specific conductance. A more complete water quality sampling is encouraged, including the following: alkalinity, bicarbonate, bromide, chloride, conductivity, nitrate ortho-phosphate, pH, sulfate, TDS, boron, calcium, magnesium, potassium, and sodium. These additional analyses will allow for improved analysis of the presence of seawater intrusion along with analyses to support basin-wide monitoring needs.

If needed, additional sampling to support characterization of regional nitrate concentrations in the aquifer may be developed in the future.

FREQUENCY

Basin-wide, coordinated static water levels will be measured semi-annually, in April and October of each year. These dates are selected to be seasonally high groundwater levels after the rainy season (April measurement) and seasonally low groundwater levels after the dry season (October measurement).

It is desired that all available municipal wells be monitored monthly for water levels within the basin. Such monthly monitoring would be performed by water agency staff near the first of the month. Benefits of monthly measurements over semi-annual measurements is better definition of seasonal highs and lows, as well as better identification of measurement or transcription errors by comparing to the previous and following measurements. Monthly measurements are also useful for detailed analysis, including development and refinement of groundwater models. Installations of pressure transducers can provide daily data and are encouraged.

For groundwater quality, coastal wells will be sampled semiannually while other wells will be sampled to meet DPH requirements.

METHODS

Details on monitoring methods are available in the USGS National Field Manual at http:/ / pubs.water.usgs.gov/ twri9A4/ . A summary of requirements for methods are provided below for both water levels and water quality.

GROUNDWATER LEVELS

Groundwater levels are intended to represent static water level conditions. The agencies will coordinate to select the same date to perform the semiannual static groundwater level monitoring event.

Measurements will be made by trained, knowledgeable personnel. Field forms used by the monitoring technician should have information on previous measurements for context when measuring.

Measured wells should have basic information on file, including:

- Location, with projection information and source (surveyed, GPS, or other method)
- Elevation of reference point for measurement and ground surface, with datum information and source (surveyed or GPS)
- Depth from reference point to screen interval
- Depth from reference point to the bottom of the well
- Lithology and well construction information

Static Water Level Program Key Activities

- Measure WL and flow
- Turn off wells for 24 hours
- Measure static WL
- Turn on wells

The procedure for measuring groundwater levels will be as follows:

- Record pumping water level and flow rate prior to turning off pump.
- Turn off well, if applicable, for a period of at least 24 hours. The period required for recovery should be tested (and may be shortened or lengthened) through a one-time test with hourly or transducer readings.
- If the well cap is tight and unvented, ensure that water levels are at equilibrium by checking water levels multiple times.
- Measure from the defined reference point to groundwater using an electric water level sounder, steel tape, or a datalogging pressure transducer, to the nearest 0.01 foot. Measure twice to ensure accuracy.
- Clean tapes after use at every well to prevent contamination.
- If using a pressure transducer, data must be corrected for atmospheric pressure if not automatically performed by the device.
- Transducer data must be confirmed with regular hand measurements.
- Record data on a field form, which should include the following information
    - Name of person performing monitoring
    - Date and time
    - Well name
    - Date and time pump was turned off, if applicable
    - Depth to groundwater (pumping level before event and static level)
    - Pump flow rate before and after event
    - Equipment used (e.g., sounder, steel tape, portable air line etc.) including specific unit, if applicable
    - Notes, such as odors, wellhead problems, etc.

GROUNDWATER QUALITY

Sampled wells should have basic information on file, including:

- Location, with projection information and source (surveyor or GPS)
- Elevation of reference point for measurement and ground surface, with datum information and source (surveyor or GPS)
- Depth from reference point to screen interval
- Depth from reference point to the bottom of the well
- Lithology and well construction information

Water Level

The water level shall be measured in the well prior to purging or sampling. Clean tapes after use at every well to prevent contamination. See the previous section for methods.

Purging

Sampling shall be performed following purging of the well casing or through appropriate low-flow or no-purge techniques.

Purging is important to ensure that the sample represents water quality in the formation surrounding the well, rather than water quality within the well casing, which may not be representative due to materials used in the well construction process or due to differences in environmental conditions, such as oxidation-reduction potential, between the water in the well casing and water in the formation. Purging attempts to remove all standing water in the well casing and replace it with water from the formation. Field monitoring can be performed to establish stabilization of certain parameters, such as pH, temperature, turbidity, and dissolved oxygen, but for simplicity at least 4 casing volumes of water will be purged prior to sampling. The volume of water is intended to remove water in the filter pack in the borehole in addition to the water in the casing itself. The casing volume can be calculated by the following formula:

$$V = 0.0408 d^2 * (t - w)$$

Where:

V = volume of water in the casing
d = well diameter [in]
w = depth to water [ft]
t = total depth [ft]
0.0408 = constant that converts units to gallons, and diameter into radius, and incorporates pi.

Purging can be performed using a pump or bailer.

Sampling

After purging, collect the sample using methodology appropriate for the sampler (e.g., pumping, bailing, diffusion bag). Clean all equipment as appropriate.

Field QA/QC Samples

Given the nature of the ambient monitoring needed for the GWMP, these samples may not be necessary unless required by regulatory guidelines.

Sampling agencies may adopt Field QA/ QC samples if desired. These samples can include field duplicates, trip blanks, field blanks, and rinsate samples. Field duplicates can be used to estimate the precision associated with sampling procedures. Trip blanks, field blanks, and rinsate samples can help monitor potential contamination from shipment, field conditions, and decontamination procedures, respectively.

Records

Field records include usage of a field notebook and Chain-of-Custody as well as labels for the samples. All items should be completed in blue or black indelible ink. The field notebook should include:

- Name of person performing monitoring
- Well name
- Date and time of sample
- Water level prior to sampling
- Depth to bottom of well
- Calculated volume of water in the casing
- Purge method
- Volume purged
- Analysis required for each sample
- Equipment used (e.g., type of pump and specific unit, if applicable)
- Notes, such as odors, wellhead problems, etc.

The Chain-of-Custody and labels should include:

- Name of person performing monitoring
- Agency name
- Well name
- Date and time of sample
- Analysis required for each sample
- Preservatives in the sample bottle, if any

SHIPPING

Samples requiring shipment to a laboratory will be packaged to avoid damage to the containers and cooled with ice to 4 degrees Celsius if required for the analytical method(s). As the nitrate analysis has a 24 hour holding time, samples will be delivered to the laboratory immediately either by courier or hand-delivered

ANALYTICAL METHODS

Most water quality sampling will be performed for Title 22 compliance and will use the analytical methods prescribed by the Department of Public Health (DPH).

Additional analytes for coastal wells may use the methods listed below

Analyte	Method	Required Volume and Container
Alkalinity	EPA 310.1	1 L Poly, Unpreserved
Bicarbonate	EPA 310.1	
Bromide	EPA 300.0	
Chloride	EPA 300.0	
Conductivity	EPA 120.1	
Nitrate	EPA 300.0	
Ortho-phosphate	EPA 365.2	
pH	EPA 150.1	
Sulfate	EPA 300.0	
TDS	EPA 160.1	
Boron,	EPA 6010B	250 ml Poly, with HNO_3 Preservative
Calcium,	EPA 6010B	
Magnesium,	EPA 6010B	
Potassium	EPA 6010B	
Sodium	EPA 6010B	

LABORATORY QUALITY CONTROL

The laboratory selected for analysis will be certified by DPH and will adhere to

- 21 CFR Part 58, *Good Laboratory Practices*
- Criteria in *Methods for Chemical Analysis of Water and Wastes*, 1983 (EPA-600/ 4-79-020)
- Procedures in SW-846 *Test Methods for Evaluating Solid WastC-Physical/Chemical Methods*, 3rd Edition, 1994
- Criteria in 40 CFR 136 *Guidelines Establishing Test Procedures for Analysis of Pollutants Under the Clean Water Act*

Laboratory quality control will be the standard quality control of the selected laboratory.

SECTION 3 SURFACE WATER FLOW AND QUALITY

While this Groundwater Management Plan focuses on groundwater, surface water is closely linked with both groundwater quality and quantity and requires monitoring to track Basin Management Objectives for the Groundwater Management Plan. The former stream gage on Colma Creek is no longer active. The benefits and costs of returning this gaging station to service will be investigated.

SECTION 4 GROUNDWATER PRODUCTION

Groundwater production is currently monitored by the water purveyors well owners and reported in annual reports for the Westside Basin. Private groundwater production is not reported. Attachment 1 includes information for the development of a voluntary groundwater monitoring network which could include the voluntary installation of meters on private wells.

Agencies, and willing private well owners, will report monthly data to support ongoing analysis and management of the basin.

SECTION 5 LAND SUBSIDENCE

Monitoring for land subsidence is under consideration for future activities. Monitoring may include land surveys, extensiometers, or Satellite Interferometric Synthetic Aperture Radar (InSAR).

ATTACHMENT 1
VOLUNTARY GROUNDWATER MONITORING MATERIALS

The materials on the following pages are for use in development of a voluntary groundwater monitoring network for owners of private wells in the South Westside Basin. This program will be developed through the implementation of the Groundwater Management Plan.

South Westside Basin
Voluntary Groundwater Monitoring Program

Thank You!
Thank you for your interest in the South Westside Basin Voluntary Groundwater Monitoring Program (VMP). The VMP is:

- Fully voluntary. You may choose to enter or leave the program at any time. You may choose to participate in all or a portion of the program.
- Important for ongoing studies of basin groundwater. Existing data is limited to public agency wells, leaving critical data gaps.

This program is based on similar other efforts across California, notably a program by the Sonoma Valley Water Agency.

VMP Components
There are two components to the VMP: groundwater level monitoring and groundwater production monitoring.

Groundwater Level Monitoring
A lack of groundwater level data results in an inability to fully assess patterns and trends in groundwater levels and groundwater in storage and also reduces the accuracy with which a groundwater model can be developed.

If you choose to participate in the groundwater level monitoring program, a groundwater monitoring technician, which will be trained agency staff, will coordinate prior to each monitoring event. Monitoring will occur twice per year: once in April and once in October. The measurements will be included in annual reports, groundwater modeling efforts, and other groundwater planning efforts. If desired, the local well name can be replaced with "Private Well ##" on the reports.

Groundwater Production Monitoring
A lack of groundwater production data requires usage of estimated production data based on land use and climatic data for use in developing an understanding of inflows and outflows from the basin and for use in the development and refinement of the numerical groundwater model. These estimates may not properly represent actual production or water levels.

If you choose to participate in the groundwater production monitoring program, agency staff will coordinate the installation of a meter for your pump if needed, free of charge. The meter will be read by trained agency staff on the last business day of each month, or on an alternate schedule as desired by the participant. Installation is contingent on available funding for this program.

Data Usage

The data gathered by this program is critical for the implementation of the South Westside Basin Groundwater Management Plan (Plan). The Plan set management strategies to achieve a sustainable, high-quality, reliable water supply at a fair price for beneficial uses through local groundwater management. The implementation of the plan is dependent on an accurate understanding of current and past conditions and the ability to monitor conditions in the basin moving forward.

The existing understanding of the basin is based on groundwater production, elevation, and quality data from municipal wells. Similar information for private groundwater producers (including cemeteries, golf courses, and others) is not available; therefore estimates must be made for based on likely water use and other parameters. These estimates may not accurately reflect real world operations.

The addition of groundwater data from the wells of private groundwater producers will assist in overall groundwater management of the basin. These data will be used in enhancements of the numerical groundwater model and in analysis of trends over time and space. In turn, this will improve the ability to determine impacts and benefits from management strategies to address concerns regarding groundwater levels, groundwater quality (nitrate, TDS, fuels, and solvents), seawater intrusion, and others to help protect the groundwater resource.

How to Participate

Participation in this program is fully voluntary, at no cost to the well owner, and greatly appreciated.

To utilize information collected, some basic information on the well is required, and some additional information is very helpful. This information is requested on the following Well Information Form. We ask that you complete this form and return it to the contact below.

Water levels in wells in the program will be measured twice a year, once in the fall and then again in the spring. Measurement data will be provided to you the well owner within one week of the visit. Additionally, you will receive, on an annual basis, a report on the South Westside groundwater basin summarizing the results of the monitoring and progress on the groundwater management program.

Monitoring personnel may be employees of the City of Daly City, City of San Bruno, California Water Services Company, Town of Colma, or the San Francisco Public Utilities Commission., collectively the Westside Basin Partners. For a monitor to enter your property, a "Permit to Enter" agreement needs to be completed by the property owner and the Westside Basin Partners. A "**Permit to Enter**" is attached for your review and completion if you chose to participate. Please **fill out two copies** and return to me at the address below. A fully completed and signed original will be sent back to you.

Your efforts in helping with this planned groundwater level monitoring program are greatly appreciated. If you have any questions about the monitoring program please contact TBD at (650) xxx-xxx or xxxx@sanbruno.ca.gov.

Please send forms to:

City of San Bruno
Attn: TBD
567 El Camino Real
San Bruno, CA 94066

South Westside Basin
Voluntary Groundwater Monitoring Program

Well Information

1 Date: (required)_____

2 Well Owner's Name: (required) _____

3 Mailing Address of Owner: (required)
_____
_____

4 Well Physical Address: (required)
_____
_____

5 Surveyed Coordinates: _____
□ Not Available

6 Well use (check all that apply)
□ Residential (inside home)
□ Residential irrigation
□ Turfgrass irrigation
□ Agricultural irrigation
□ Commercial/Institutional or industrial areas

7 Name & address of water well driller:
_____
_____
_____

□ Don't know

7. Do you have a copy of the Water Well Drillers' Report.
□ yes □ no
If yes please attach a copy and skip questions 8 through 11.

8. Date well was drilled. Please estimate date if unknown and check estimated box.
_____ □ estimated

9. Total well depth _____ feet □ Don't know

10. Depth to top and bottom of perforations/well screen
Top of Well Screen _____ feet below top of well casing
Bottom of Well Screen _____ feet below top of well casing

11. Well Diameter _____ inches □ Don't know

12. Well Usage □ Year-round □ Seasonal Irrigation □ Not in use □ Other (please explain)

13. Pump Flow Rate (please check one) "gpm - gallons per minute"
□ 1 - 5 gpm □ 5 - 25 gpm □ 25 - 100 gpm □ 100- 400 gpm □ greater than 400 gpm □ don't know

14. Depth of pump: _____ feet below top of well casing □ don't know

15. Do you have any water level information for the well? (If yes, please attach copy of water level data): □ yes □ no

16. Do you have any water quality analysis of the well? (If yes, please attach copy of most recent report): □ yes □ no

17. Have you experienced any problems with your well (for example, declining production, water quality issues, etc.)? If so, please note here:

_____
_____
_____
_____
_____

18. Please add any additional information that you think may be helpful in the monitoring well program (attach additional sheet if necessary).

_____
_____
_____
_____
_____

South Westside Basin
Voluntary Groundwater Monitoring Program Monitoring Program Permit to Enter

_____(Property Owner), herein called "Grantor", permits the Westside Basin Partners, herein called "Partners", its agents, contractors or assigns, to enter upon that property located at _____(property address) and identified by the San Mateo County Assessor as parcel number(s) _____(APN).

Entry to the abovC-referenced parcel will be for the purpose of performing non-disturbing well water elevation measurements on Grantor's property. All wells selected for the program will be measured twice a year, once in the fall and then again in the spring. During the term of this Permit to Enter, Grantor shall notify Partners of any pending transfer of this property within a reasonable time period prior to said transfer.

Agency shall indemnify and defend (with counsel reasonable acceptable to Grantor) and hold Grantor harmless from and against any and all claims, damages, costs, liabilities, losses, and expenses (including reasonable attorneys' fees) arising out of any entry by Partners or its agents or contractors; provided, however, that Partners shall have no obligation hereunder to the extent the claim, liability, or expense arises from the negligence or willful misconduct of Grantor.

Agency shall notify Grantor 48 hours prior to entering Grantor's property.

This Permit to Enter shall terminate on July 31, 2021 or upon written notification by the Grantor.

GRANTOR' S APPROVAL:

By:

Who by his/her signature herein above represents that he/she has been duly vested with authority to sign this instrument on behalf of all owners of record for the subject property.

DATE:

PRINT NAME:

MAILING ADDRESS:

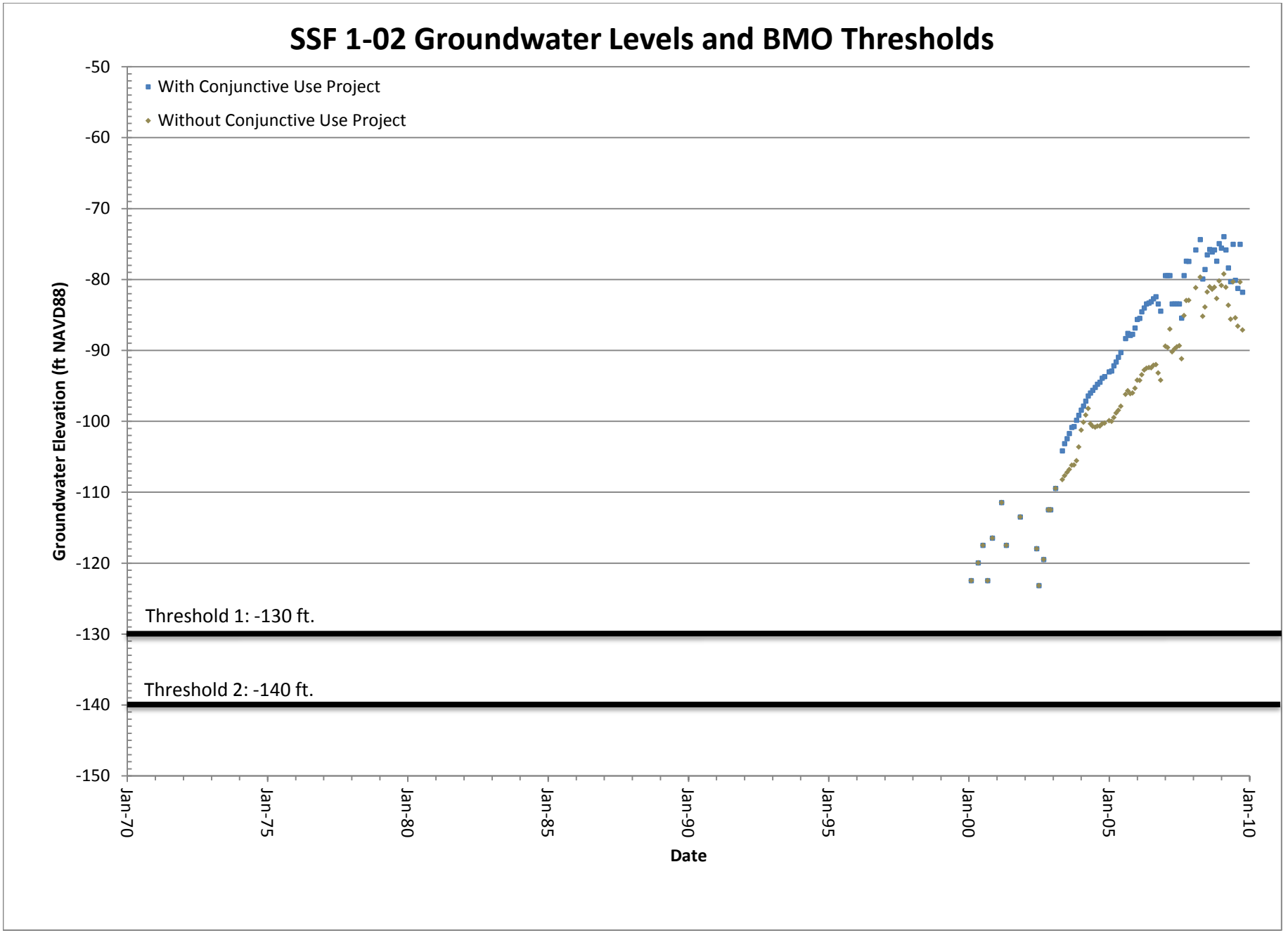
CITY, STATE, ZIP CODE: TELEPHONE

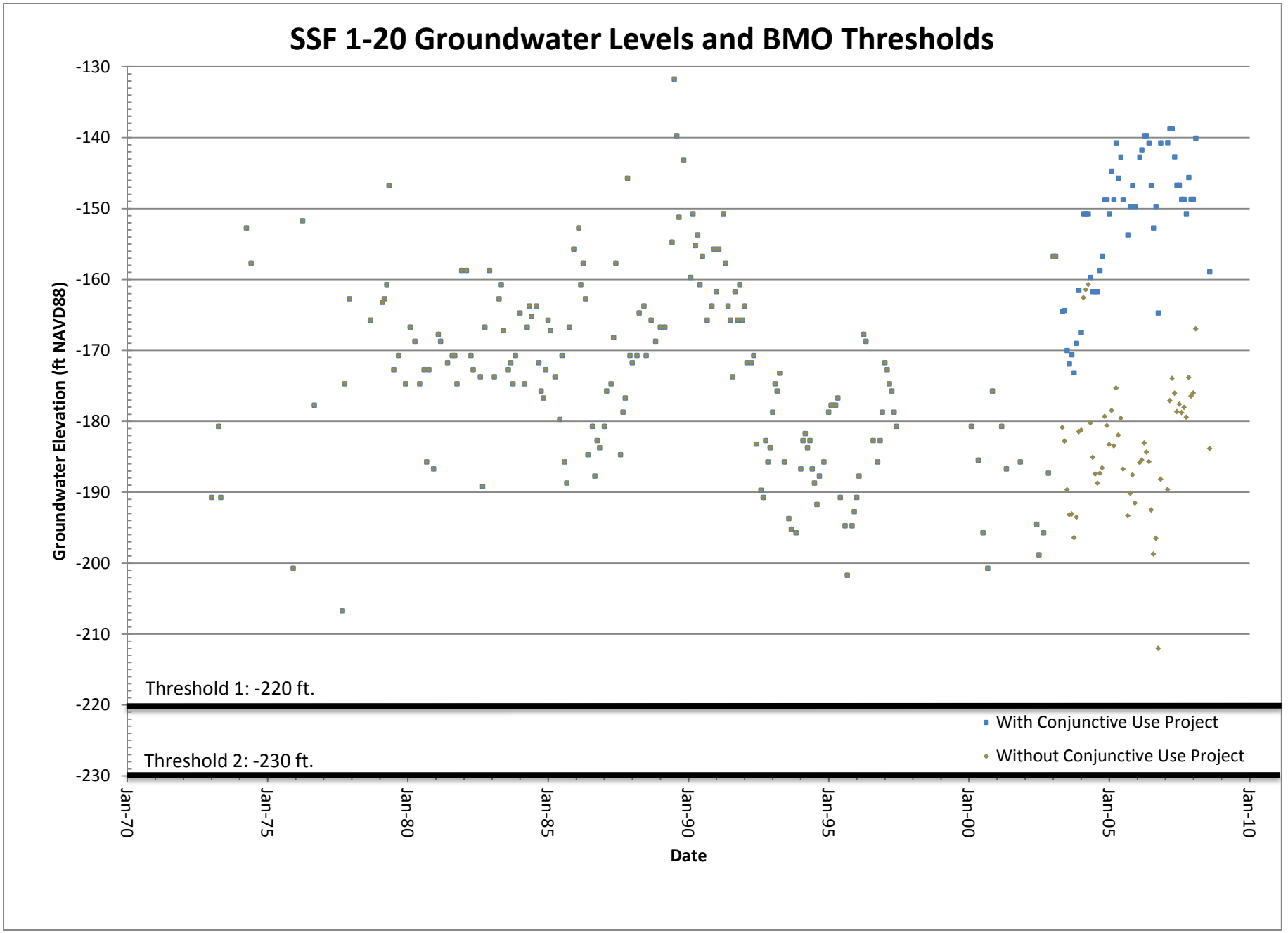
NUMBER(S):

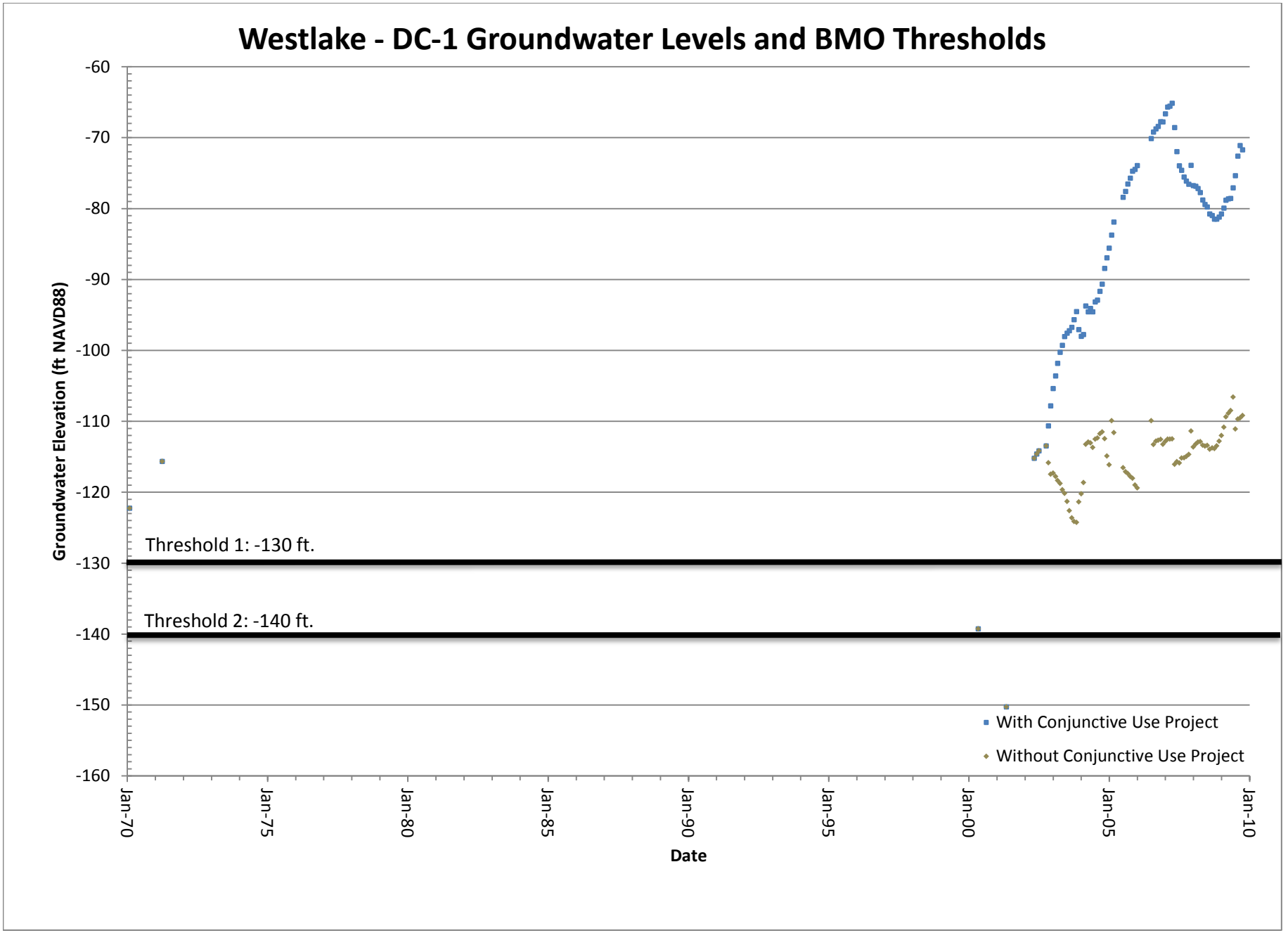
WESTSIDE BASIN PARTNERS ACCEPTANCE:

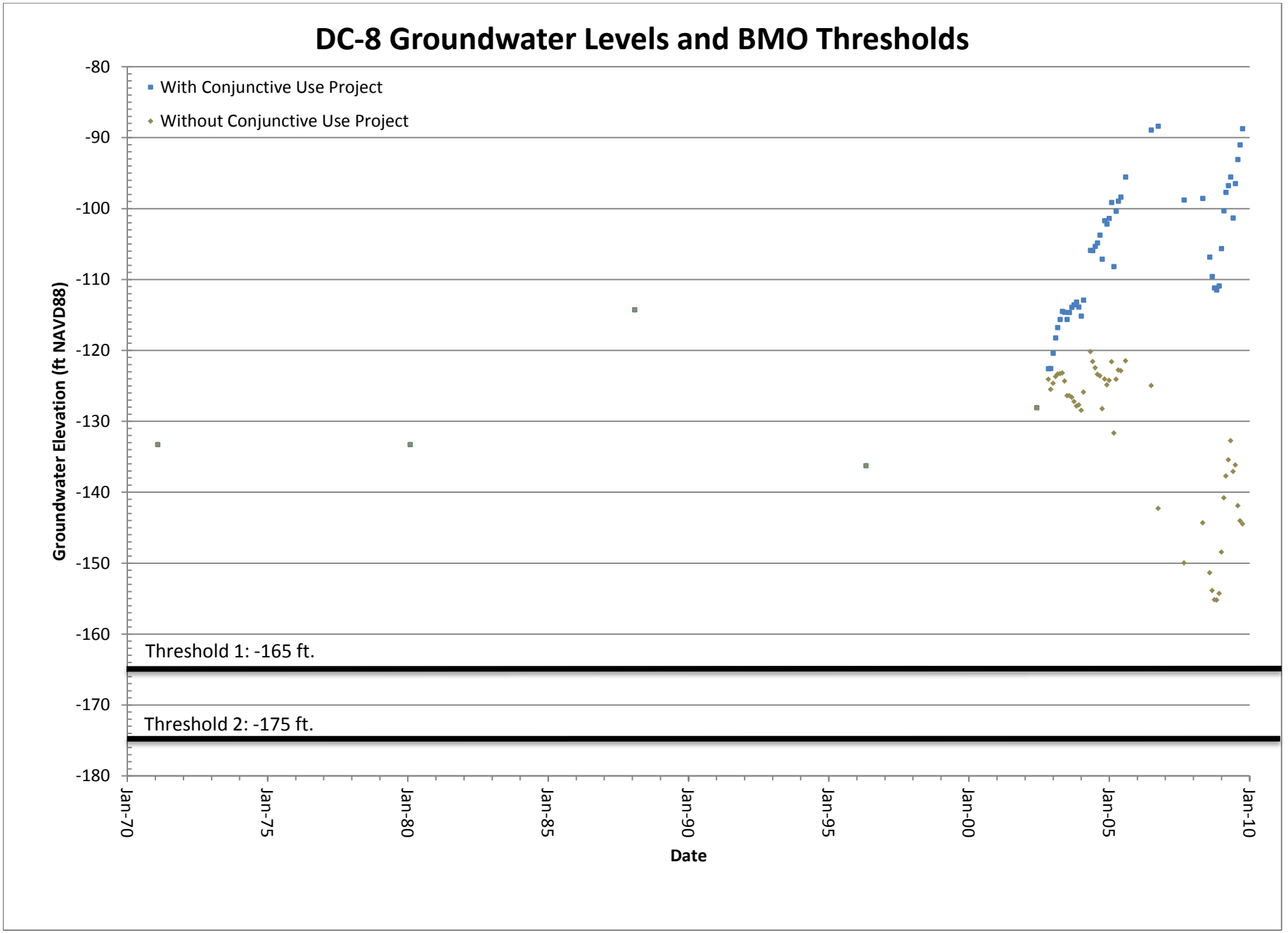
Signature :_____ Date:_____
NAME --- Titlte --- Agency

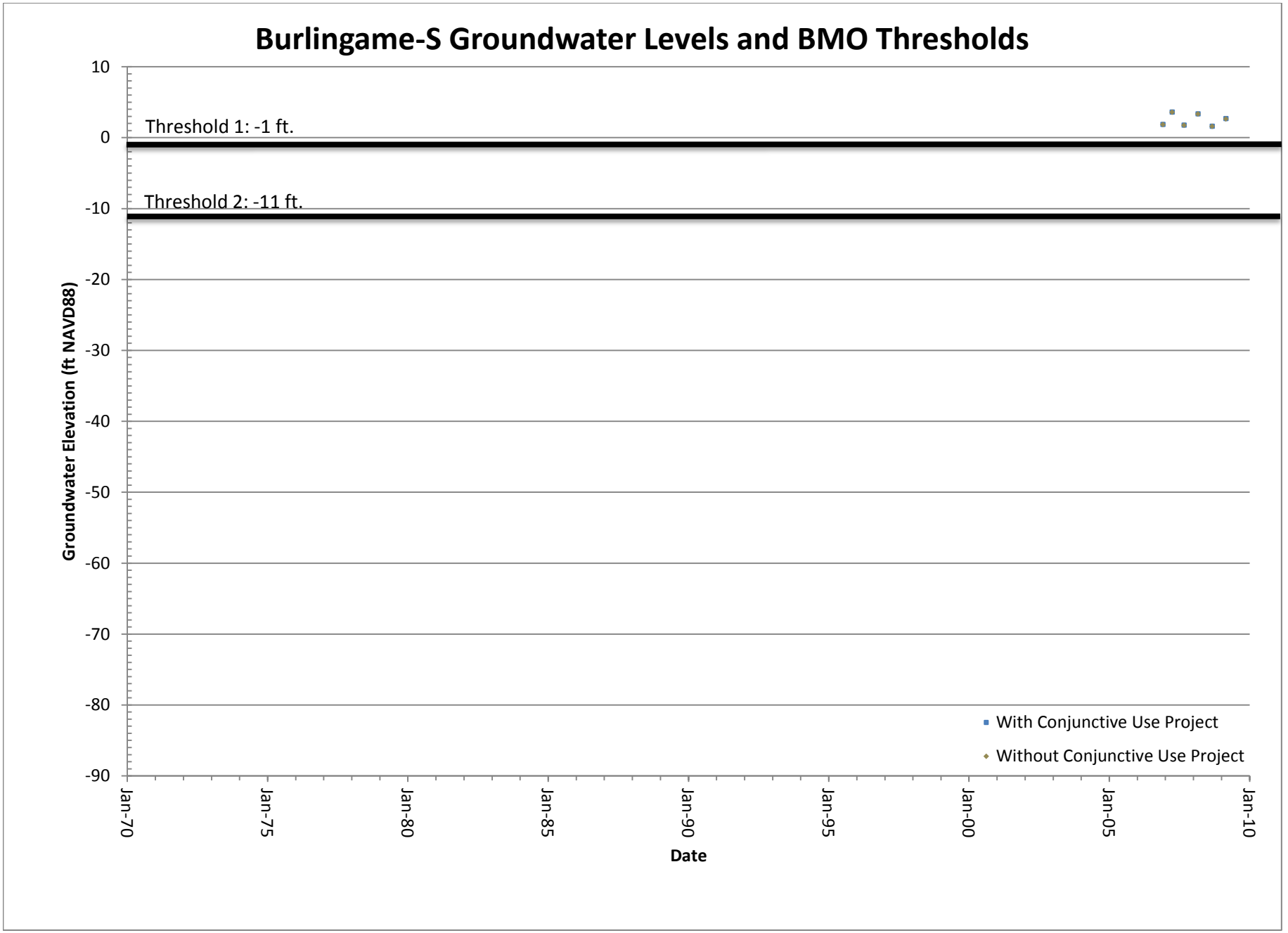
APPENDIX D – BASIN MANAGEMENT OBJECTIVE HYDROGRAPHS

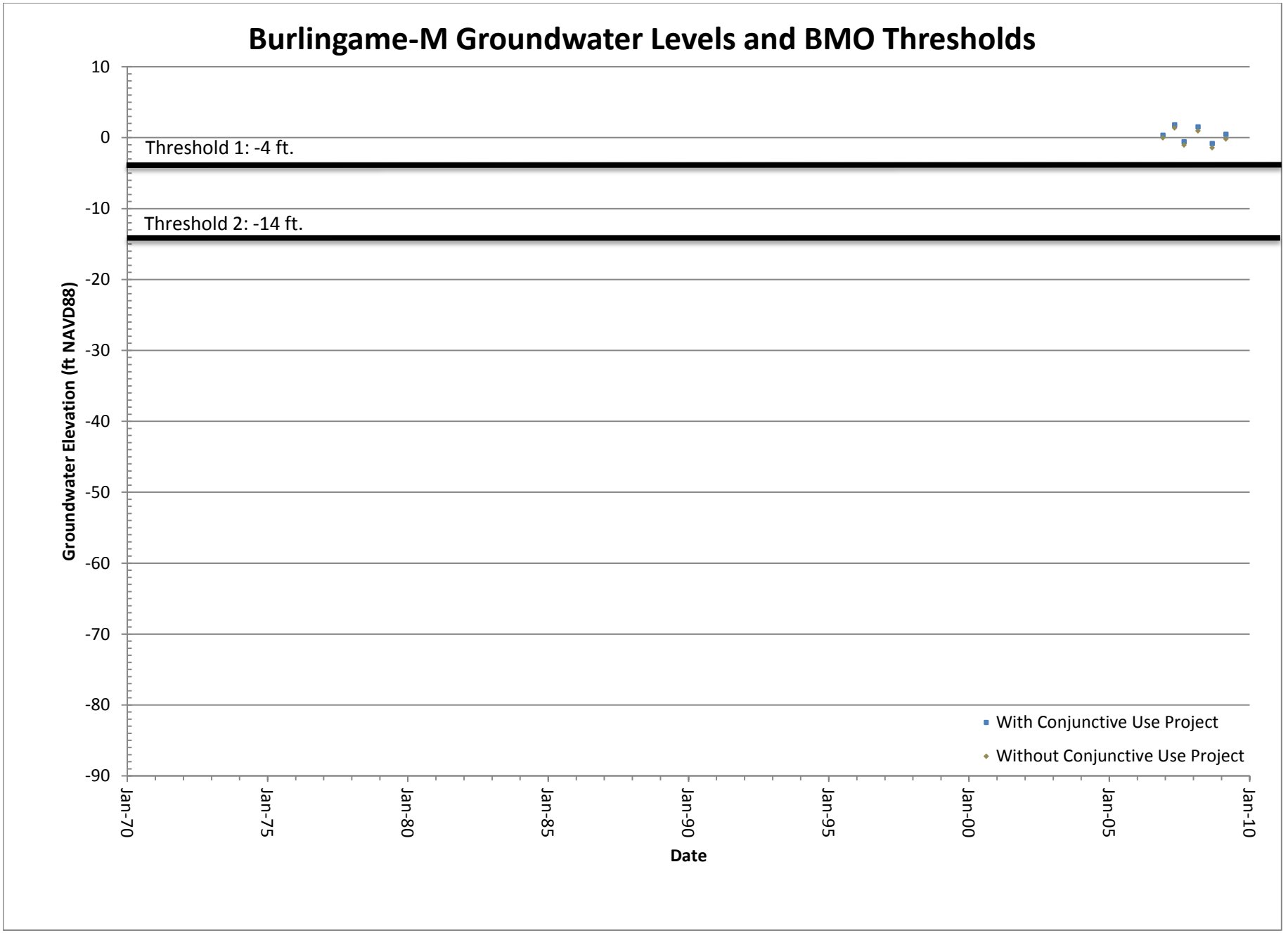

SSF 1-02 Groundwater Levels and BMO Thresholds
With Conjunctive Use Project
Without Conjunctive Use Project
Groundwater Elevation (ft NAVD88)
-50
-60
-70
-80
-90
-100
-110
-120
-130
-140
-150
Threshold 1: -130 ft.
Threshold 2: -140 ft.
Jan-70
Jan-75
Jan-80
Jan-85
Jan-90
Jan-95
Jan-00
Jan-05
Jan-10
Date

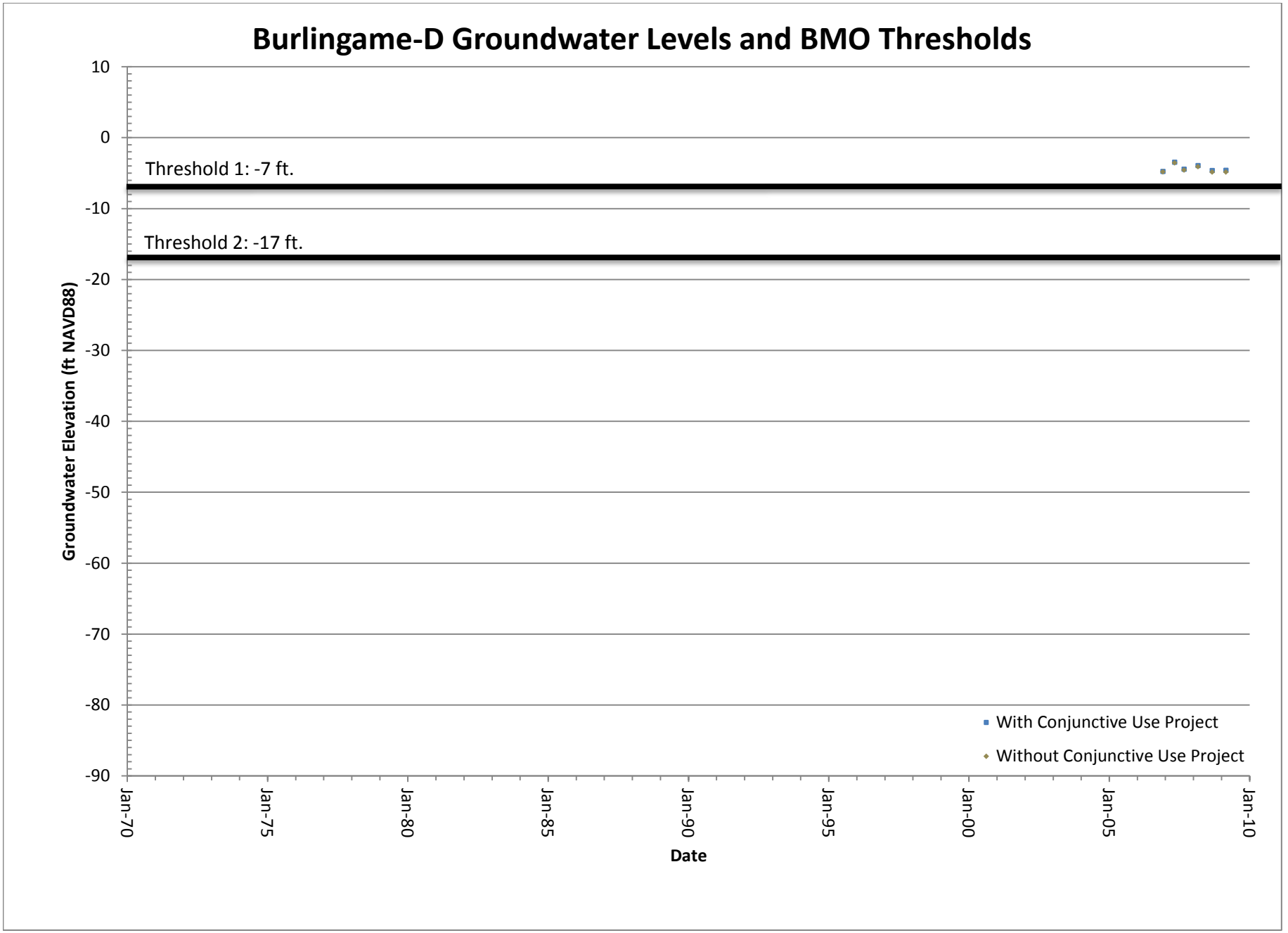

SSF 1-20 Groundwater Levels and BMO Thresholds
Groundwater Elevation (ft NAVD88)
-130
-140
-150
-160
-170
-180
-190
-200
-210
-220
-230
Threshold 1: -220 ft.
Threshold 2: -230 ft.
With Conjunctive Use Project
Without Conjunctive Use Project
Jan-70
Jan-75
Jan-80
Jan-85
Jan-90
Jan-95
Jan-00
Jan-05
Jan-10
Date

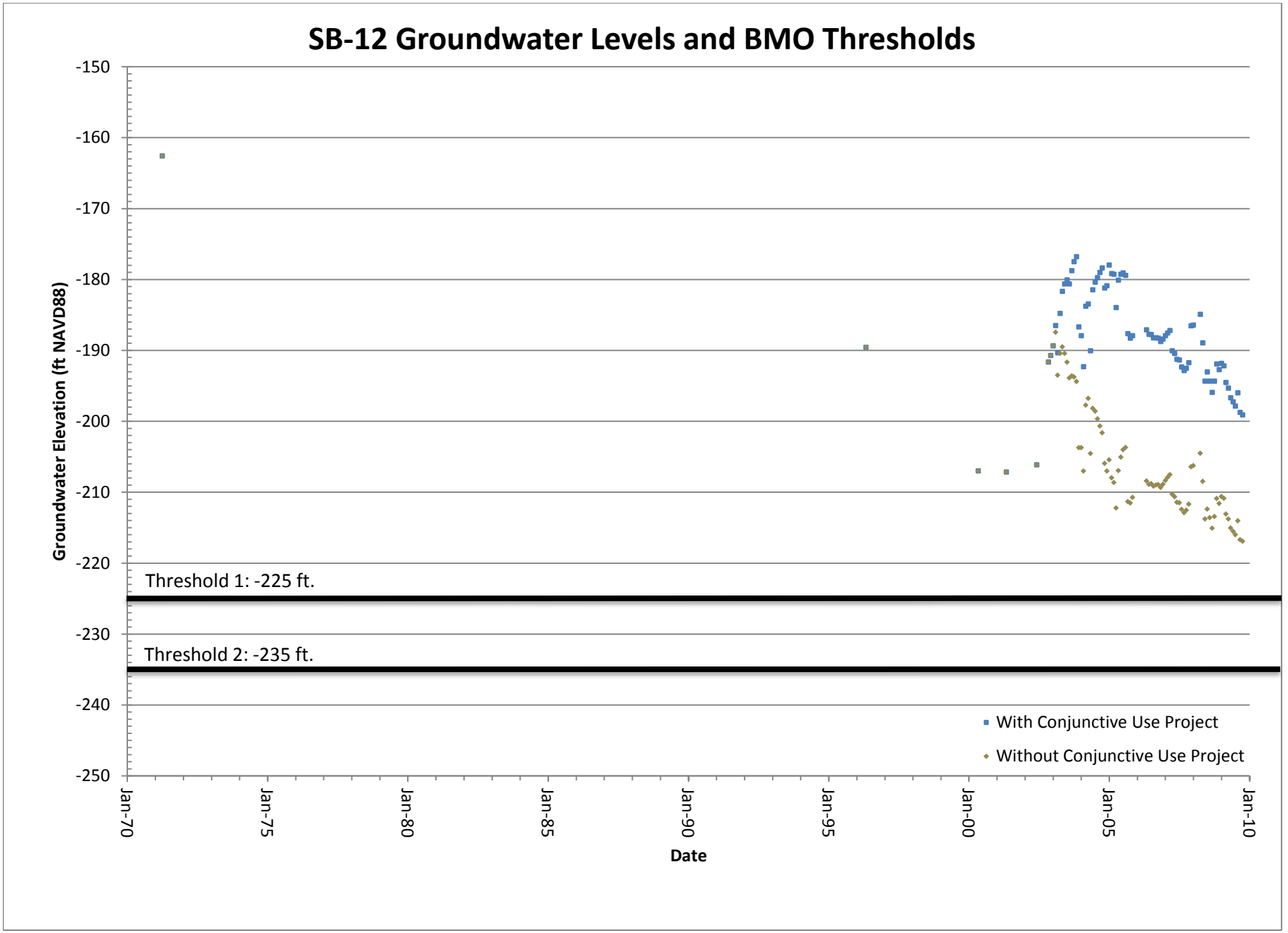

Westlake - DC-1 Groundwater Levels and BMO Thresholds
Groundwater Elevation (ft NAVD88)
-60
-70
-80
-90
-100
-110
-120
-130
-140
-150
-160
Threshold 1: -130 ft.
Threshold 2: -140 ft.
With Conjunctive Use Project
Without Conjunctive Use Project
Jan-70
Jan-75
Jan-80
Jan-85
Jan-90
Jan-95
Jan-00
Jan-05
Jan-10
Date

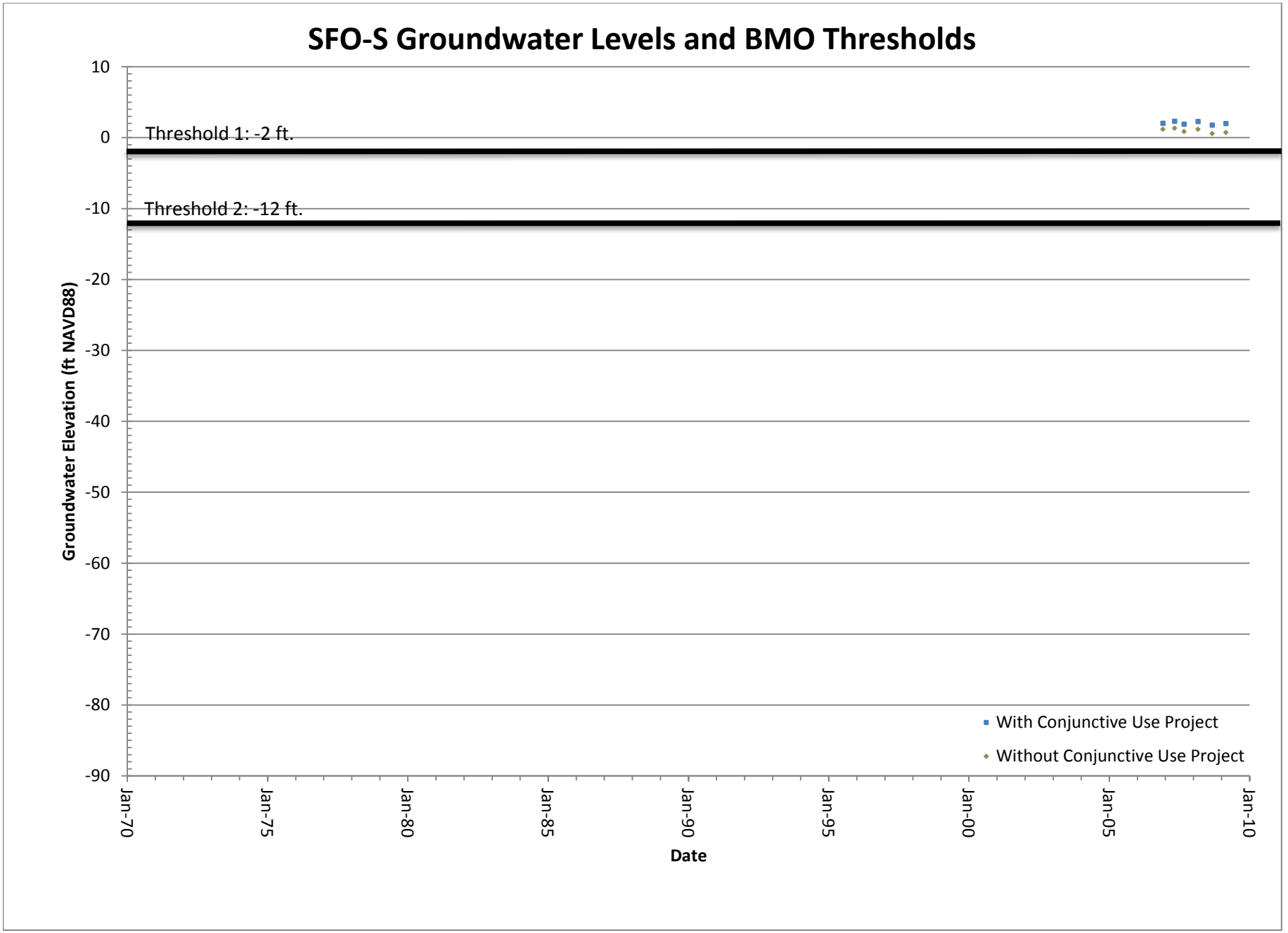

DC-8 Groundwater Levels and BMO Thresholds
With Conjunctive Use Project
Without Conjunctive Use Project
Groundwater Elevation (ft NAVD88)
-80
-90
-100
-110
-120
-130
-140
-150
-160
-170
-180
Threshold 1: -165 ft.
Threshold 2: -175 ft.
Jan-70
Jan-75
Jan-80
Jan-85
Jan-90
Jan-95
Jan-00
Jan-05
Jan-10
Date

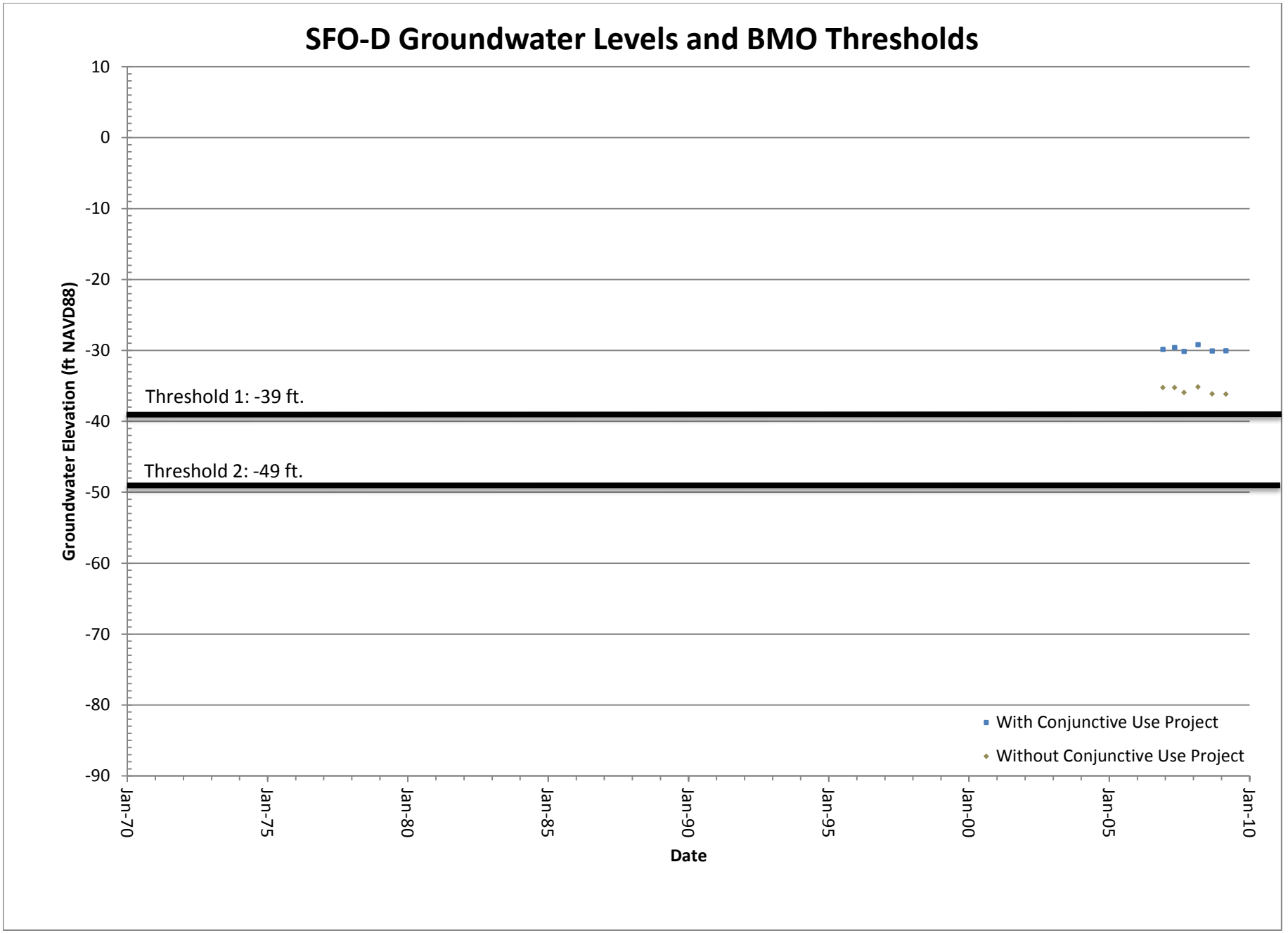

Burlingame-S Groundwater Levels and BMO Thresholds
10
0
-10
-20
-30
-40
-50
-60
-70
-80
-90
Threshold 1: -1 ft.
Threshold 2: -11 ft.
Groundwater Elevation (ft NAVD88)
Jan-70
Jan-75
Jan-80
Jan-85
Jan-90
Jan-95
Jan-00
Jan-05
Jan-10
Date
With Conjunctive Use Project
Without Conjunctive Use Project

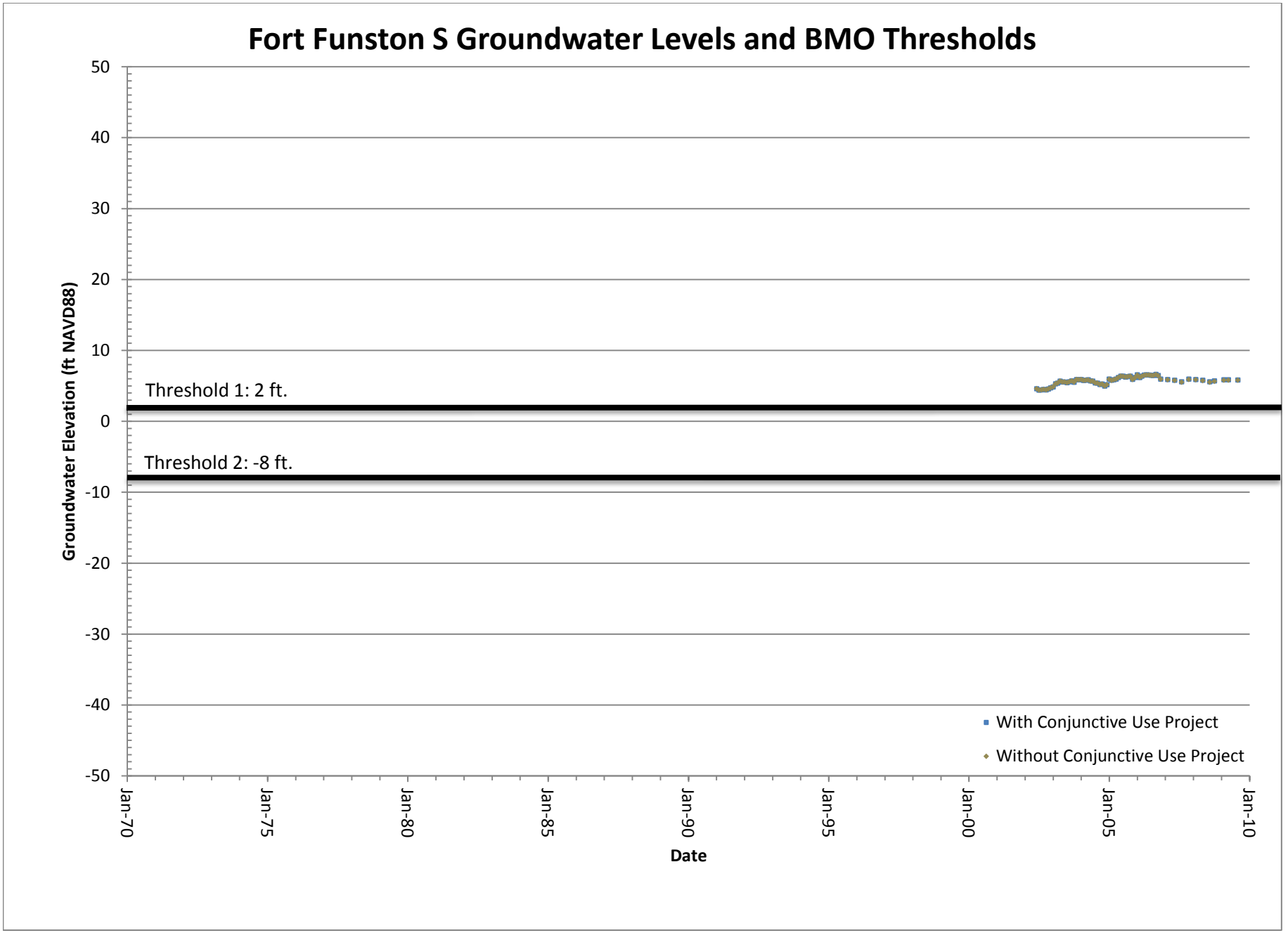

Burlingame-M Groundwater Levels and BMO Thresholds
10
0
-10
-20
-30
-40
-50
-60
-70
-80
-90
Threshold 1: -4 ft.
Threshold 2: -14 ft.
Groundwater Elevation (ft NAVD88)
Jan-70
Jan-75
Jan-80
Jan-85
Jan-90
Jan-95
Jan-00
Jan-05
Jan-10
Date
With Conjunctive Use Project
Without Conjunctive Use Project

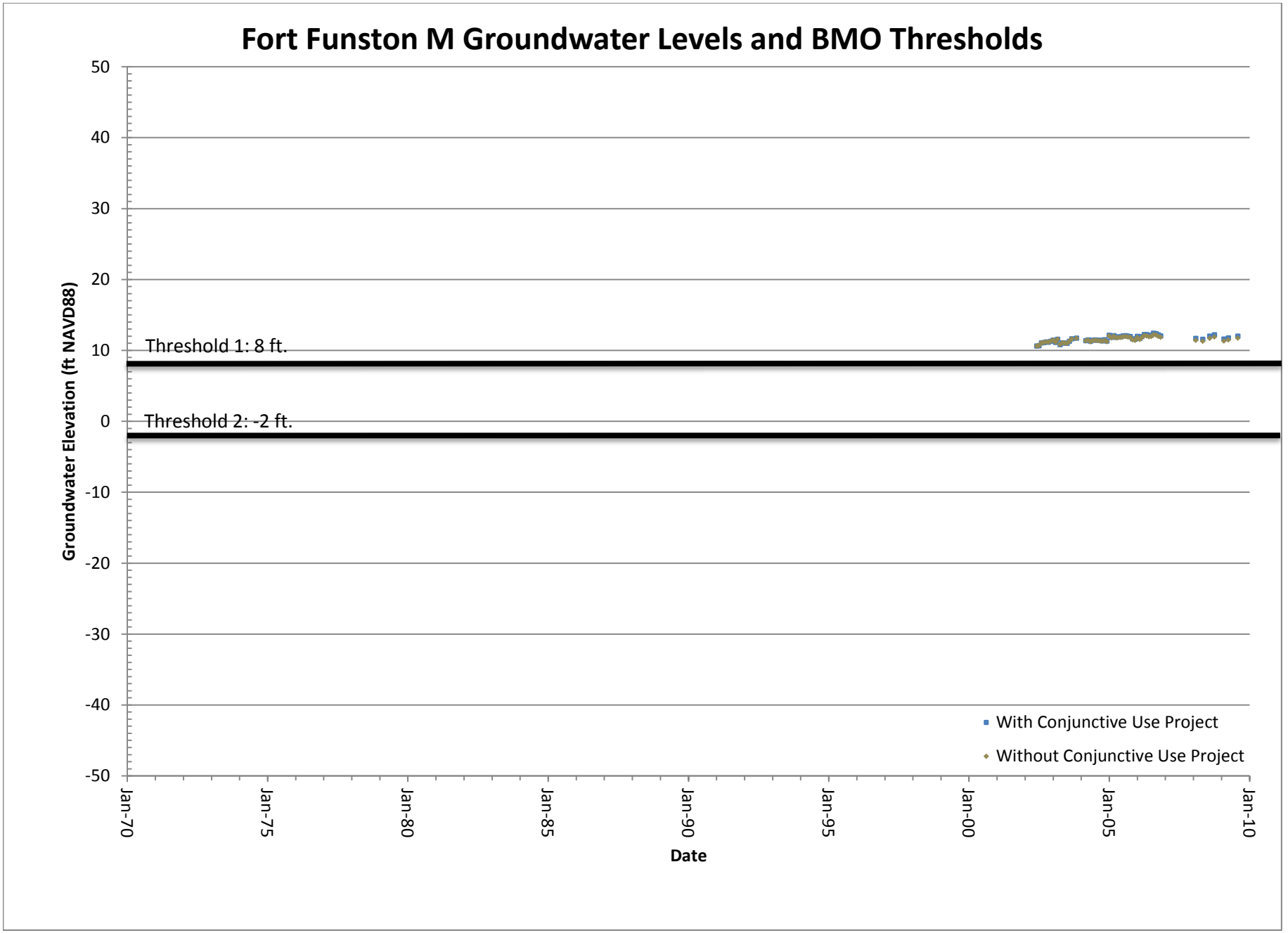

Burlingame-D Groundwater Levels and BMO Thresholds
10
0
-10
-20
-30
-40
-50
-60
-70
-80
-90
Threshold 1: -7 ft.
Threshold 2: -17 ft.
Groundwater Elevation (ft NAVD88)
Jan-70
Jan-75
Jan-80
Jan-85
Jan-90
Jan-95
Jan-00
Jan-05
Jan-10
Date
With Conjunctive Use Project
Without Conjunctive Use Project

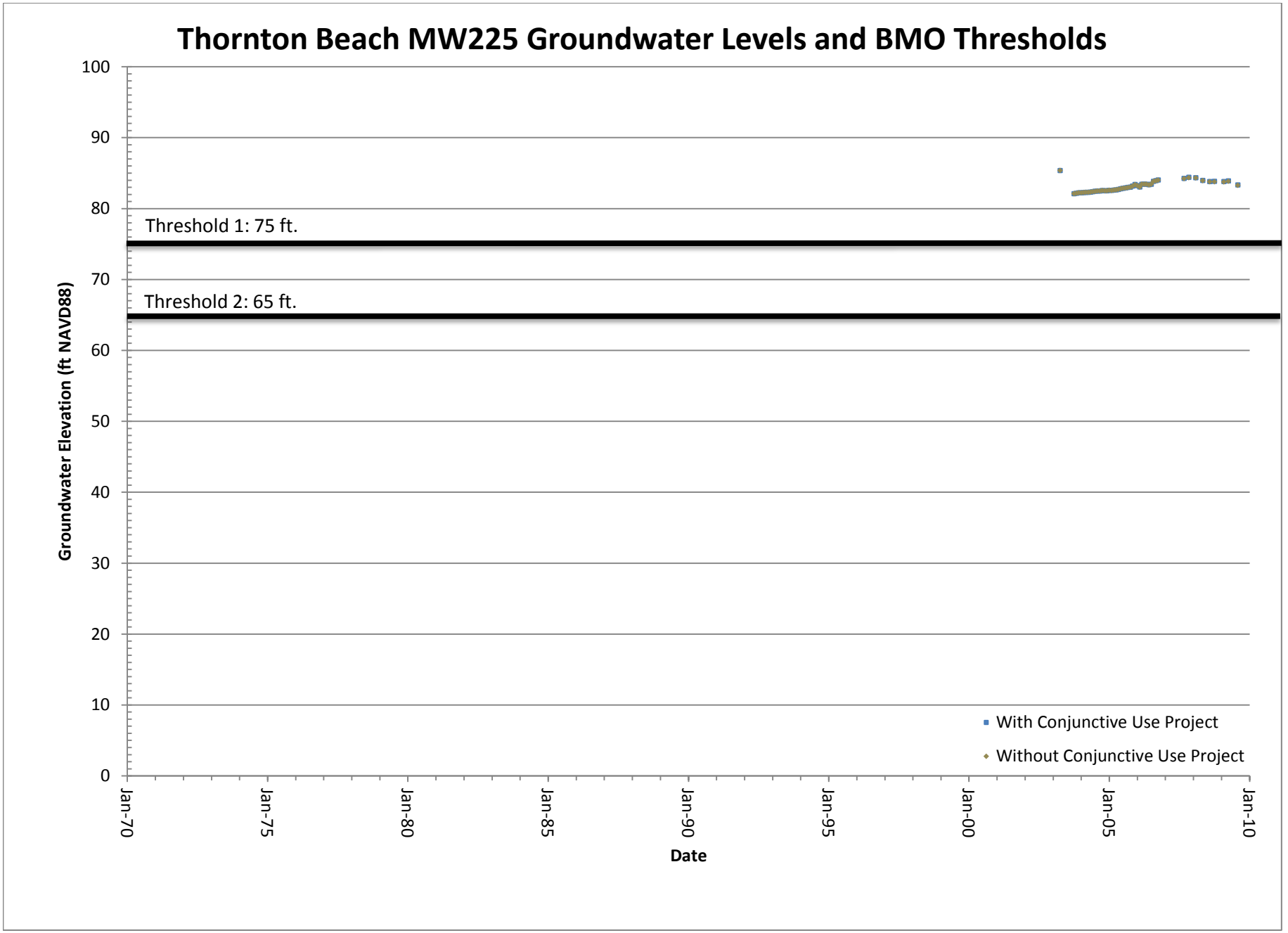

SB-12 Groundwater Levels and BMO Thresholds
Groundwater Elevation (ft NAVD88)
-150
-160
-170
-180
-190
-200
-210
-220
-230
-240
-250
Threshold 1: -225 ft.
Threshold 2: -235 ft.
With Conjunctive Use Project
Without Conjunctive Use Project
Jan-70
Jan-75
Jan-80
Jan-85
Jan-90
Jan-95
Jan-00
Jan-05
Jan-10
Date

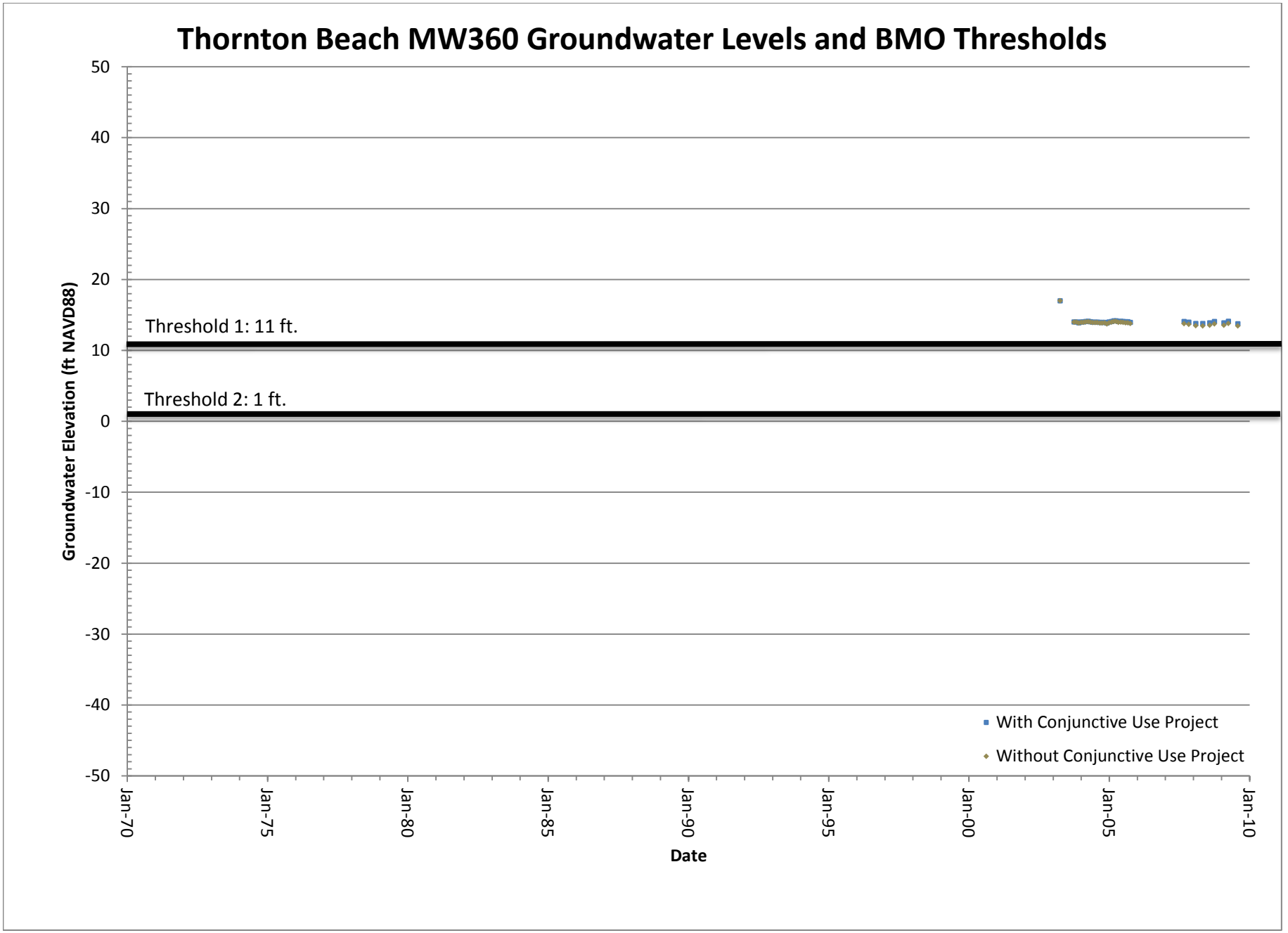

SFO-S Groundwater Levels and BMO Thresholds
10
0
-10
-20
-30
-40
-50
-60
-70
-80
-90
Threshold 1: -2 ft.
Threshold 2: -12 ft.
Groundwater Elevation (ft NAVD88)
Jan-70
Jan-75
Jan-80
Jan-85
Jan-90
Jan-95
Jan-00
Jan-05
Jan-10
Date
With Conjunctive Use Project
Without Conjunctive Use Project

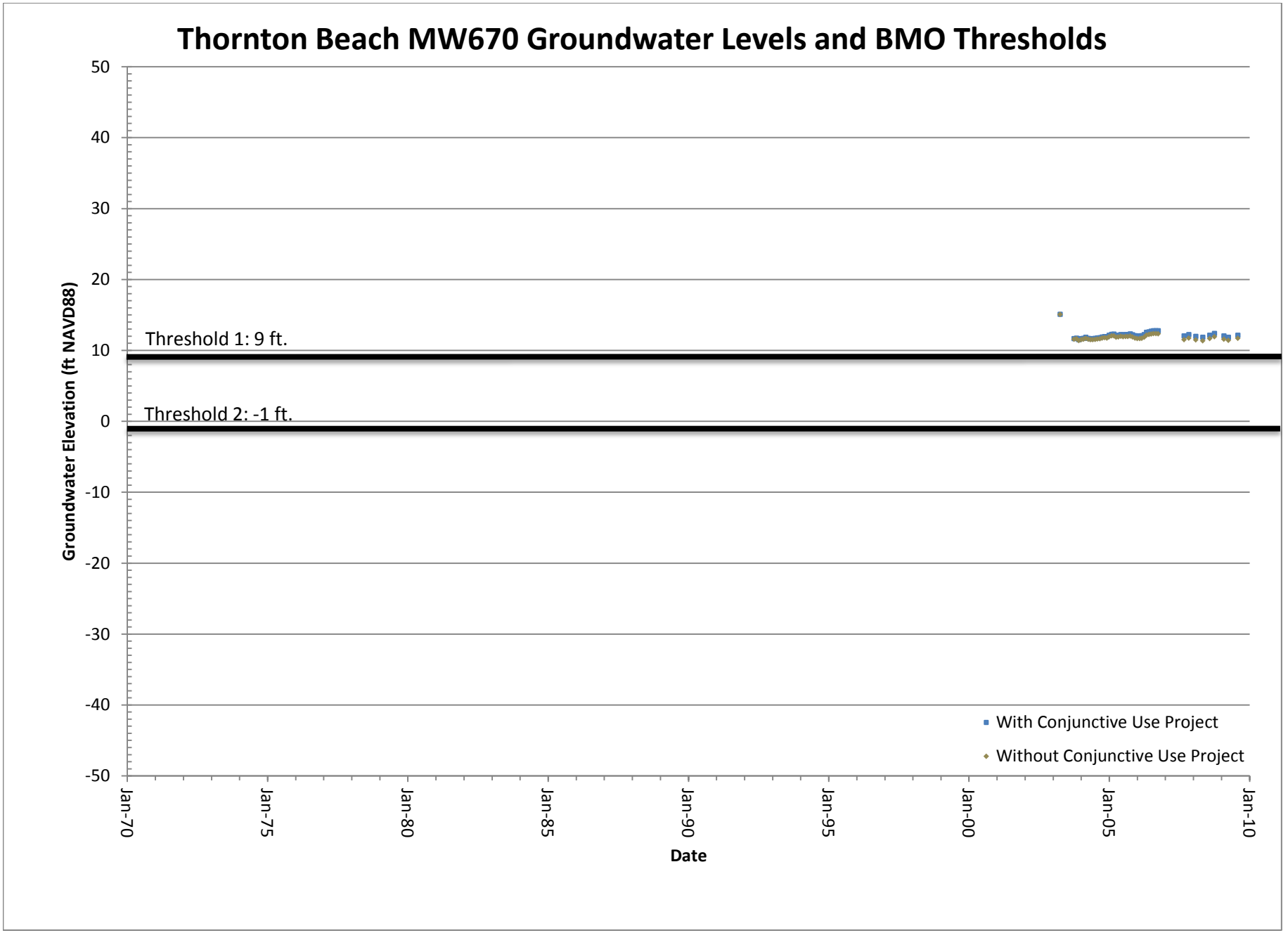

SFO-D Groundwater Levels and BMO Thresholds
Groundwater Elevation (ft NAVD88)
10
0
-10
-20
-30
-40
-50
-60
-70
-80
-90
Threshold 1: -39 ft.
Threshold 2: -49 ft.
With Conjunctive Use Project
Without Conjunctive Use Project
Jan-70
Jan-75
Jan-80
Jan-85
Jan-90
Jan-95
Jan-00
Jan-05
Jan-10
Date

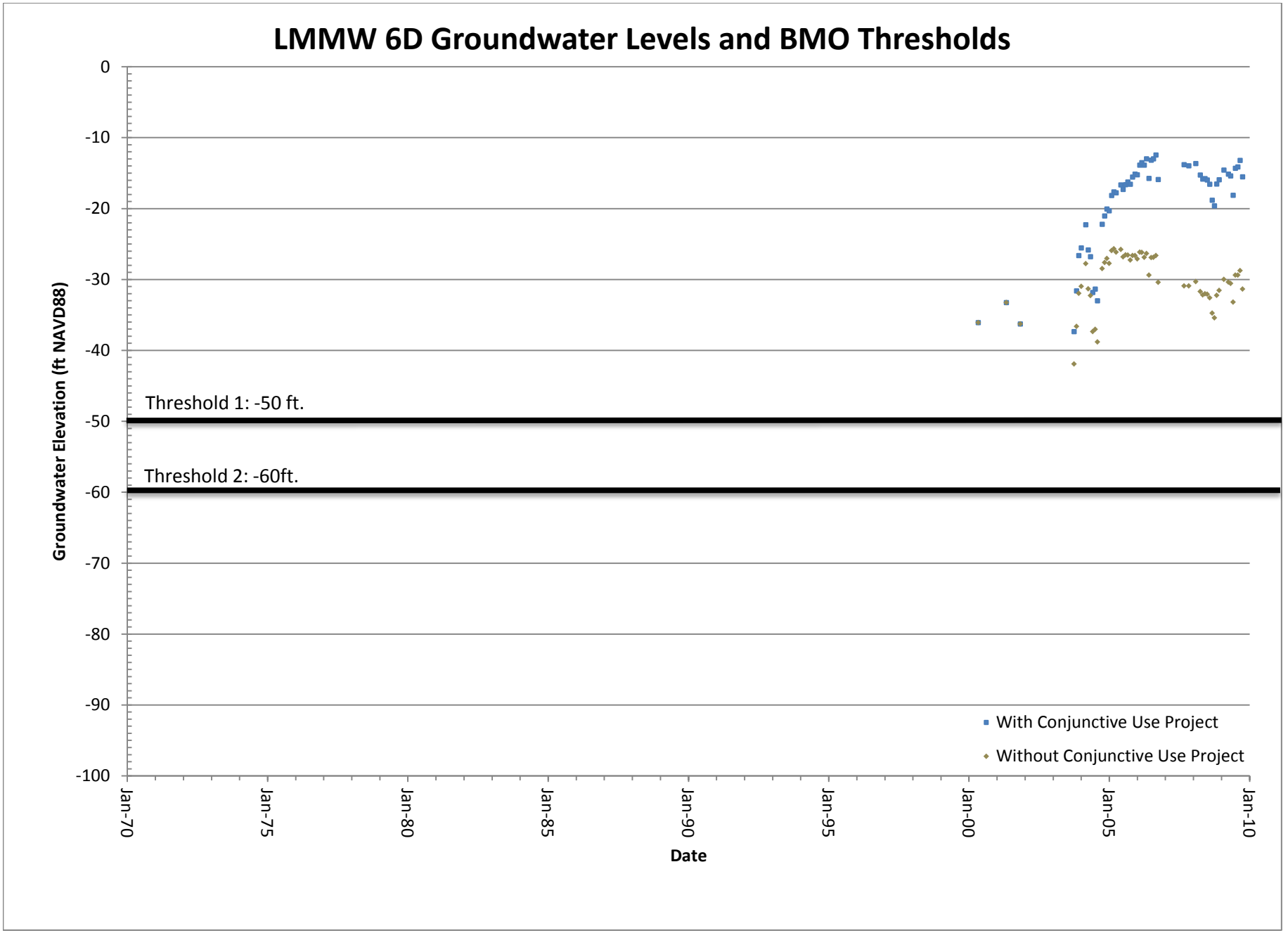

Fort Funston S Groundwater Levels and BMO Thresholds
Groundwater Elevation (ft NAVD88)
50
40
30
20
10
0
-10
-20
-30
-40
-50
Threshold 1: 2 ft.
Threshold 2: -8 ft.
With Conjunctive Use Project
Without Conjunctive Use Project
Jan-70
Jan-75
Jan-80
Jan-85
Jan-90
Jan-95
Jan-00
Jan-05
Jan-10
Date

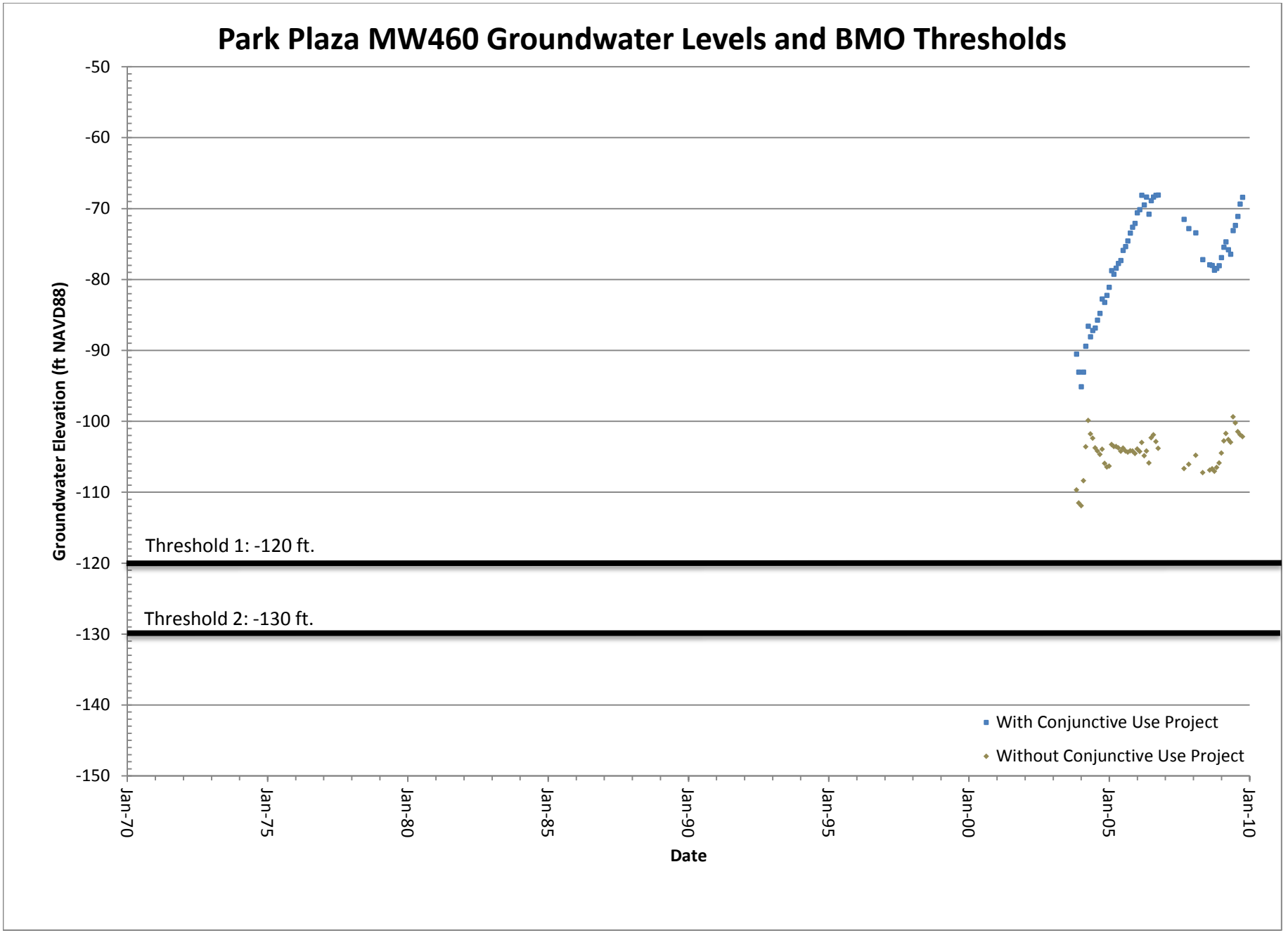

Fort Funston M Groundwater Levels and BMO Thresholds
Groundwater Elevation (ft NAVD88)
50
40
30
20
10
0
-10
-20
-30
-40
-50
Threshold 1: 8 ft.
Threshold 2: -2 ft.
With Conjunctive Use Project
Without Conjunctive Use Project
Jan-70
Jan-75
Jan-80
Jan-85
Jan-90
Jan-95
Jan-00
Jan-05
Jan-10
Date

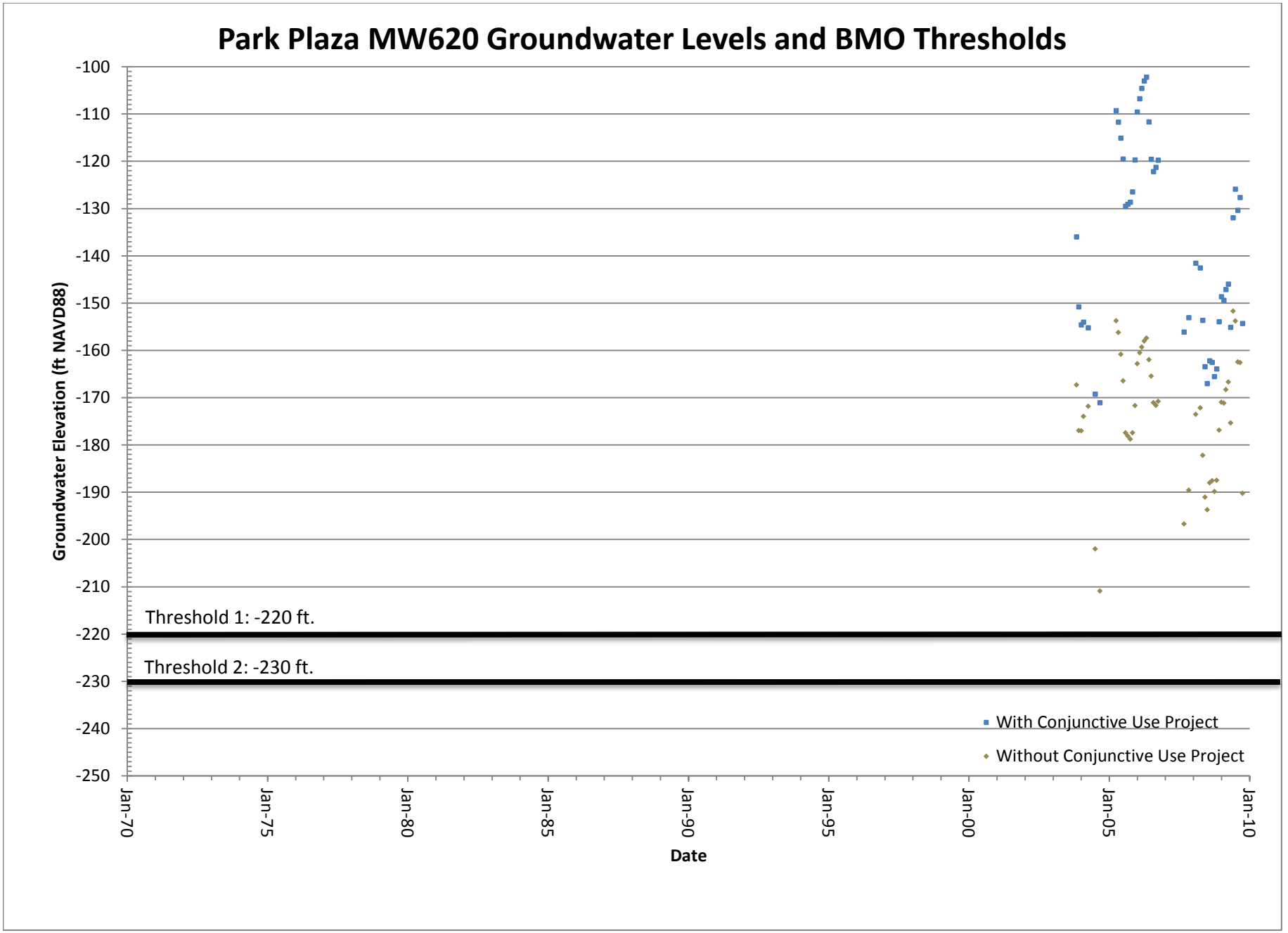

Thornton Beach MW225 Groundwater Levels and BMO Thresholds
Groundwater Elevation (ft NAVD88)
100
90
80
70
60
50
40
30
20
10
0
Threshold 1: 75 ft.
Threshold 2: 65 ft.
With Conjunctive Use Project
Without Conjunctive Use Project
Jan-70
Jan-75
Jan-80
Jan-85
Jan-90
Jan-95
Jan-00
Jan-05
Jan-10
Date

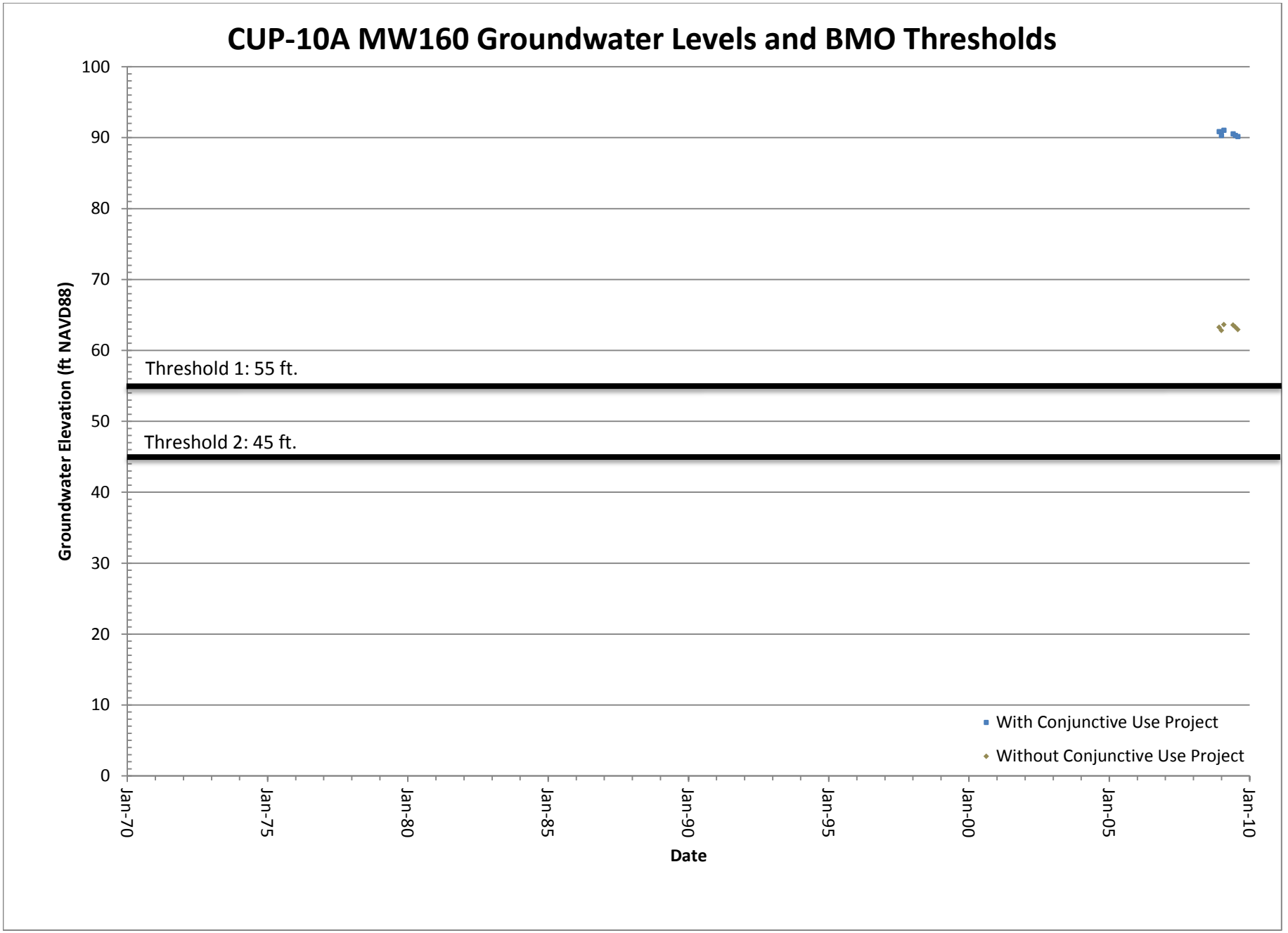

Thornton Beach MW360 Groundwater Levels and BMO Thresholds
Groundwater Elevation (ft NAVD88)
50
40
30
20
10
0
-10
-20
-30
-40
-50
Threshold 1: 11 ft.
Threshold 2: 1 ft.
With Conjunctive Use Project
Without Conjunctive Use Project
Jan-70
Jan-75
Jan-80
Jan-85
Jan-90
Jan-95
Jan-00
Jan-05
Jan-10
Date

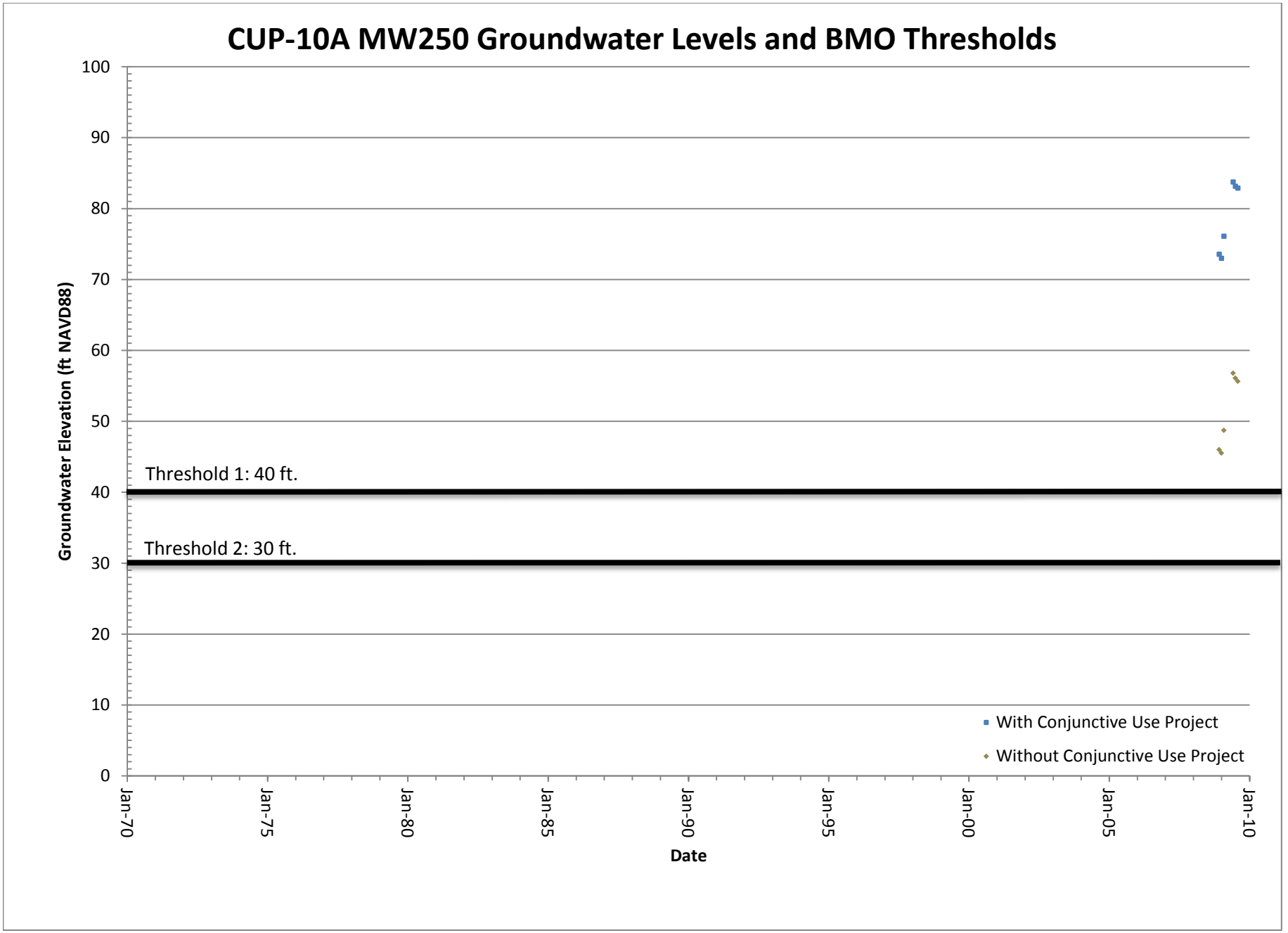

Thornton Beach MW670 Groundwater Levels and BMO Thresholds
Groundwater Elevation (ft NAVD88)
50
40
30
20
10
0
-10
-20
-30
-40
-50
Threshold 1: 9 ft.
Threshold 2: -1 ft.
With Conjunctive Use Project
Without Conjunctive Use Project
Jan-70
Jan-75
Jan-80
Jan-85
Jan-90
Jan-95
Jan-00
Jan-05
Jan-10
Date

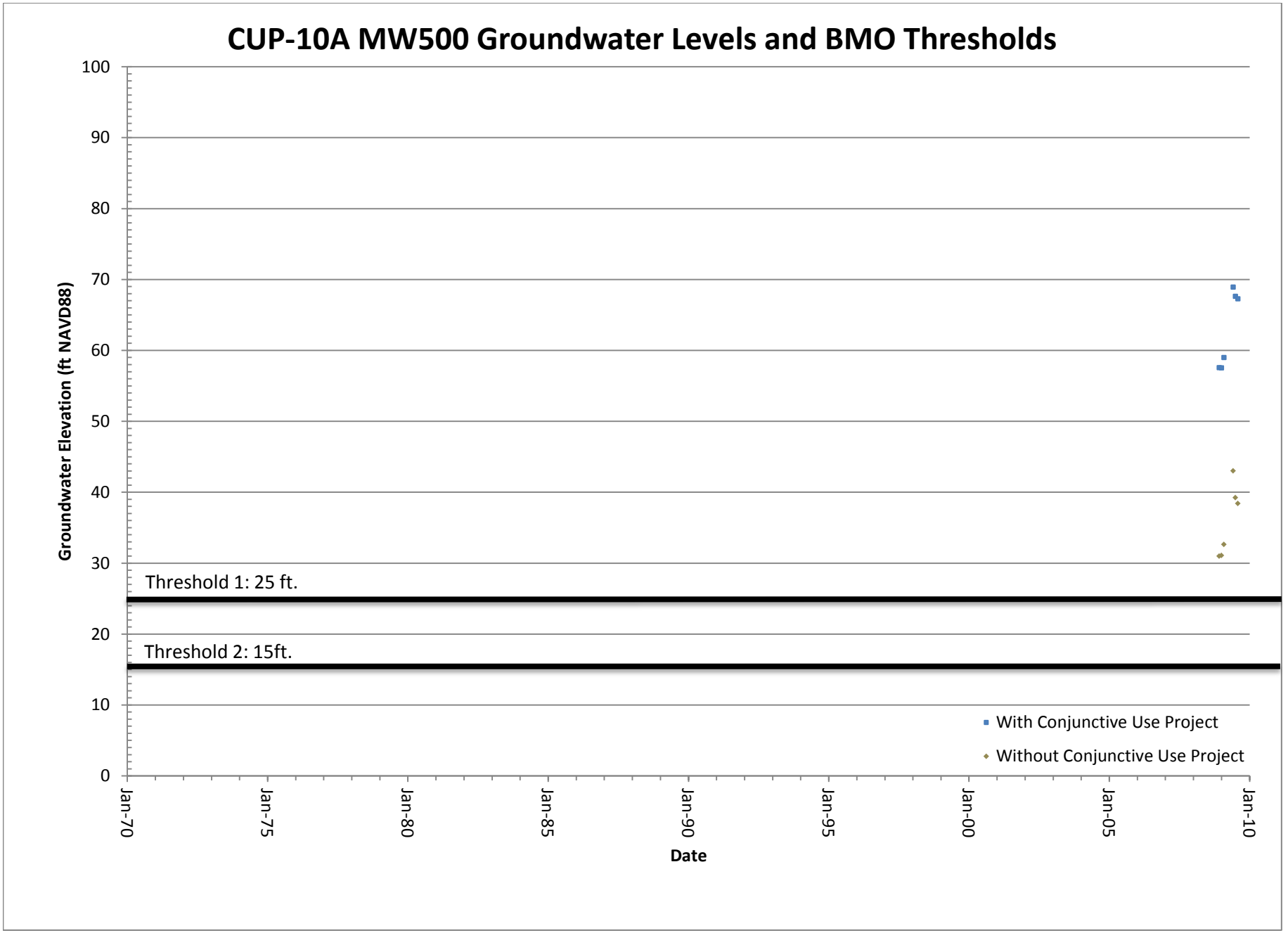

LMMW 6D Groundwater Levels and BMO Thresholds
Groundwater Elevation (ft NAVD88)
0
-10
-20
-30
-40
-50
-60
-70
-80
-90
-100
Threshold 1: -50 ft.
Threshold 2: -60ft.
Jan-70
Jan-75
Jan-80
Jan-85
Jan-90
Jan-95
Jan-00
Jan-05
Jan-10
Date
With Conjunctive Use Project
Without Conjunctive Use Project

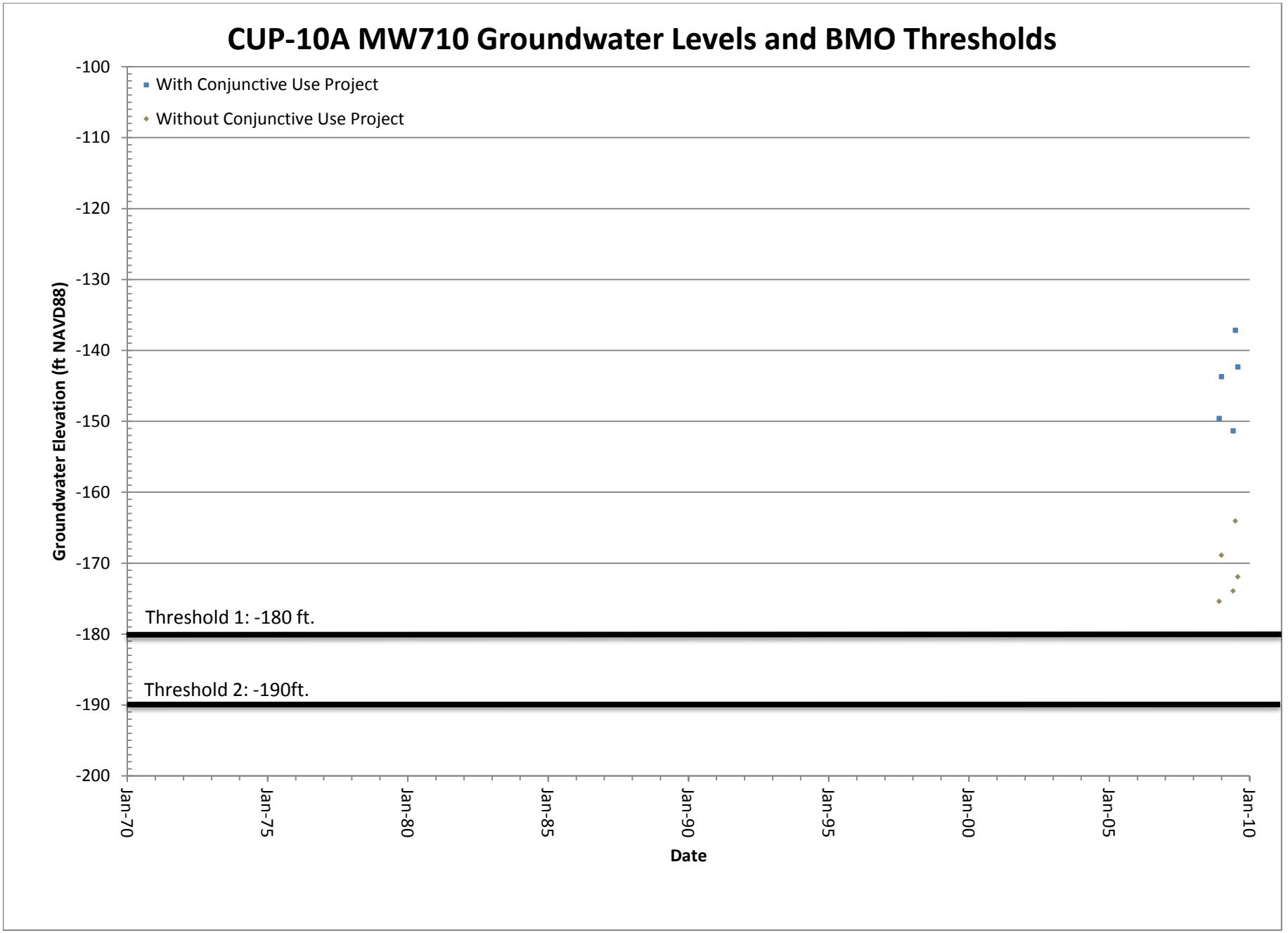

Park Plaza MW460 Groundwater Levels and BMO Thresholds
Groundwater Elevation (ft NAVD88)
-50
-60
-70
-80
-90
-100
-110
-120
-130
-140
-150
Threshold 1: -120 ft.
Threshold 2: -130 ft.
With Conjunctive Use Project
Without Conjunctive Use Project
Jan-70
Jan-75
Jan-80
Jan-85
Jan-90
Jan-95
Jan-00
Jan-05
Jan-10
Date

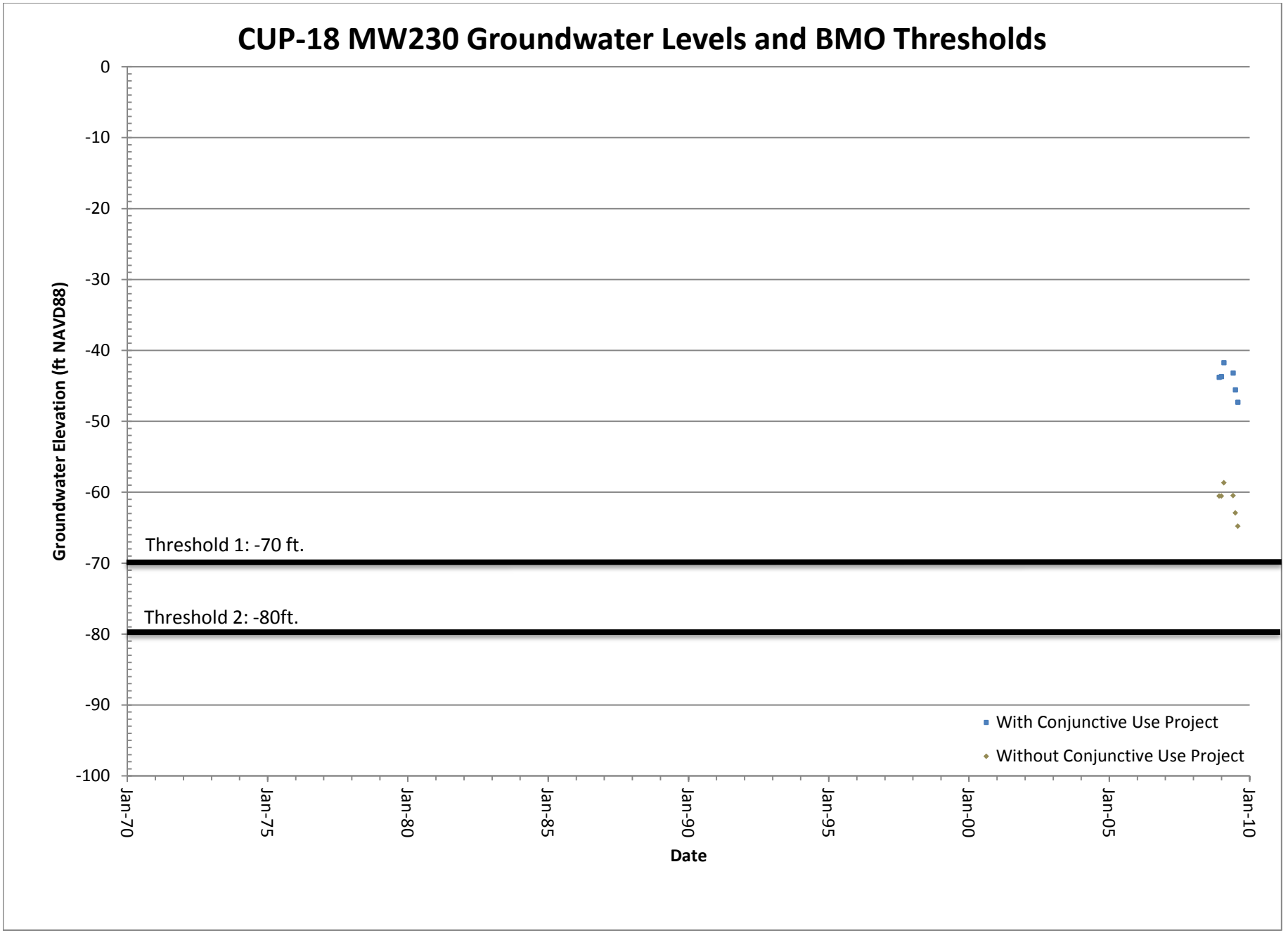

Park Plaza MW620 Groundwater Levels and BMO Thresholds
Groundwater Elevation (ft NAVD88)
-100
-110
-120
-130
-140
-150
-160
-170
-180
-190
-200
-210
-220
-230
-240
-250
Threshold 1: -220 ft.
Threshold 2: -230 ft.
With Conjunctive Use Project
Without Conjunctive Use Project
Jan-70
Jan-75
Jan-80
Jan-85
Jan-90
Jan-95
Jan-00
Jan-05
Jan-10
Date

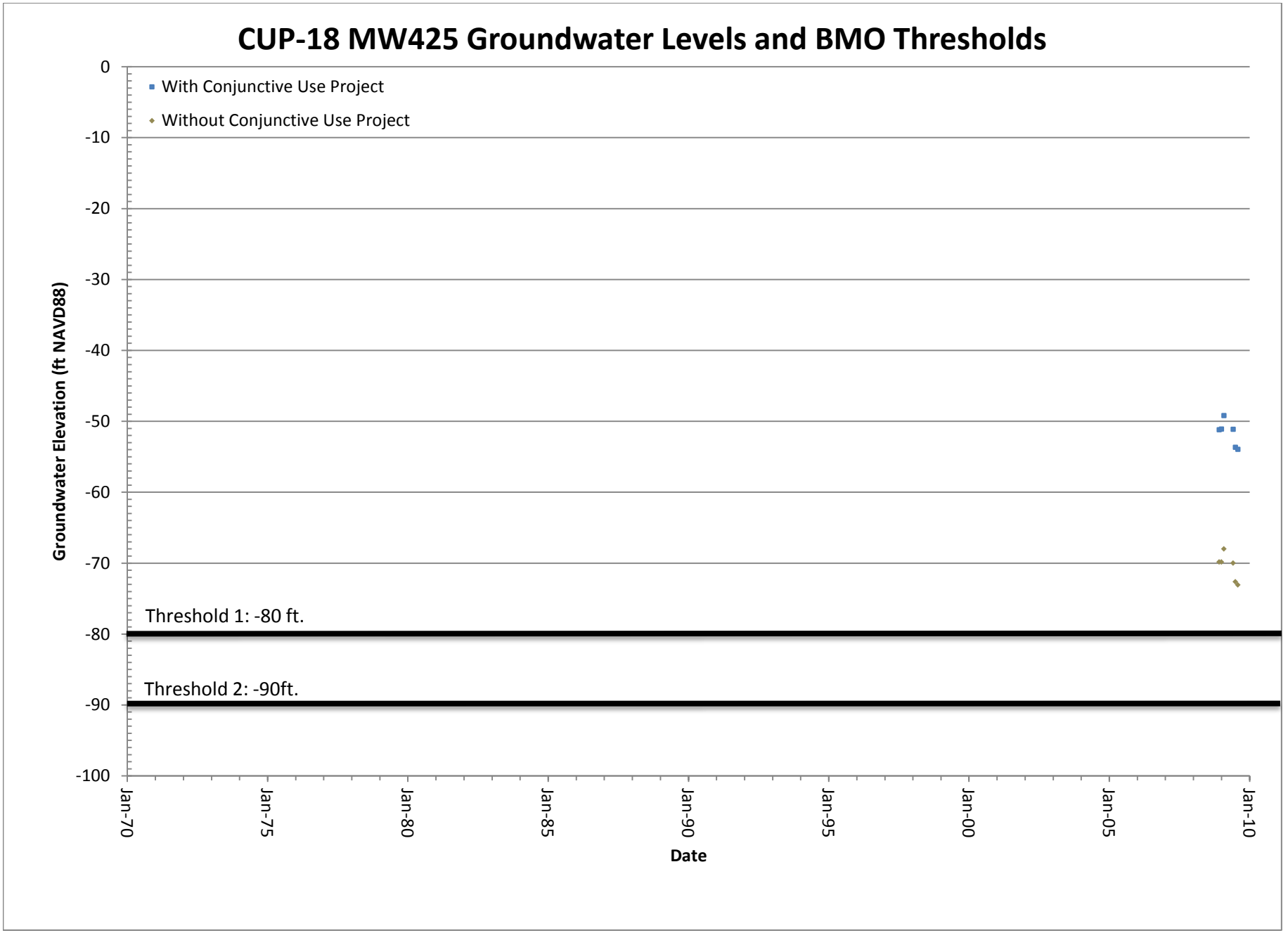

CUP-10A MW160 Groundwater Levels and BMO Thresholds
Groundwater Elevation (ft NAVD88)
100
90
80
70
60
50
40
30
20
10
0
Threshold 1: 55 ft.
Threshold 2: 45 ft.
With Conjunctive Use Project
Without Conjunctive Use Project
Jan-70
Jan-75
Jan-80
Jan-85
Jan-90
Jan-95
Jan-00
Jan-05
Jan-10
Date

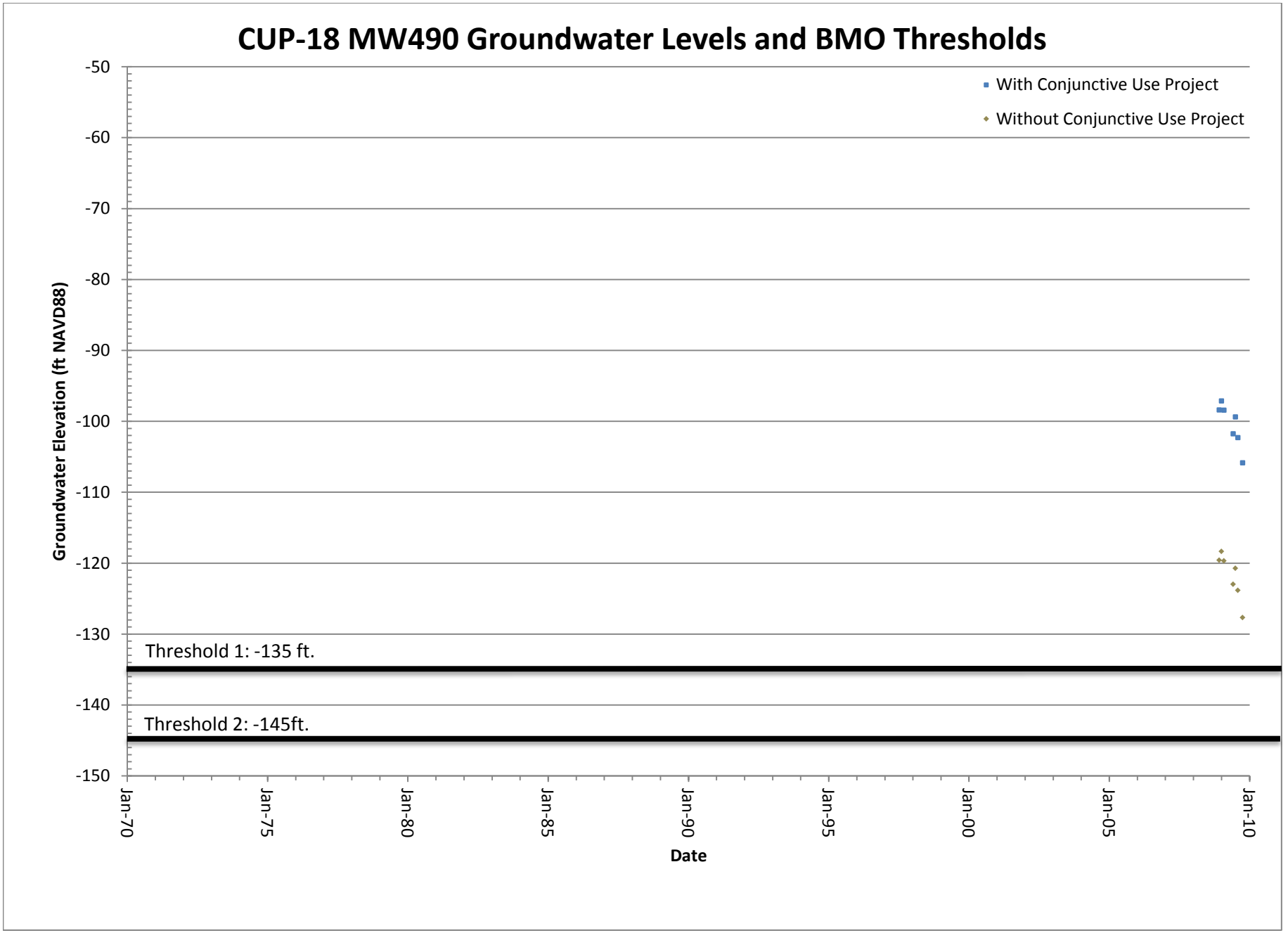

CUP-10A MW250 Groundwater Levels and BMO Thresholds
Groundwater Elevation (ft NAVD88)
100
90
80
70
60
50
40
30
20
10
0
Threshold 1: 40 ft.
Threshold 2: 30 ft.
With Conjunctive Use Project
Without Conjunctive Use Project
Jan-70
Jan-75
Jan-80
Jan-85
Jan-90
Jan-95
Jan-00
Jan-05
Jan-10
Date

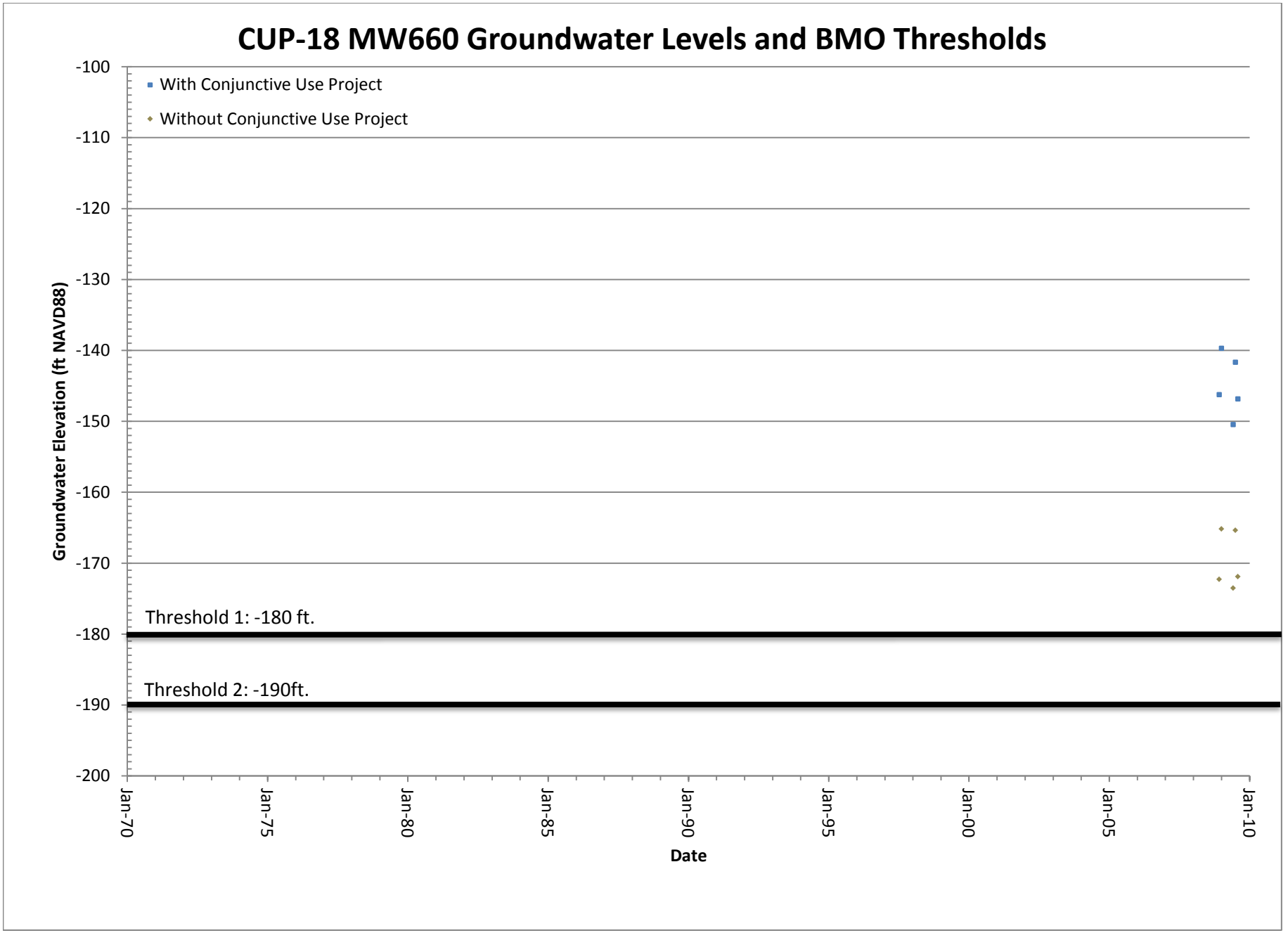

CUP-10A MW500 Groundwater Levels and BMO Thresholds
Groundwater Elevation (ft NAVD88)
100
90
80
70
60
50
40
30
20
10
0
Threshold 1: 25 ft.
Threshold 2: 15ft.
With Conjunctive Use Project
Without Conjunctive Use Project
Jan-70
Jan-75
Jan-80
Jan-85
Jan-90
Jan-95
Jan-00
Jan-05
Jan-10
Date

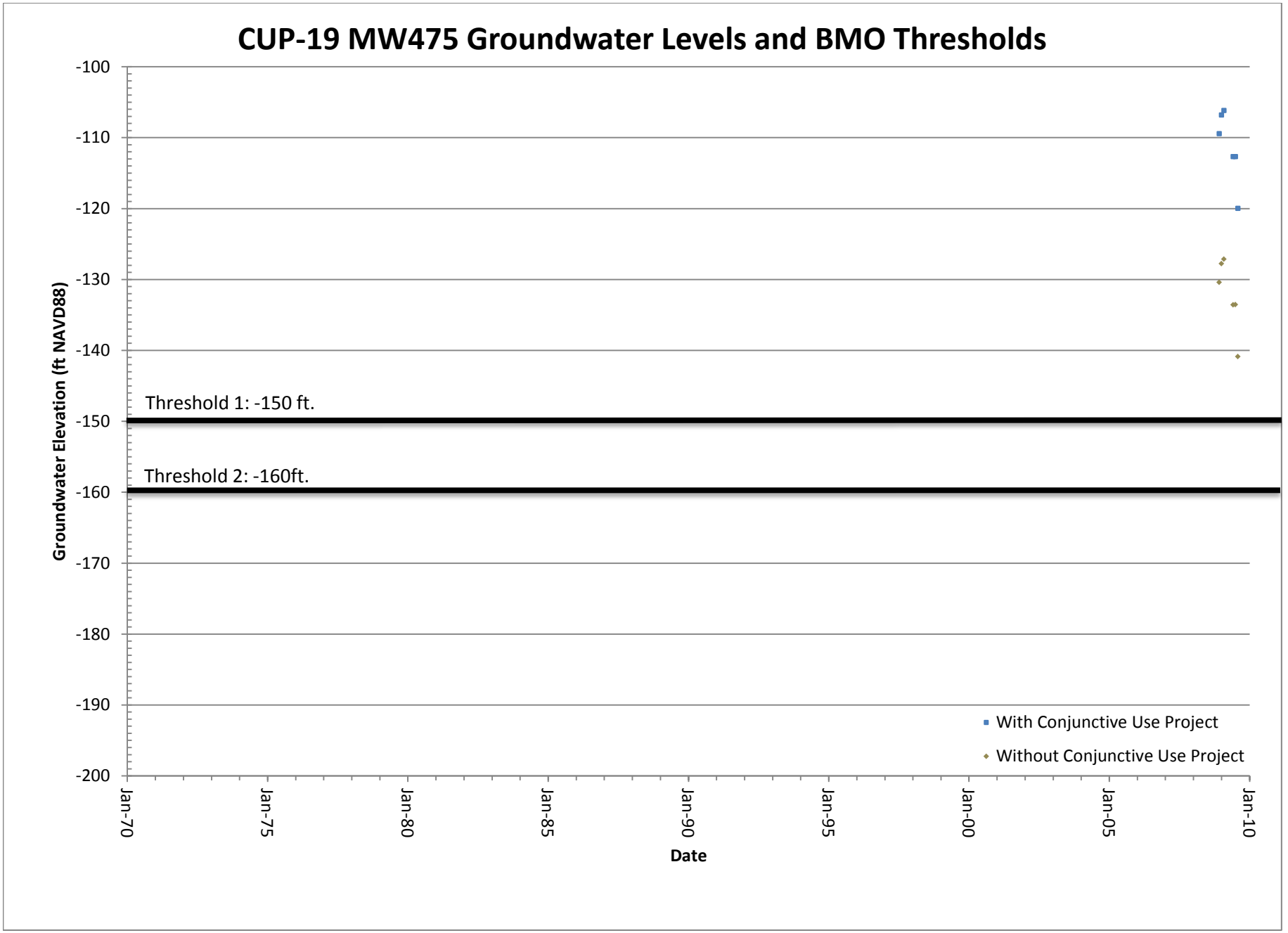

CUP-10A MW710 Groundwater Levels and BMO Thresholds
With Conjunctive Use Project
Without Conjunctive Use Project
Groundwater Elevation (ft NAVD88)
-100
-110
-120
-130
-140
-150
-160
-170
-180
-190
-200
Threshold 1: -180 ft.
Threshold 2: -190ft.
Jan-70
Jan-75
Jan-80
Jan-85
Jan-90
Jan-95
Jan-00
Jan-05
Jan-10
Date

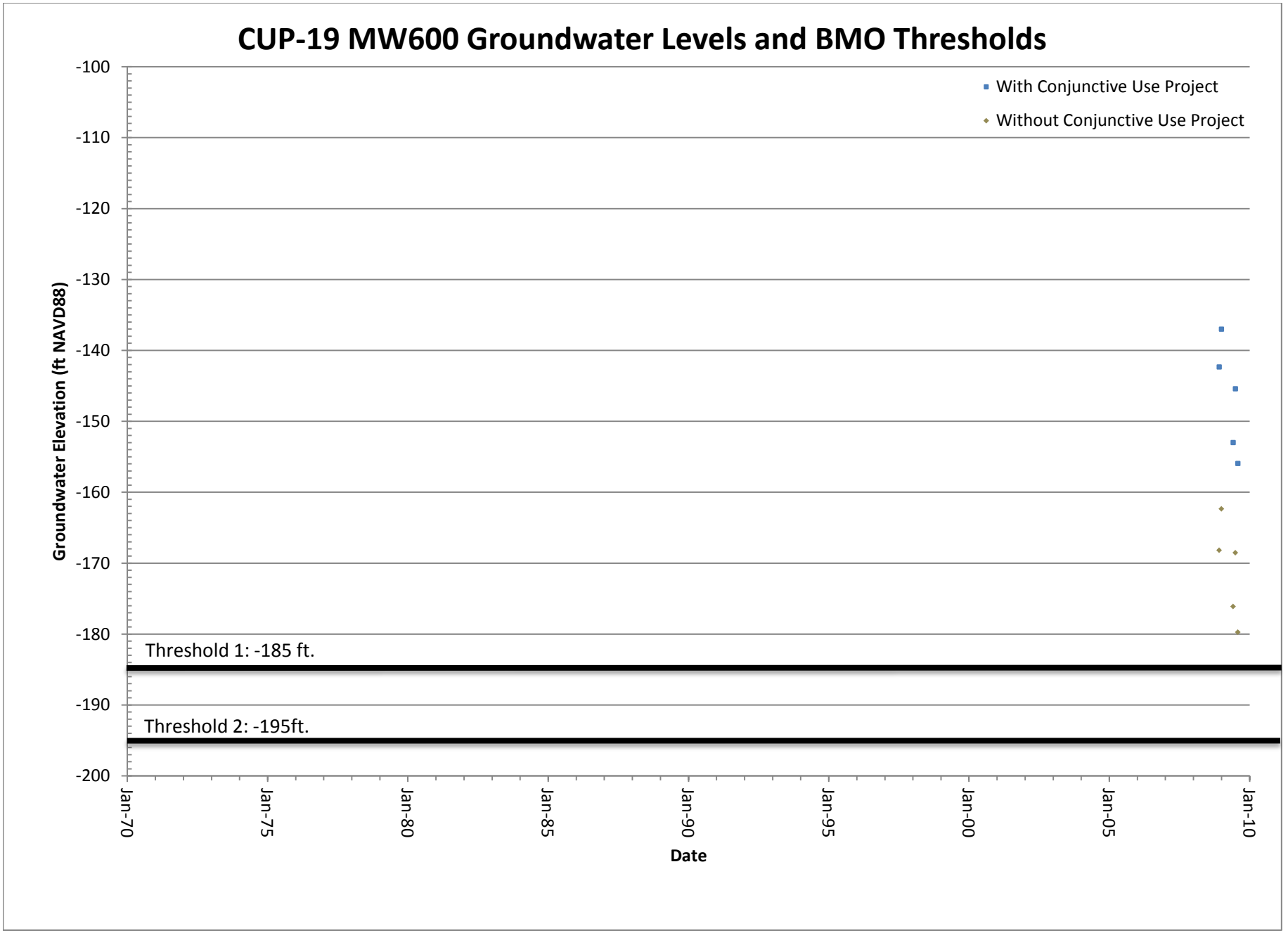

CUP-18 MW230 Groundwater Levels and BMO Thresholds
Groundwater Elevation (ft NAVD88)
0
-10
-20
-30
-40
-50
-60
-70
-80
-90
-100
Threshold 1: -70 ft.
Threshold 2: -80ft.
With Conjunctive Use Project
Without Conjunctive Use Project
Jan-70
Jan-75
Jan-80
Jan-85
Jan-90
Jan-95
Jan-00
Jan-05
Jan-10
Date

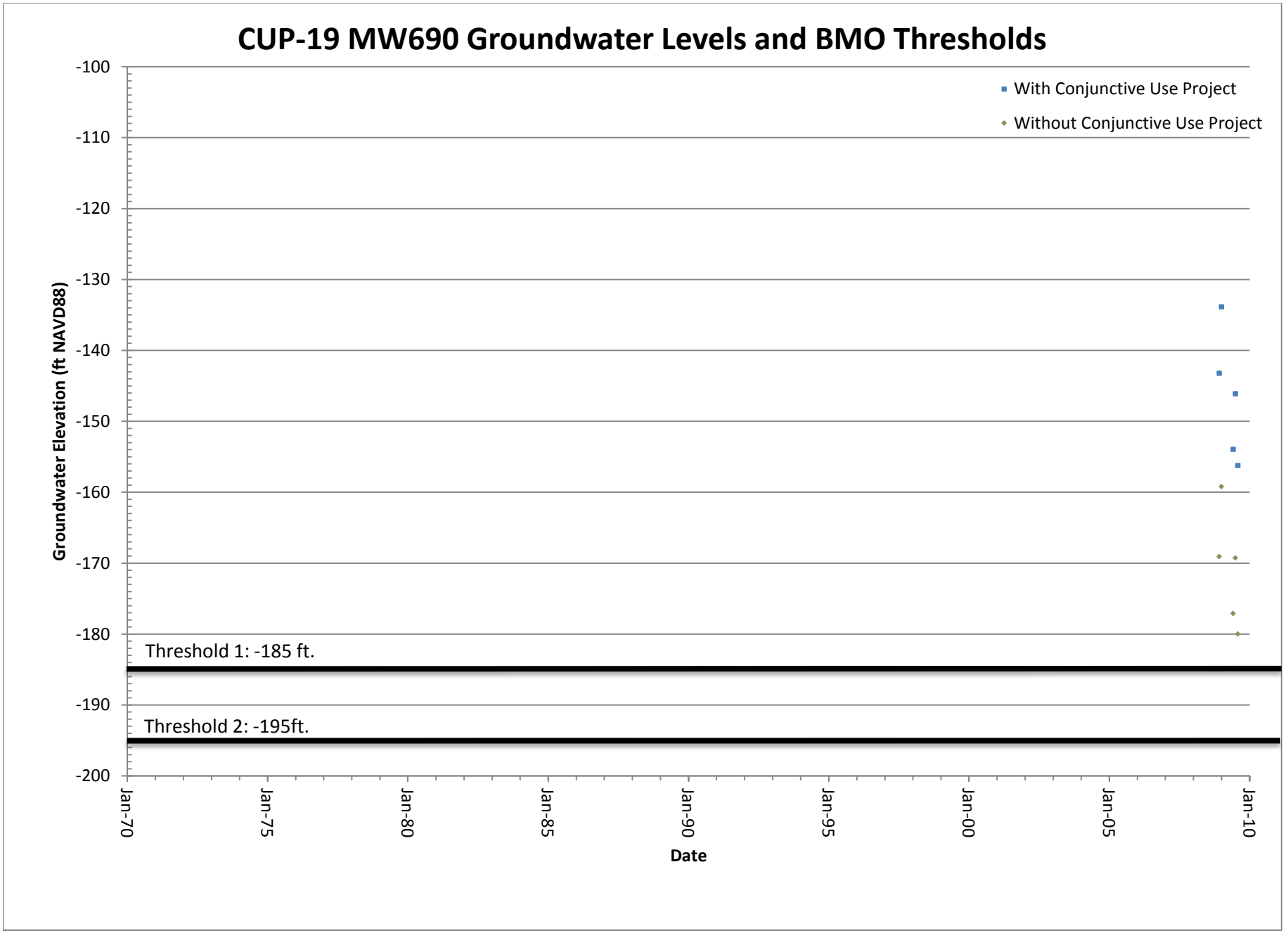

CUP-18 MW425 Groundwater Levels and BMO Thresholds
With Conjunctive Use Project
Without Conjunctive Use Project
Groundwater Elevation (ft NAVD88)
0
-10
-20
-30
-40
-50
-60
-70
-80
-90
-100
Threshold 1: -80 ft.
Threshold 2: -90ft.
Jan-70
Jan-75
Jan-80
Jan-85
Jan-90
Jan-95
Jan-00
Jan-05
Jan-10
Date

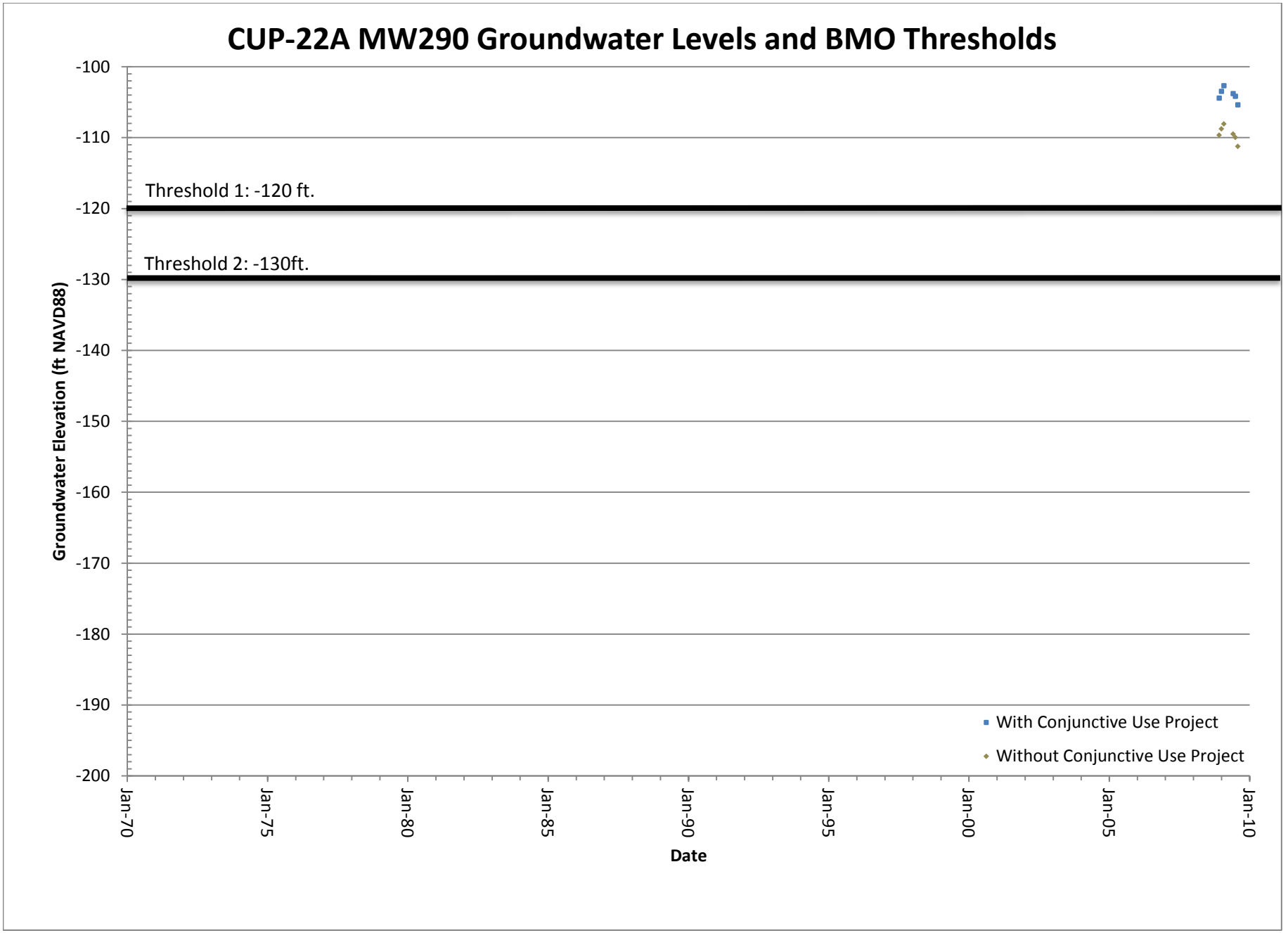

CUP-18 MW490 Groundwater Levels and BMO Thresholds
With Conjunctive Use Project
Without Conjunctive Use Project
Groundwater Elevation (ft NAVD88)
-50
-60
-70
-80
-90
-100
-110
-120
-130
-140
-150
Threshold 1: -135 ft.
Threshold 2: -145ft.
Jan-70
Jan-75
Jan-80
Jan-85
Jan-90
Jan-95
Jan-00
Jan-05
Jan-10
Date

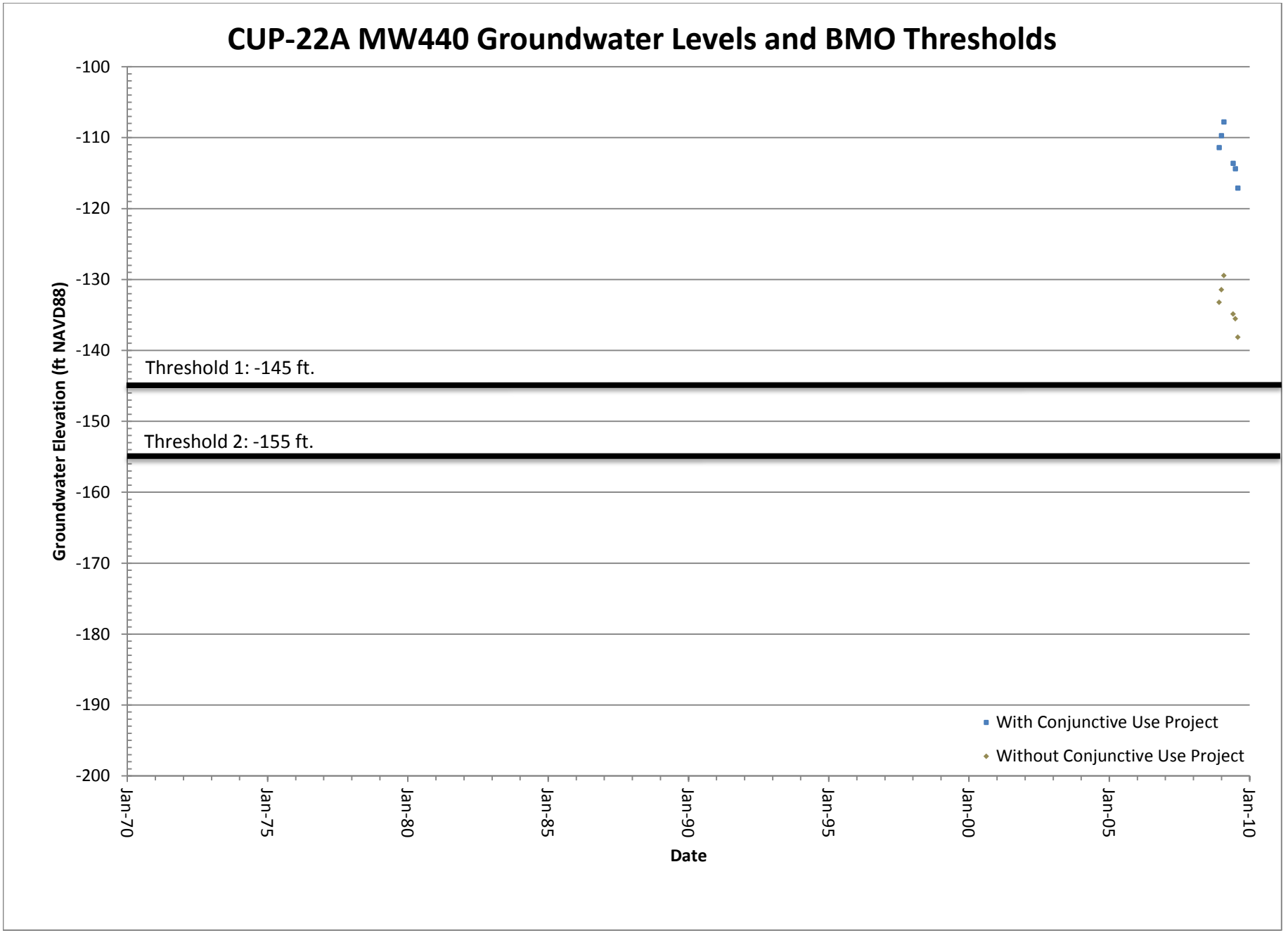

CUP-18 MW660 Groundwater Levels and BMO Thresholds
With Conjunctive Use Project
Without Conjunctive Use Project
Groundwater Elevation (ft NAVD88)
-100
-110
-120
-130
-140
-150
-160
-170
-180
-190
-200
Threshold 1: -180 ft.
Threshold 2: -190ft.
Jan-70
Jan-75
Jan-80
Jan-85
Jan-90
Jan-95
Jan-00
Jan-05
Jan-10
Date

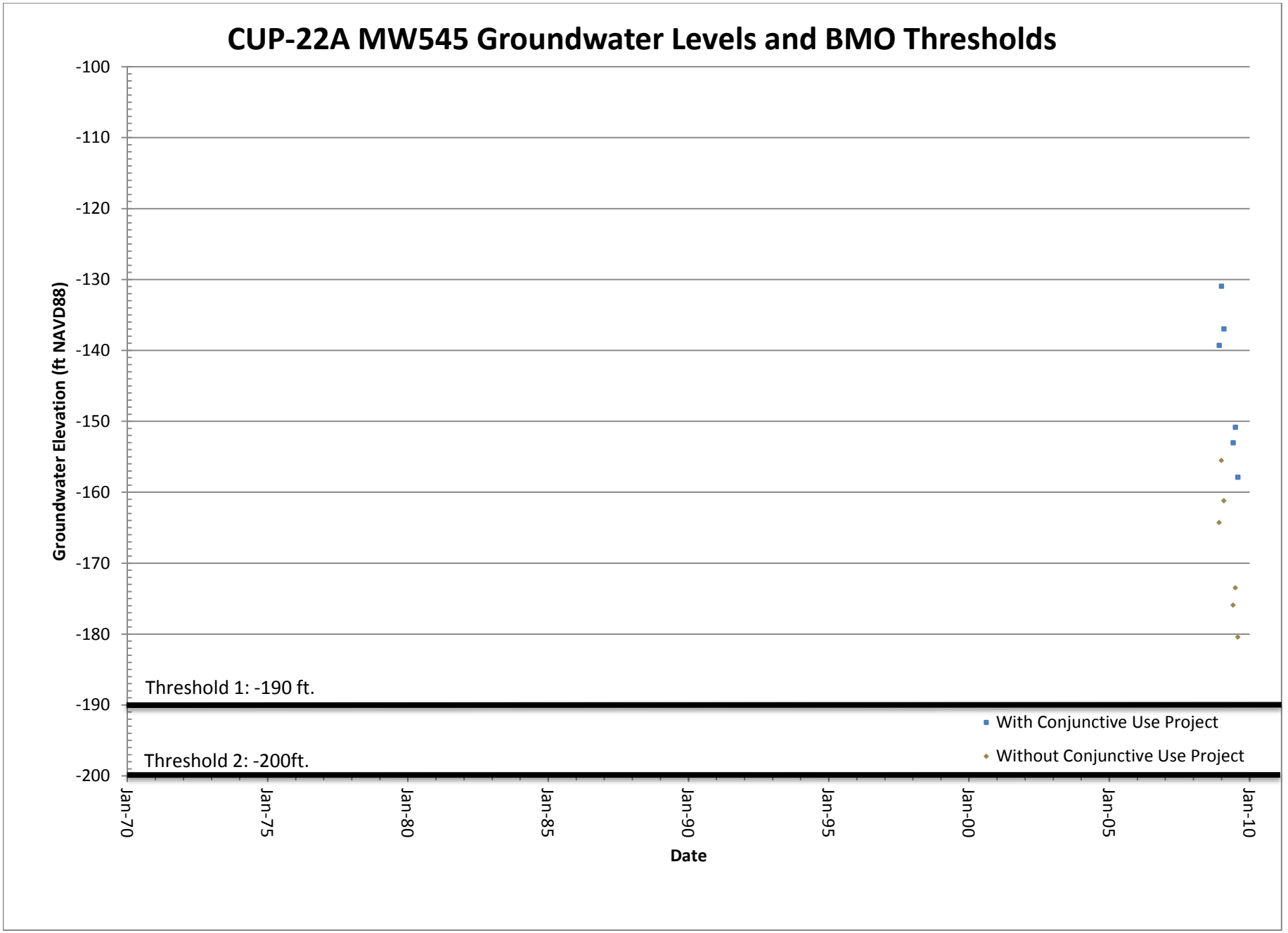

CUP-19 MW475 Groundwater Levels and BMO Thresholds
Groundwater Elevation (ft NAVD88)
-100
-110
-120
-130
-140
-150
-160
-170
-180
-190
-200
Threshold 1: -150 ft.
Threshold 2: -160ft.
Jan-70
Jan-75
Jan-80
Jan-85
Jan-90
Jan-95
Jan-00
Jan-05
Jan-10
Date
With Conjunctive Use Project
Without Conjunctive Use Project

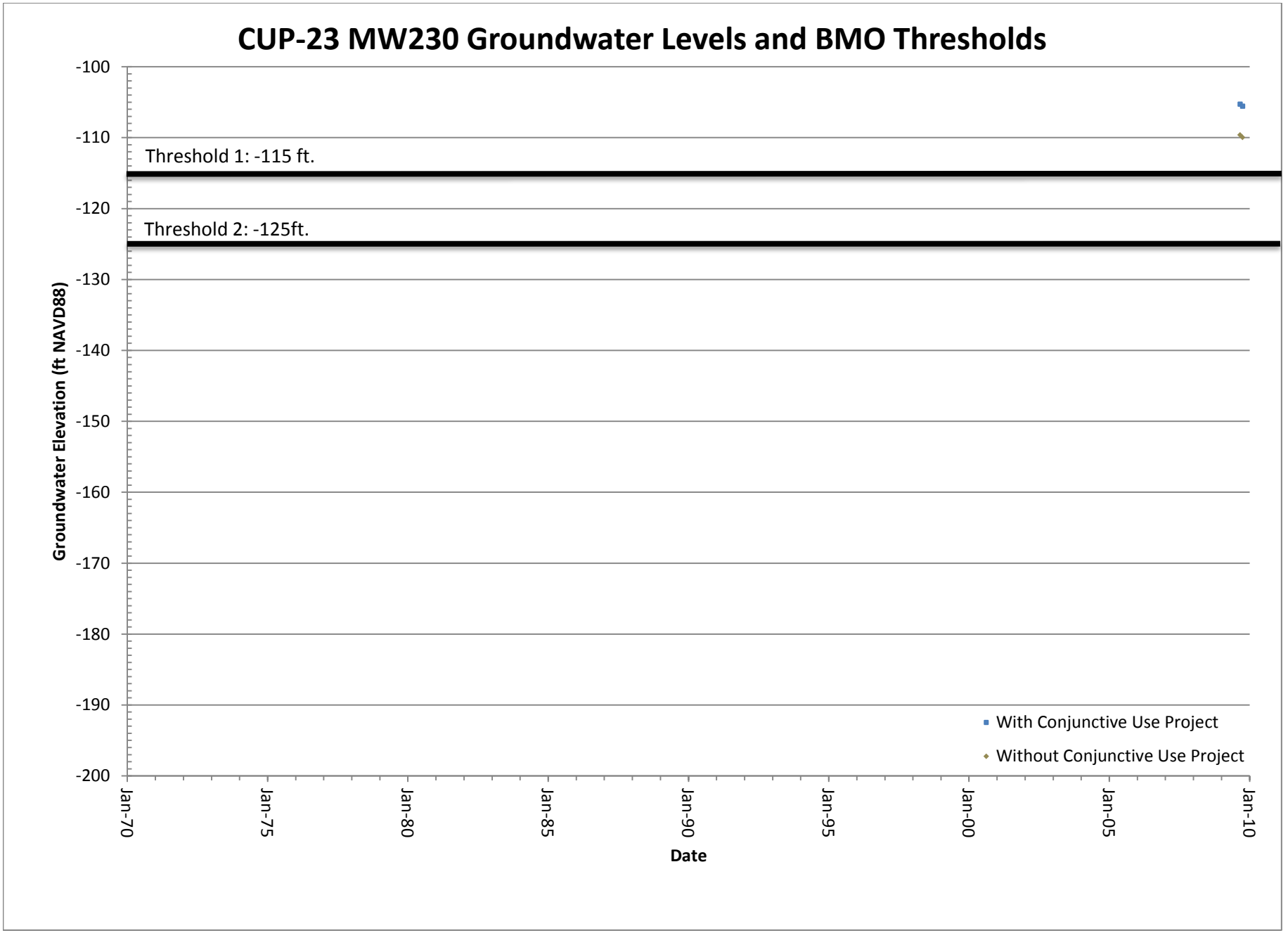

CUP-19 MW600 Groundwater Levels and BMO Thresholds
With Conjunctive Use Project
Without Conjunctive Use Project
Groundwater Elevation (ft NAVD88)
-100
-110
-120
-130
-140
-150
-160
-170
-180
-190
-200
Threshold 1: -185 ft.
Threshold 2: -195ft.
Jan-70
Jan-75
Jan-80
Jan-85
Jan-90
Jan-95
Jan-00
Jan-05
Jan-10
Date

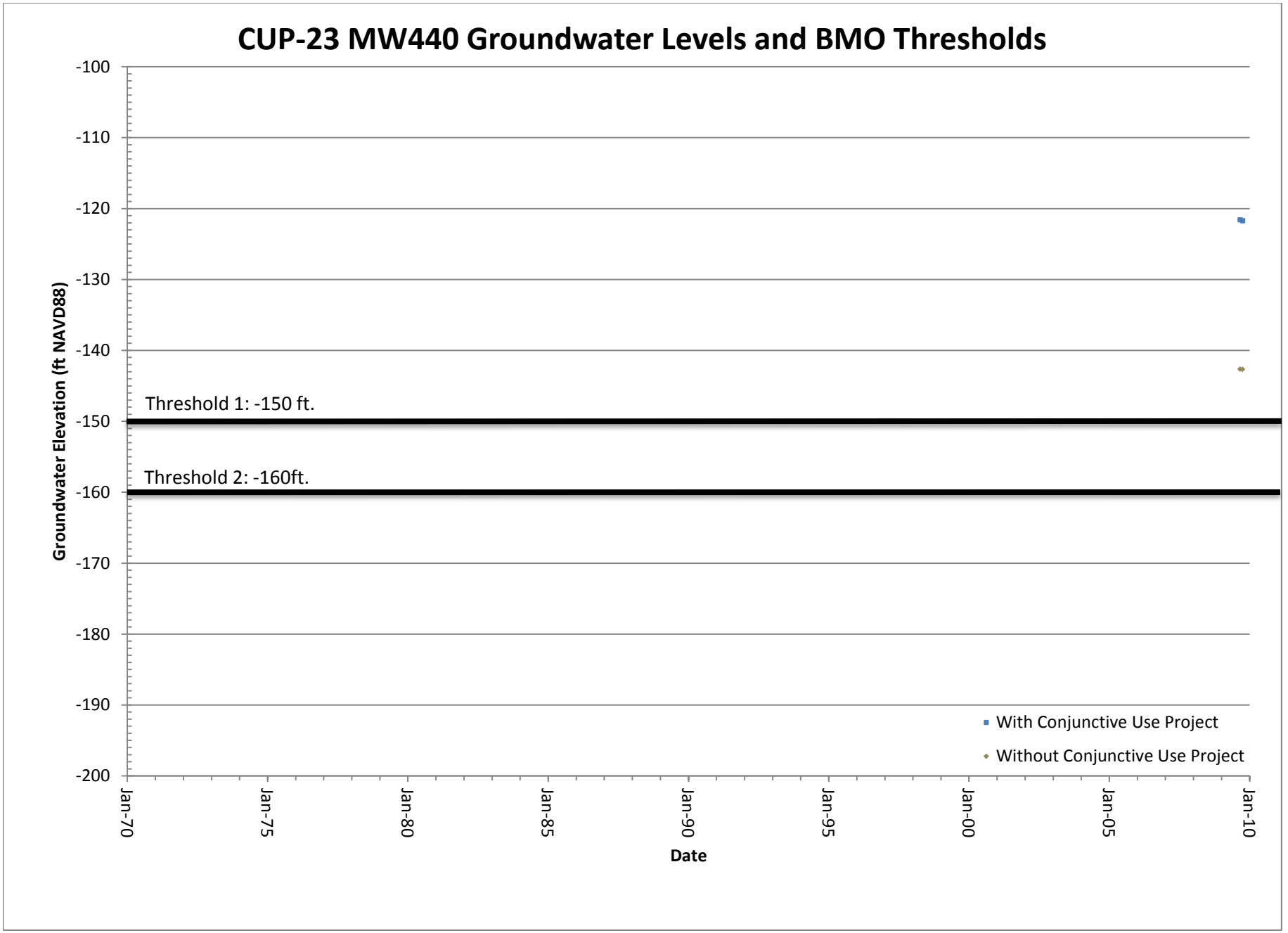

CUP-19 MW690 Groundwater Levels and BMO Thresholds
With Conjunctive Use Project
Without Conjunctive Use Project
Groundwater Elevation (ft NAVD88)
-100
-110
-120
-130
-140
-150
-160
-170
-180
-190
-200
Threshold 1: -185 ft.
Threshold 2: -195ft.
Jan-70
Jan-75
Jan-80
Jan-85
Jan-90
Jan-95
Jan-00
Jan-05
Jan-10
Date

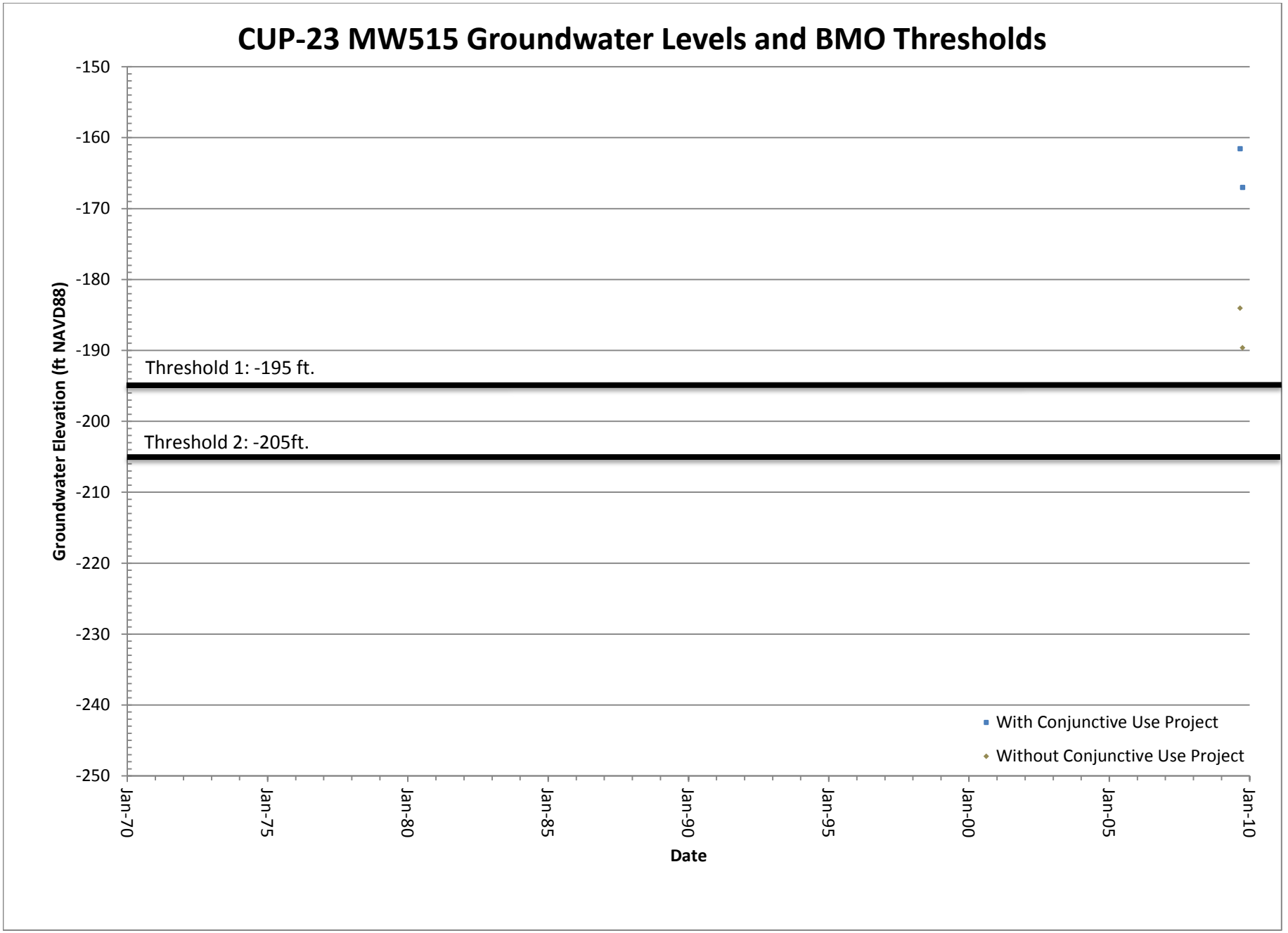

CUP-22A MW290 Groundwater Levels and BMO Thresholds
-100
-110
-120
-130
-140
-150
-160
-170
-180
-190
-200
Groundwater Elevation (ft NAVD88)
Threshold 1: -120 ft.
Threshold 2: -130ft.
With Conjunctive Use Project
Without Conjunctive Use Project
Jan-70
Jan-75
Jan-80
Jan-85
Jan-90
Jan-95
Jan-00
Jan-05
Jan-10
Date

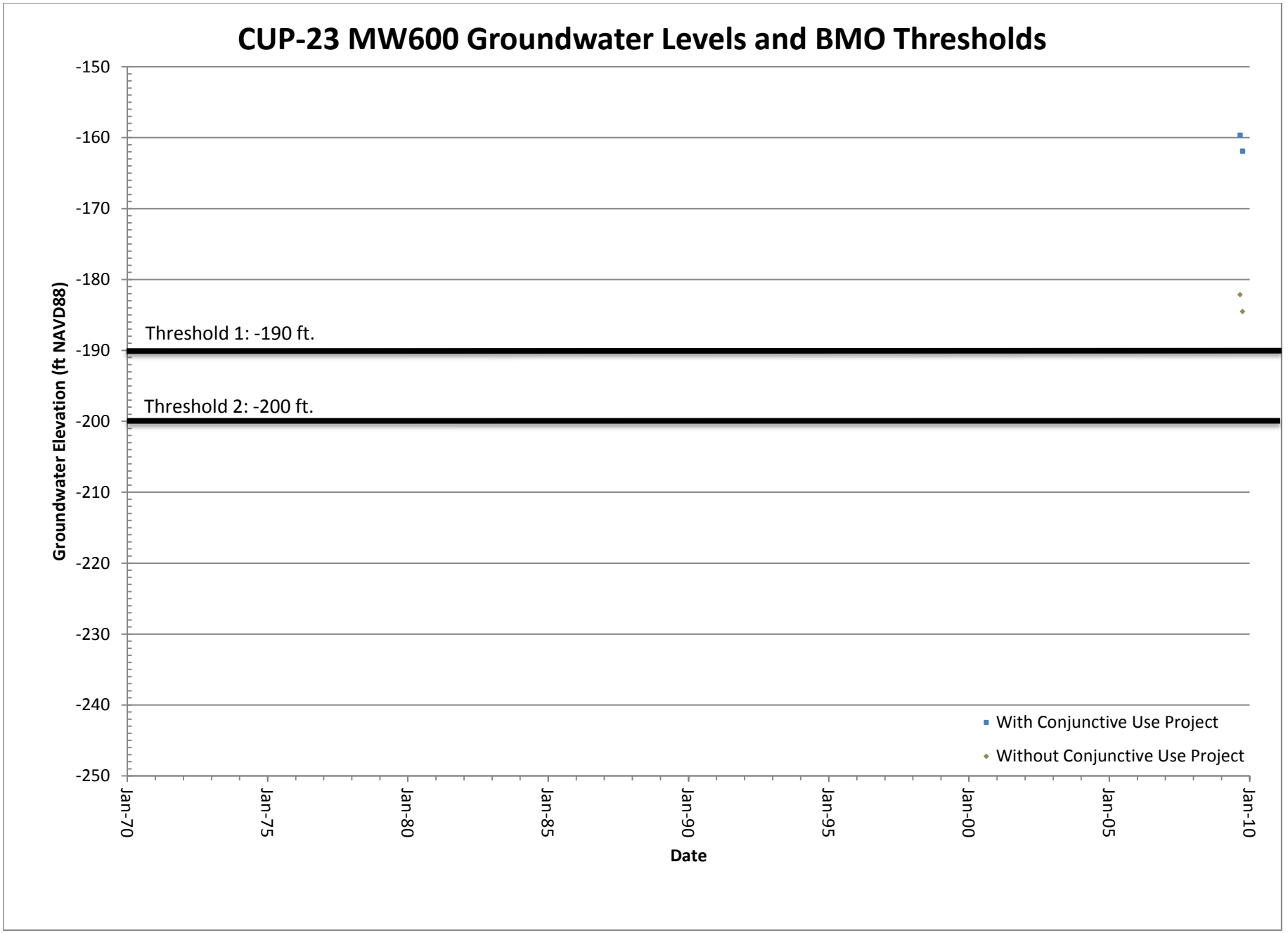

CUP-22A MW440 Groundwater Levels and BMO Thresholds
Groundwater Elevation (ft NAVD88)
-100
-110
-120
-130
-140
-150
-160
-170
-180
-190
-200
Threshold 1: -145 ft.
Threshold 2: -155 ft.
With Conjunctive Use Project
Without Conjunctive Use Project
Jan-70
Jan-75
Jan-80
Jan-85
Jan-90
Jan-95
Jan-00
Jan-05
Jan-10
Date

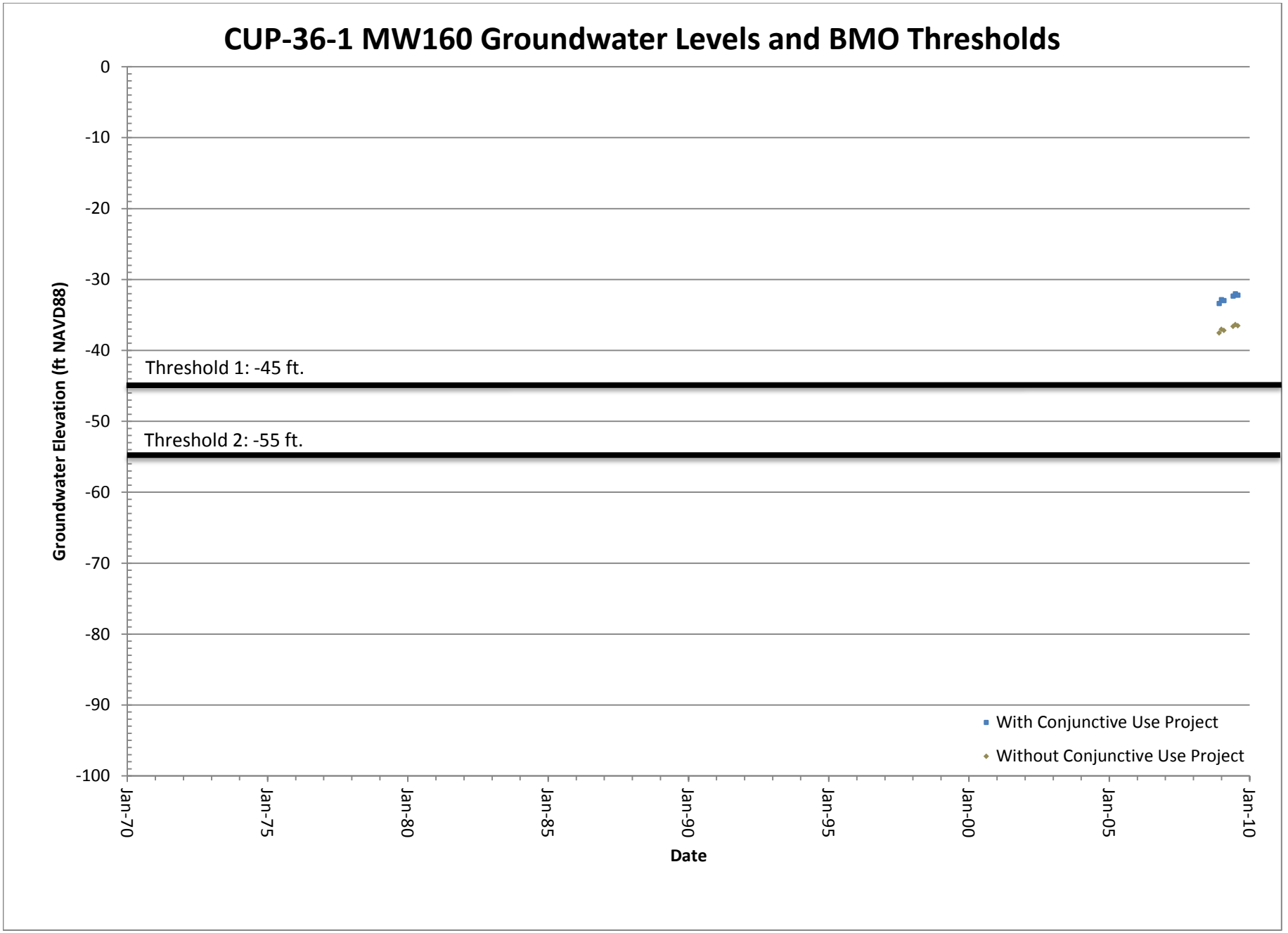

CUP-22A MW545 Groundwater Levels and BMO Thresholds
Groundwater Elevation (ft NAVD88)
-100
-110
-120
-130
-140
-150
-160
-170
-180
-190
-200
Threshold 1: -190 ft.
Threshold 2: -200ft.
With Conjunctive Use Project
Without Conjunctive Use Project
Jan-70
Jan-75
Jan-80
Jan-85
Jan-90
Jan-95
Jan-00
Jan-05
Jan-10
Date

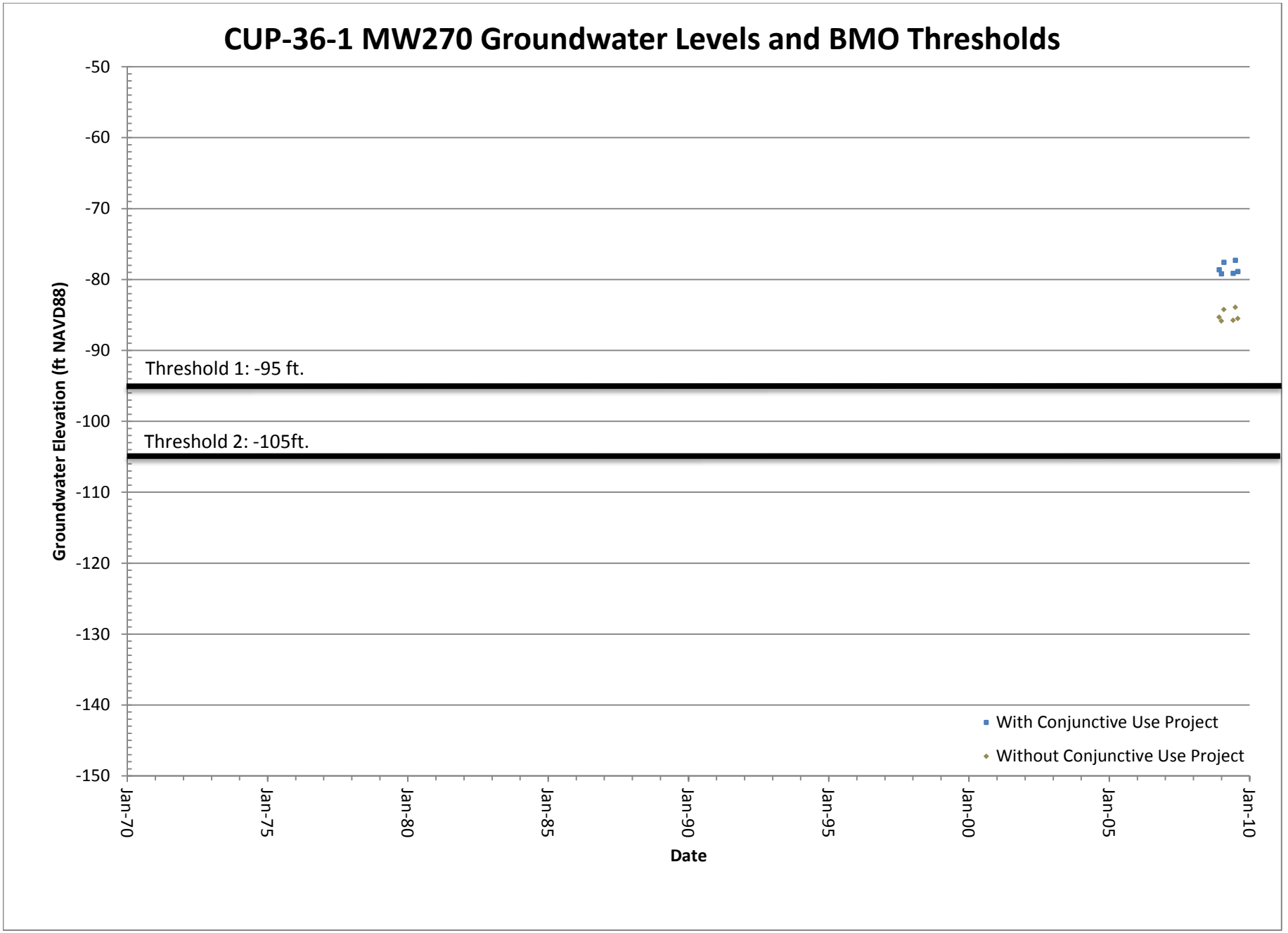

CUP-23 MW230 Groundwater Levels and BMO Thresholds
-100
-110
-120
-130
-140
-150
-160
-170
-180
-190
-200
Groundwater Elevation (ft NAVD88)
Threshold 1: -115 ft.
Threshold 2: -125ft.
With Conjunctive Use Project
Without Conjunctive Use Project
Jan-70
Jan-75
Jan-80
Jan-85
Jan-90
Jan-95
Jan-00
Jan-05
Jan-10
Date

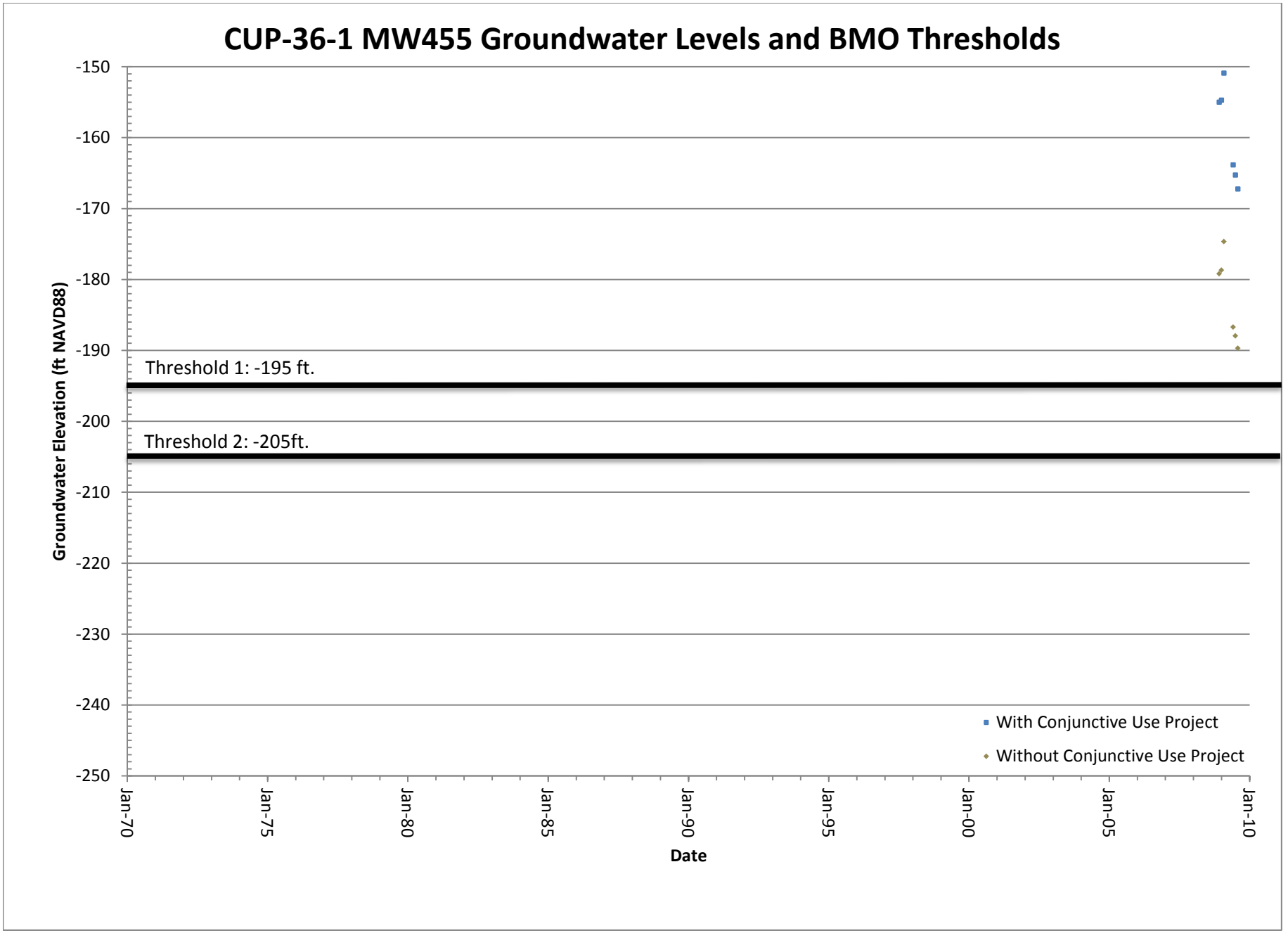

CUP-23 MW440 Groundwater Levels and BMO Thresholds
Groundwater Elevation (ft NAVD88)
-100
-110
-120
-130
-140
-150
-160
-170
-180
-190
-200
Threshold 1: -150 ft.
Threshold 2: -160ft.
With Conjunctive Use Project
Without Conjunctive Use Project
Jan-70
Jan-75
Jan-80
Jan-85
Jan-90
Jan-95
Jan-00
Jan-05
Jan-10
Date

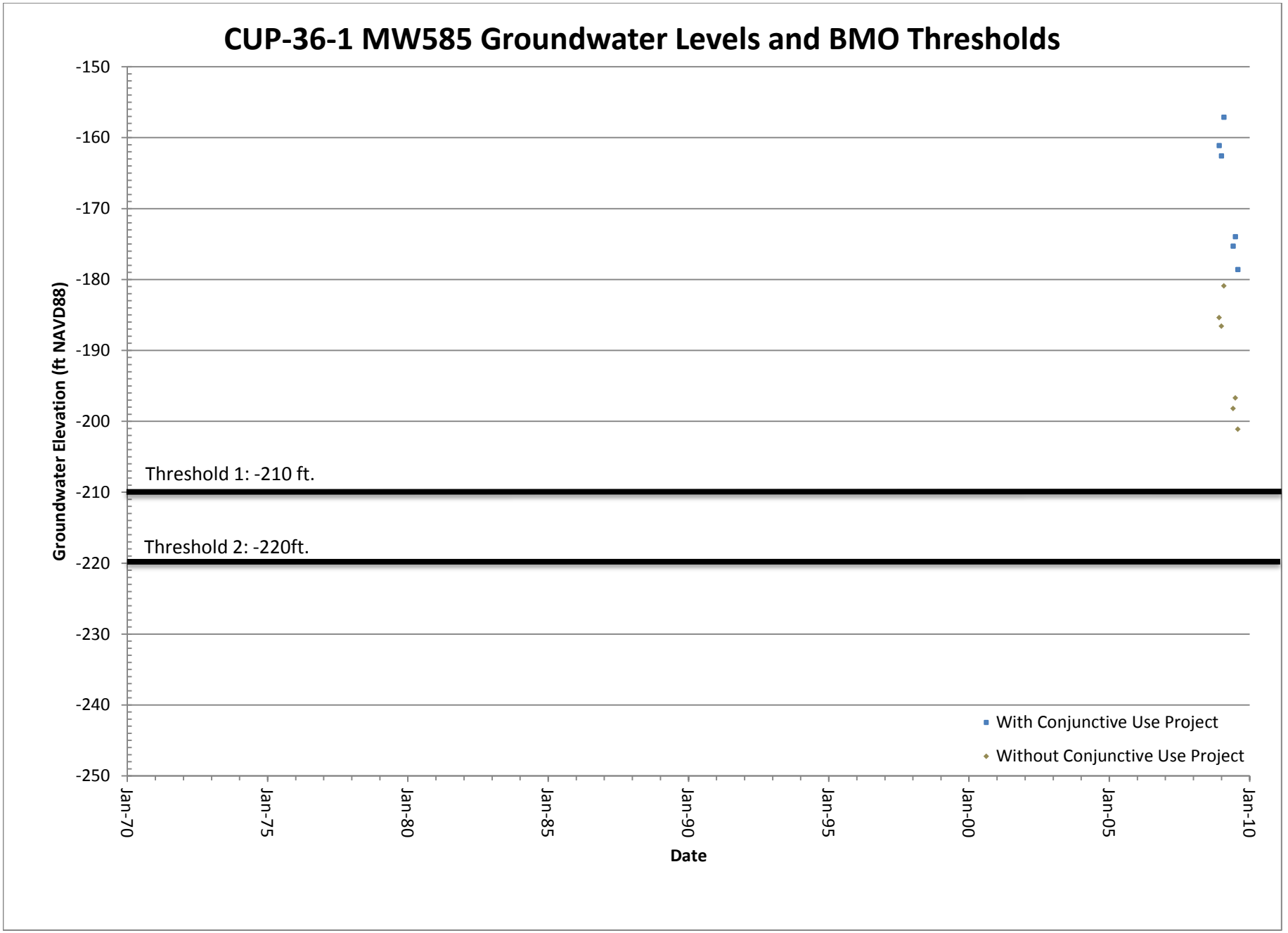

CUP-23 MW515 Groundwater Levels and BMO Thresholds
Groundwater Elevation (ft NAVD88)
-150
-160
-170
-180
-190
-200
-210
-220
-230
-240
-250
Threshold 1: -195 ft.
Threshold 2: -205ft.
With Conjunctive Use Project
Without Conjunctive Use Project
Jan-70
Jan-75
Jan-80
Jan-85
Jan-90
Jan-95
Jan-00
Jan-05
Jan-10
Date

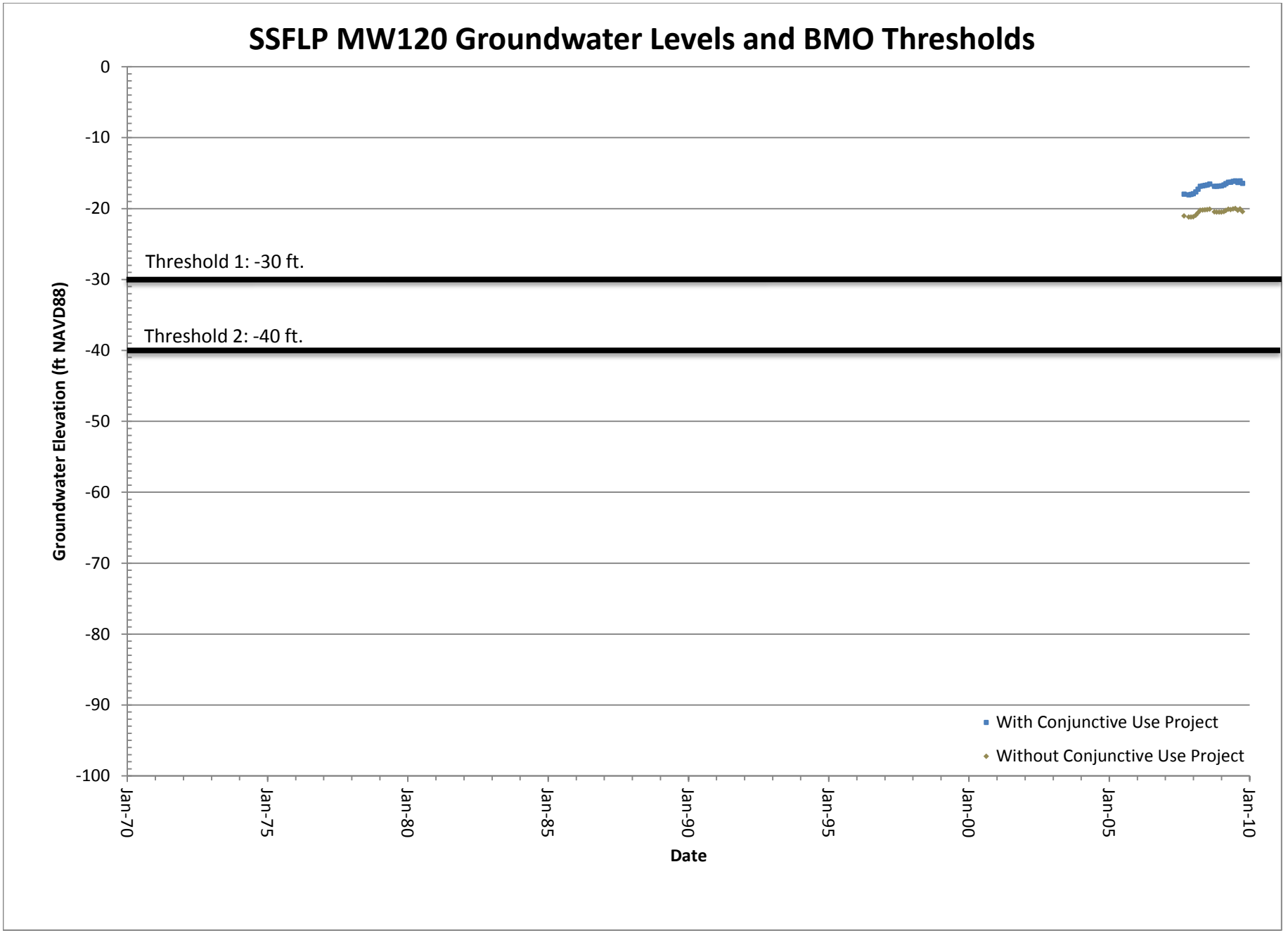

CUP-23 MW600 Groundwater Levels and BMO Thresholds
-150
-160
-170
-180
-190
-200
-210
-220
-230
-240
-250
Groundwater Elevation (ft NAVD88)
Threshold 1: -190 ft.
Threshold 2: -200 ft.
With Conjunctive Use Project
Without Conjunctive Use Project
Jan-70
Jan-75
Jan-80
Jan-85
Jan-90
Jan-95
Jan-00
Jan-05
Jan-10
Date

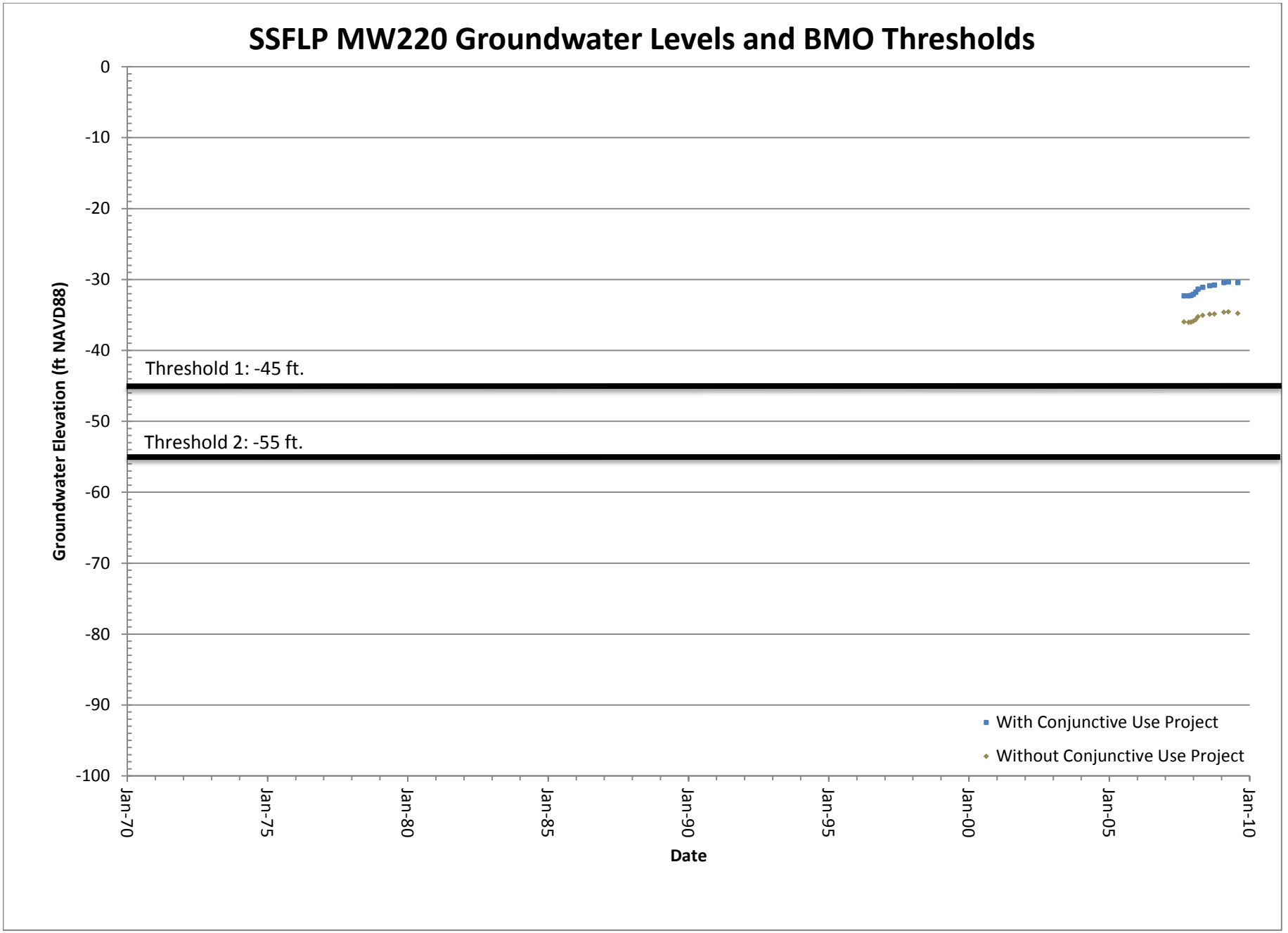

CUP-36-1 MW160 Groundwater Levels and BMO Thresholds
Groundwater Elevation (ft NAVD88)
0
-10
-20
-30
-40
-50
-60
-70
-80
-90
-100
Threshold 1: -45 ft.
Threshold 2: -55 ft.
With Conjunctive Use Project
Without Conjunctive Use Project
Jan-70
Jan-75
Jan-80
Jan-85
Jan-90
Jan-95
Jan-00
Jan-05
Jan-10
Date

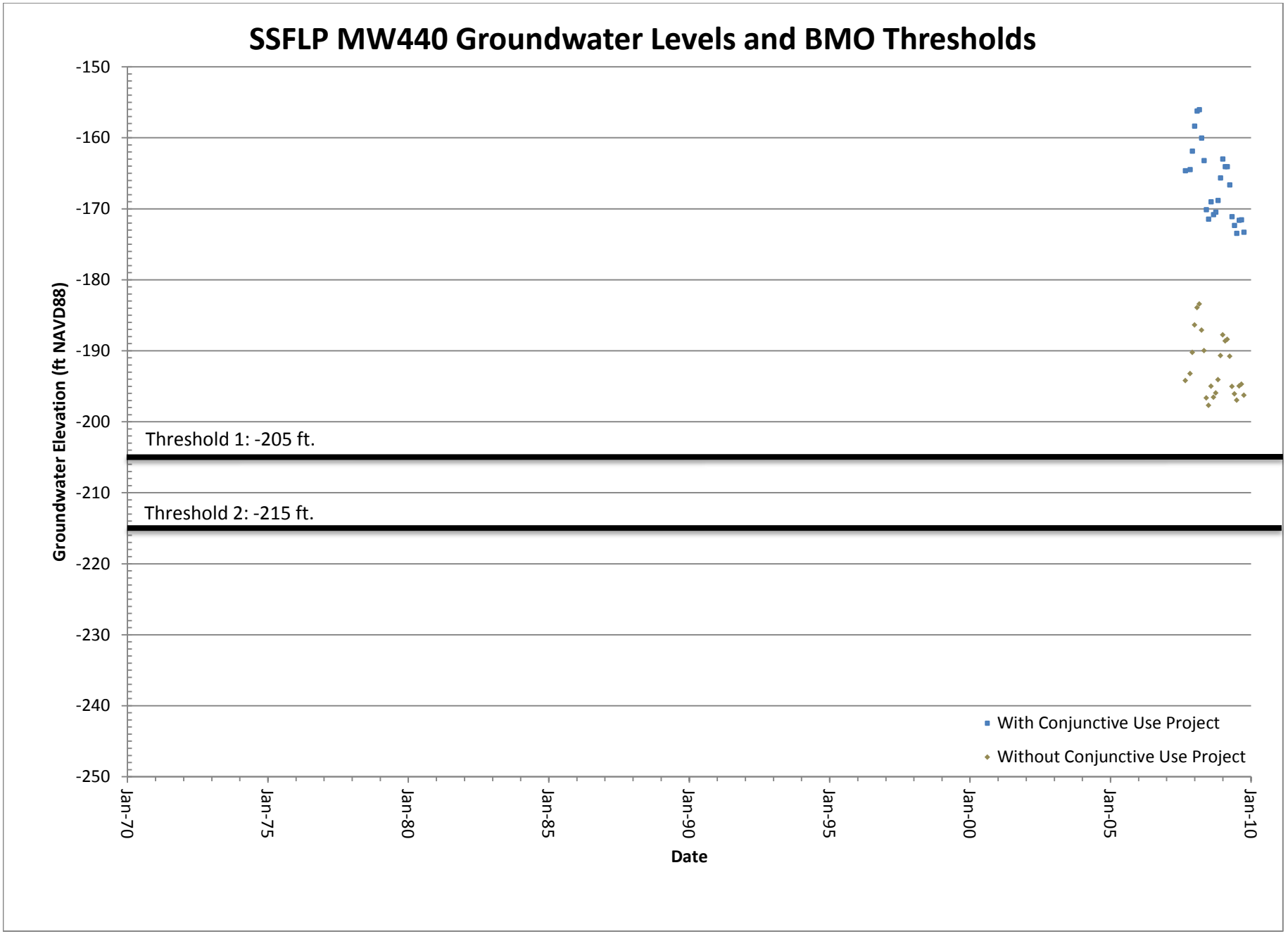

CUP-36-1 MW270 Groundwater Levels and BMO Thresholds
Groundwater Elevation (ft NAVD88)
-50
-60
-70
-80
-90
-100
-110
-120
-130
-140
-150
Threshold 1: -95 ft.
Threshold 2: -105ft.
With Conjunctive Use Project
Without Conjunctive Use Project
Jan-70
Jan-75
Jan-80
Jan-85
Jan-90
Jan-95
Jan-00
Jan-05
Jan-10
Date

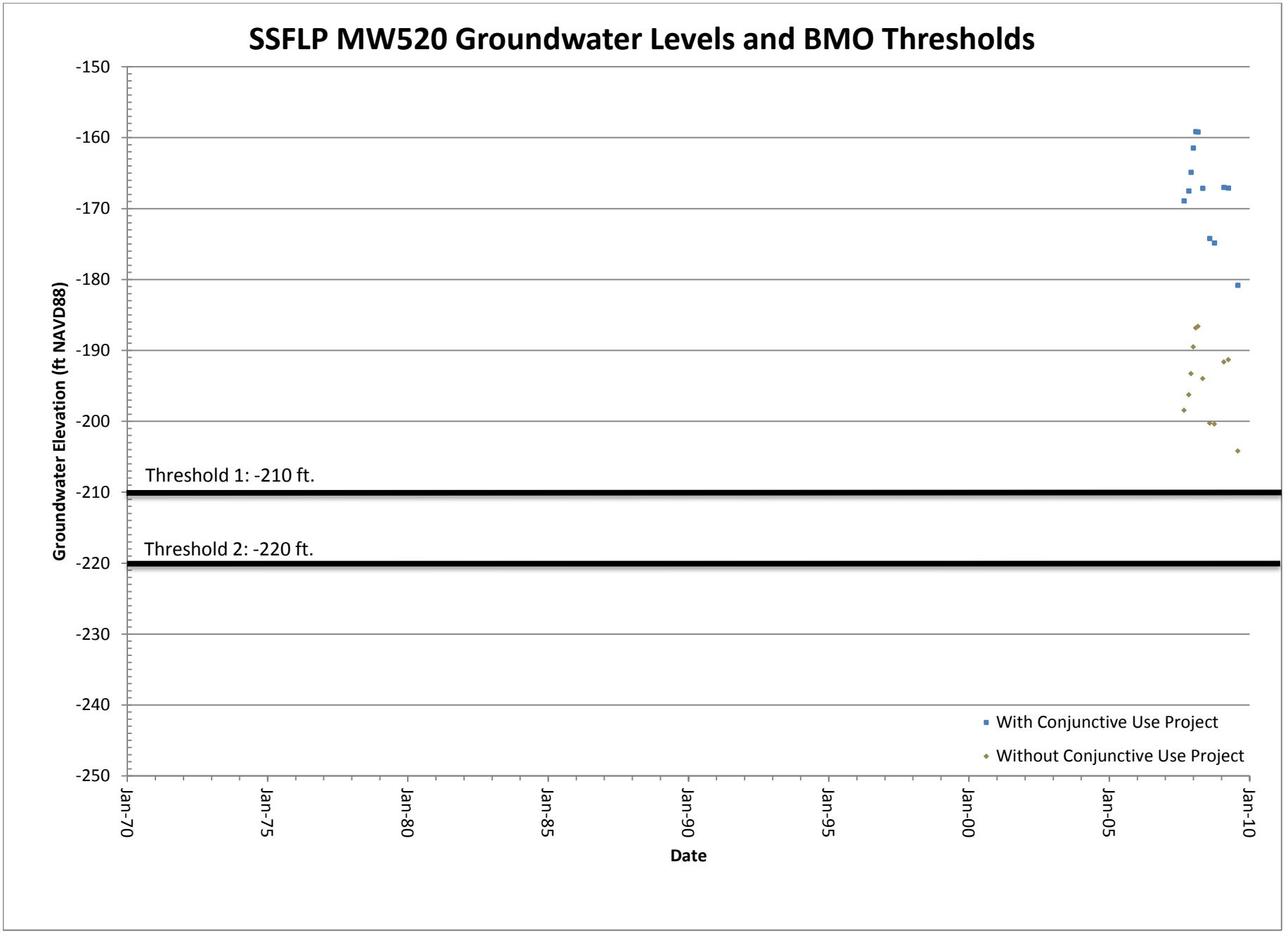

CUP-36-1 MW455 Groundwater Levels and BMO Thresholds
Groundwater Elevation (ft NAVD88)
-150
-160
-170
-180
-190
-200
-210
-220
-230
-240
-250
Threshold 1: -195 ft.
Threshold 2: -205ft.
With Conjunctive Use Project
Without Conjunctive Use Project
Jan-70
Jan-75
Jan-80
Jan-85
Jan-90
Jan-95
Jan-00
Jan-05
Jan-10
Date

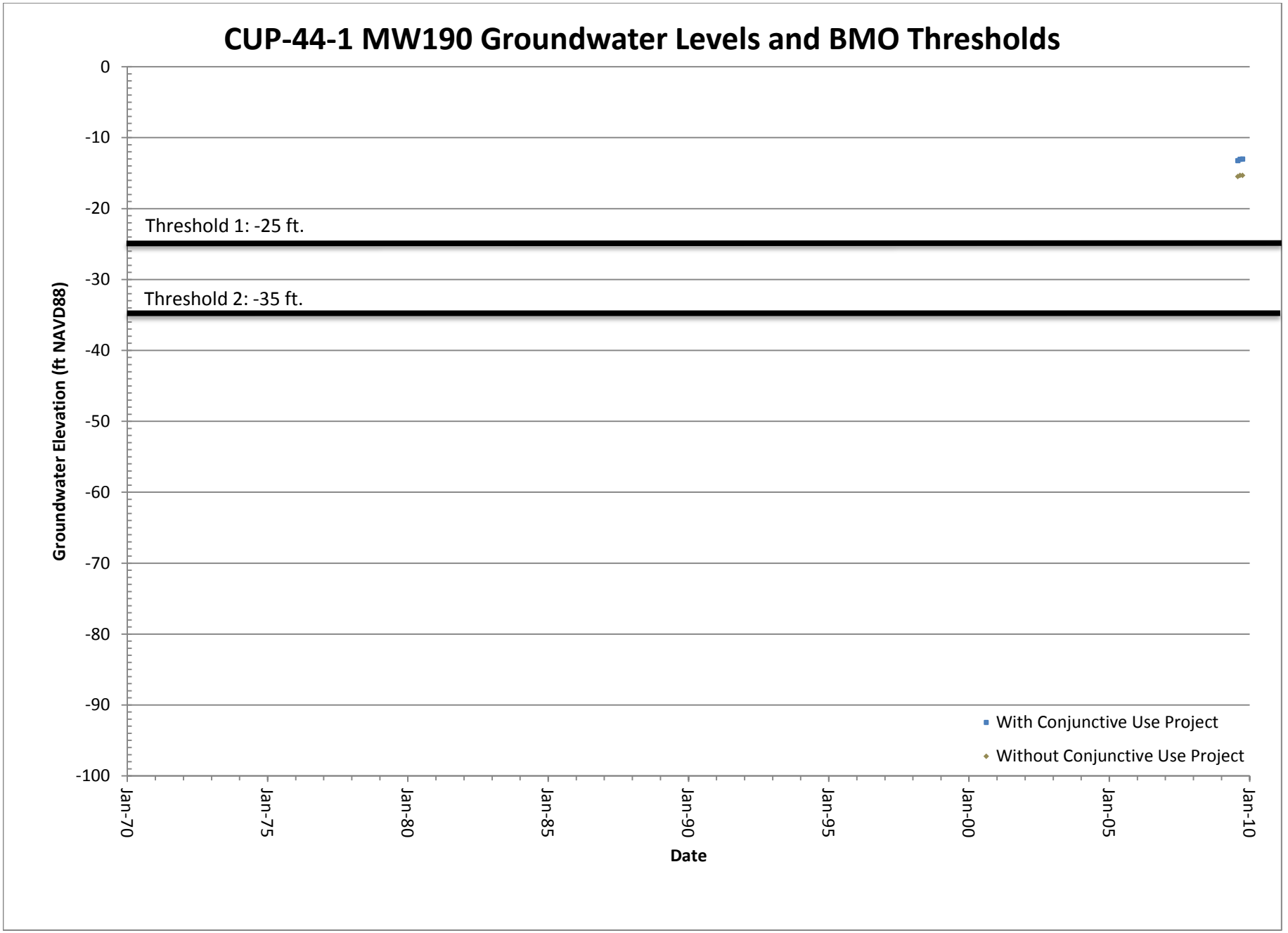

CUP-36-1 MW585 Groundwater Levels and BMO Thresholds
Groundwater Elevation (ft NAVD88)
-150
-160
-170
-180
-190
-200
-210
-220
-230
-240
-250
Threshold 1: -210 ft.
Threshold 2: -220ft.
With Conjunctive Use Project
Without Conjunctive Use Project
Jan-70
Jan-75
Jan-80
Jan-85
Jan-90
Jan-95
Jan-00
Jan-05
Jan-10
Date

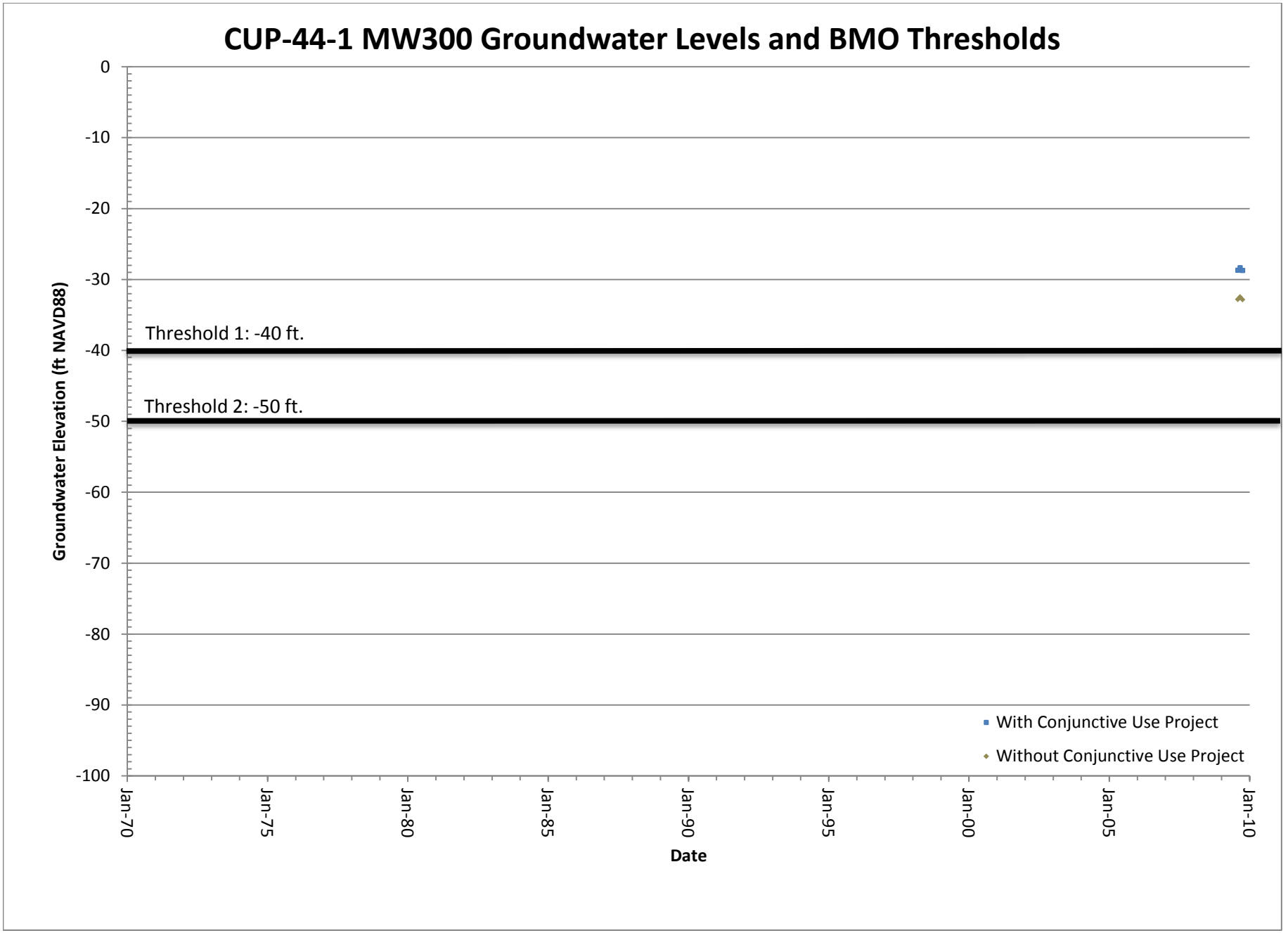

SSFLP MW120 Groundwater Levels and BMO Thresholds
Groundwater Elevation (ft NAVD88)
0
-10
-20
-30
-40
-50
-60
-70
-80
-90
-100
Threshold 1: -30 ft.
Threshold 2: -40 ft.
Jan-70
Jan-75
Jan-80
Jan-85
Jan-90
Jan-95
Jan-00
Jan-05
Jan-10
Date
With Conjunctive Use Project
Without Conjunctive Use Project

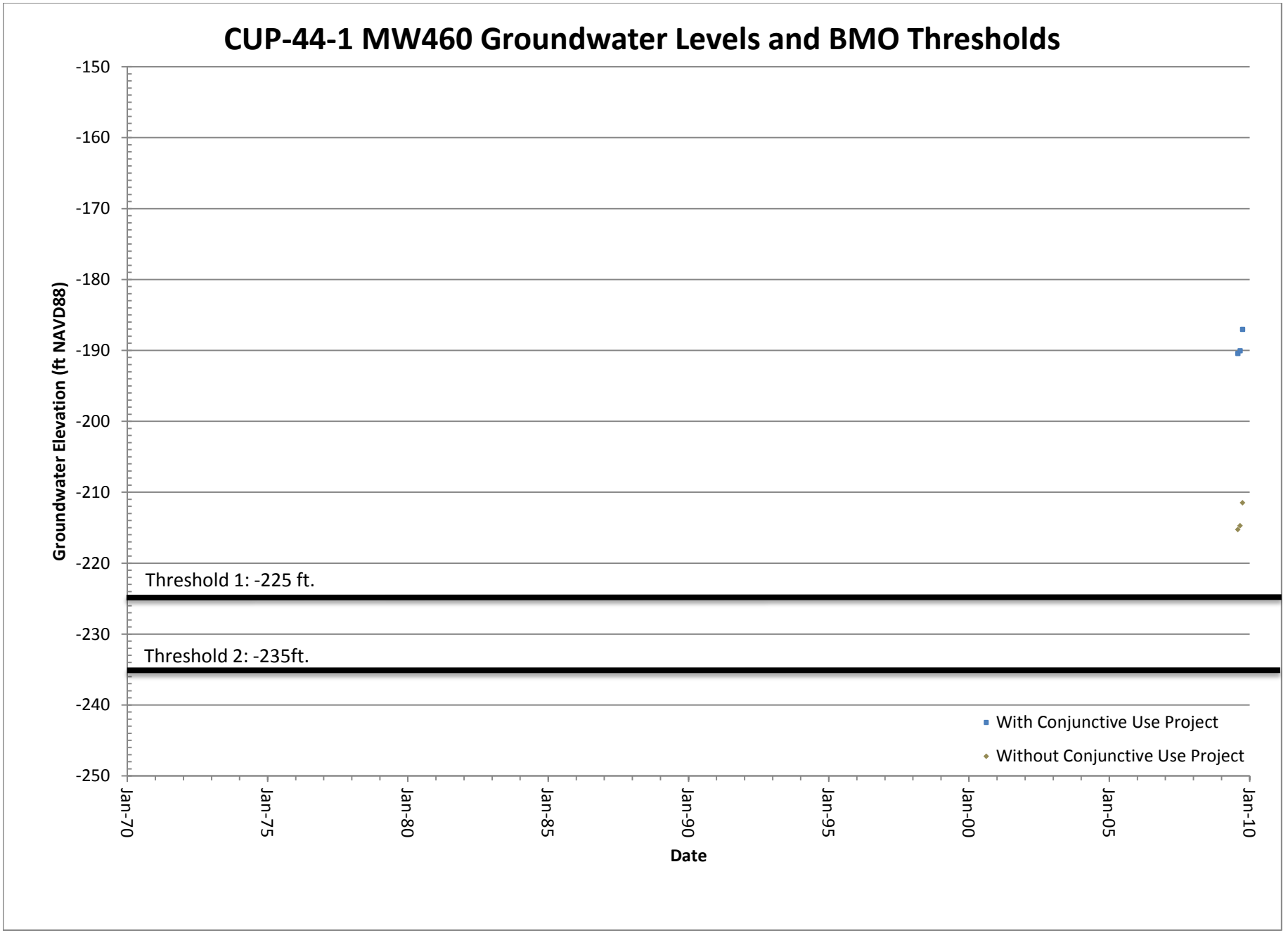

SSFLP MW220 Groundwater Levels and BMO Thresholds
Groundwater Elevation (ft NAVD88)
0
-10
-20
-30
-40
-50
-60
-70
-80
-90
-100
Threshold 1: -45 ft.
Threshold 2: -55 ft.
With Conjunctive Use Project
Without Conjunctive Use Project
Jan-70
Jan-75
Jan-80
Jan-85
Jan-90
Jan-95
Jan-00
Jan-05
Jan-10
Date

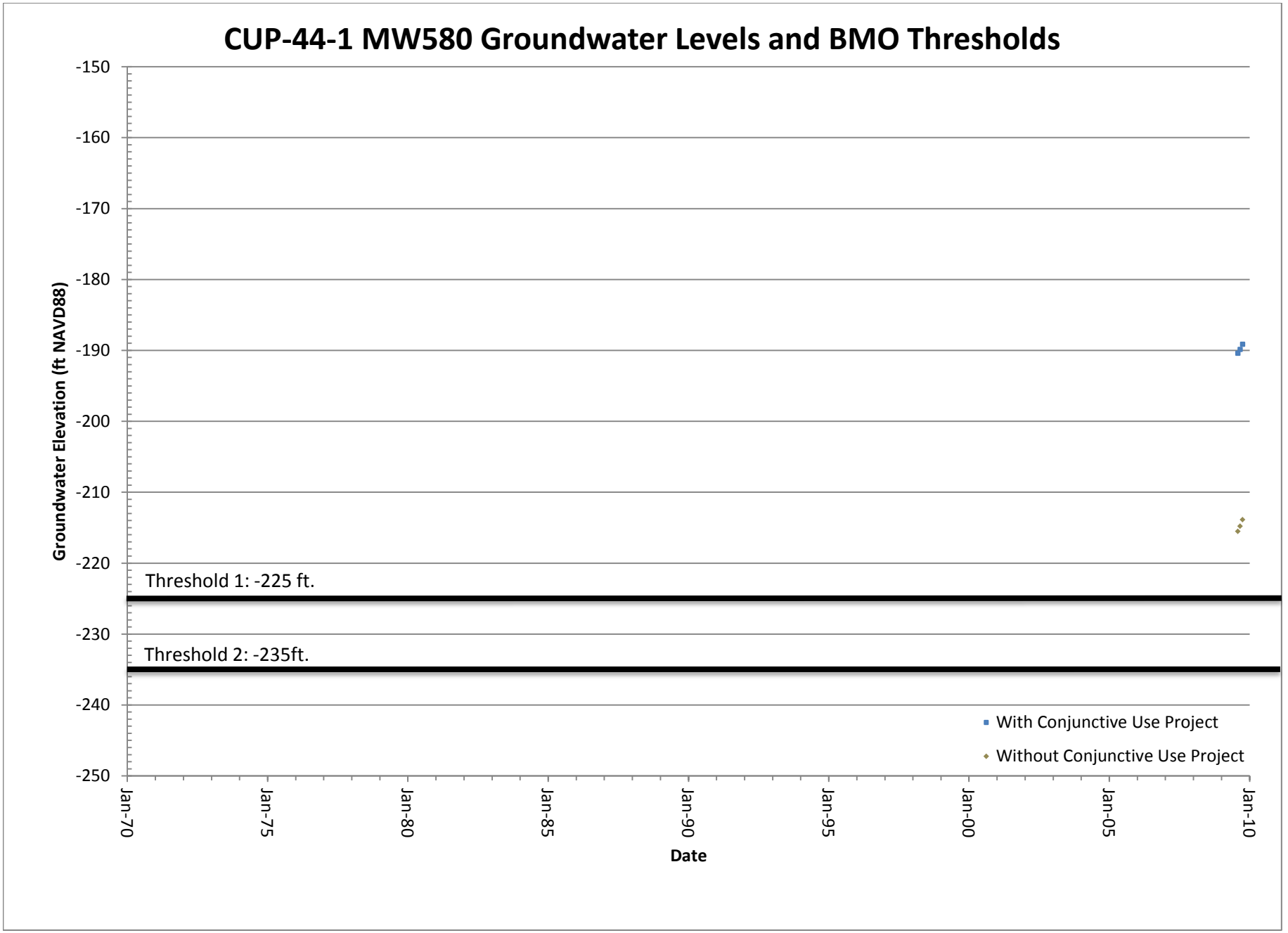

SSFLP MW440 Groundwater Levels and BMO Thresholds
Groundwater Elevation (ft NAVD88)
-150
-160
-170
-180
-190
-200
-210
-220
-230
-240
-250
Threshold 1: -205 ft.
Threshold 2: -215 ft.
With Conjunctive Use Project
Without Conjunctive Use Project
Jan-70
Jan-75
Jan-80
Jan-85
Jan-90
Jan-95
Jan-00
Jan-05
Jan-10
Date


SSFLP MW520 Groundwater Levels and BMO Thresholds
Groundwater Elevation (ft NAVD88)
-150
-160
-170
-180
-190
-200
-210
-220
-230
-240
-250
Threshold 1: -210 ft.
Threshold 2: -220 ft.
With Conjunctive Use Project
Without Conjunctive Use Project
Jan-70
Jan-75
Jan-80
Jan-85
Jan-90
Jan-95
Jan-00
Jan-05
Jan-10
Date


CUP-44-1 MW190 Groundwater Levels and BMO Thresholds
Groundwater Elevation (ft NAVD88)
0
-10
-20
-30
-40
-50
-60
-70
-80
-90
-100
Threshold 1: -25 ft.
Threshold 2: -35 ft.
With Conjunctive Use Project
Without Conjunctive Use Project
Jan-70
Jan-75
Jan-80
Jan-85
Jan-90
Jan-95
Jan-00
Jan-05
Jan-10
Date

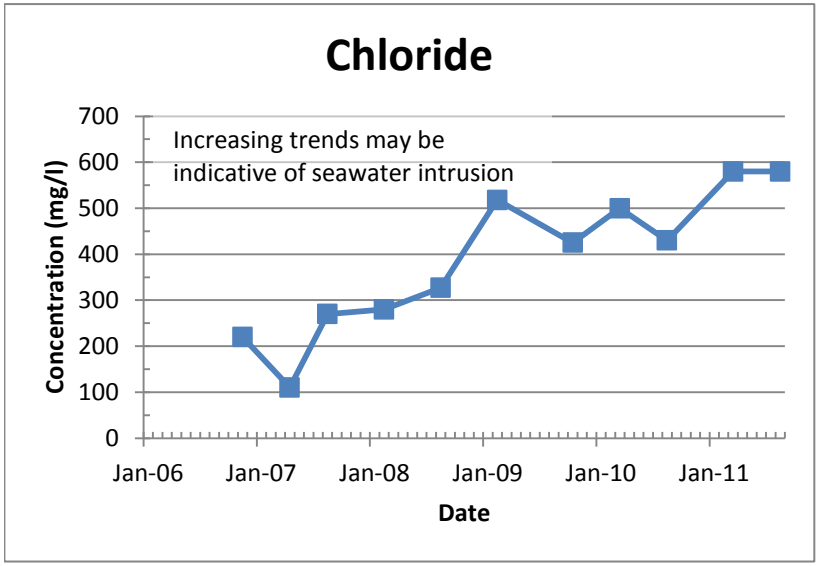

CUP-44-1 MW300 Groundwater Levels and BMO Thresholds
Groundwater Elevation (ft NAVD88)
0
-10
-20
-30
-40
-50
-60
-70
-80
-90
-100
Threshold 1: -40 ft.
Threshold 2: -50 ft.
With Conjunctive Use Project
Without Conjunctive Use Project
Jan-70
Jan-75
Jan-80
Jan-85
Jan-90
Jan-95
Jan-00
Jan-05
Jan-10
Date

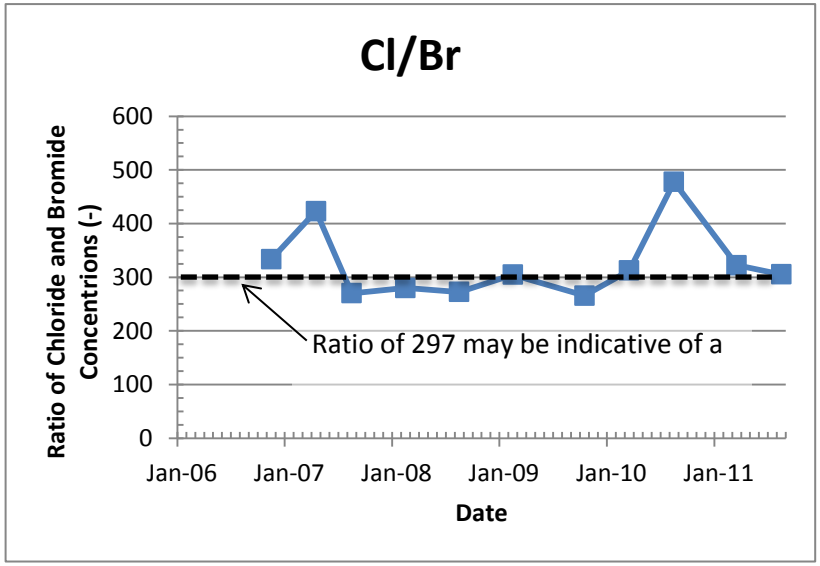

CUP-44-1 MW460 Groundwater Levels and BMO Thresholds
Groundwater Elevation (ft NAVD88)
-150
-160
-170
-180
-190
-200
-210
-220
-230
-240
-250
Threshold 1: -225 ft.
Threshold 2: -235ft.
With Conjunctive Use Project
Without Conjunctive Use Project
Jan-70
Jan-75
Jan-80
Jan-85
Jan-90
Jan-95
Jan-00
Jan-05
Jan-10
Date

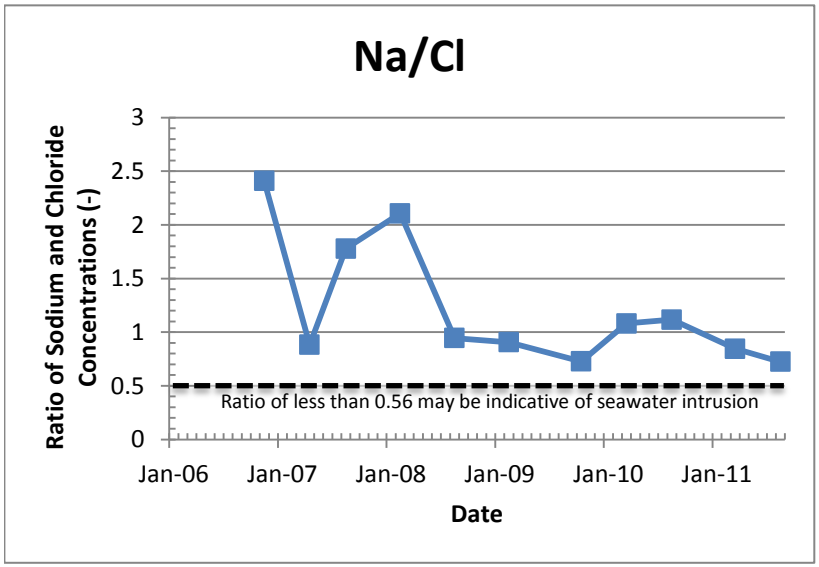

CUP-44-1 MW580 Groundwater Levels and BMO Thresholds
Groundwater Elevation (ft NAVD88)
-150
-160
-170
-180
-190
-200
-210
-220
-230
-240
-250
Threshold 1: -225 ft.
Threshold 2: -235ft.
With Conjunctive Use Project
Without Conjunctive Use Project
Jan-70
Jan-75
Jan-80
Jan-85
Jan-90
Jan-95
Jan-00
Jan-05
Jan-10
Date

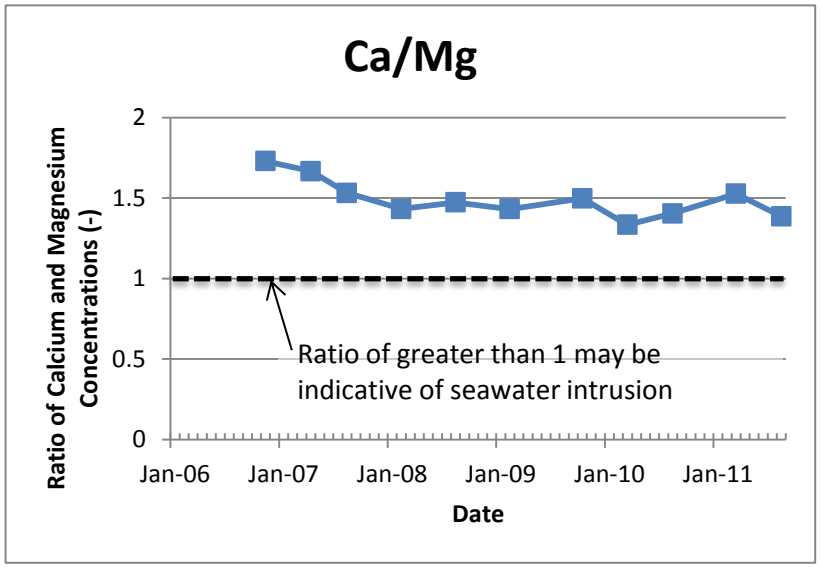
APPENDIX E – SEAWATER INTRUSION INDICATORS

Seawater Intrusion Indicators for Well Burlingame-S

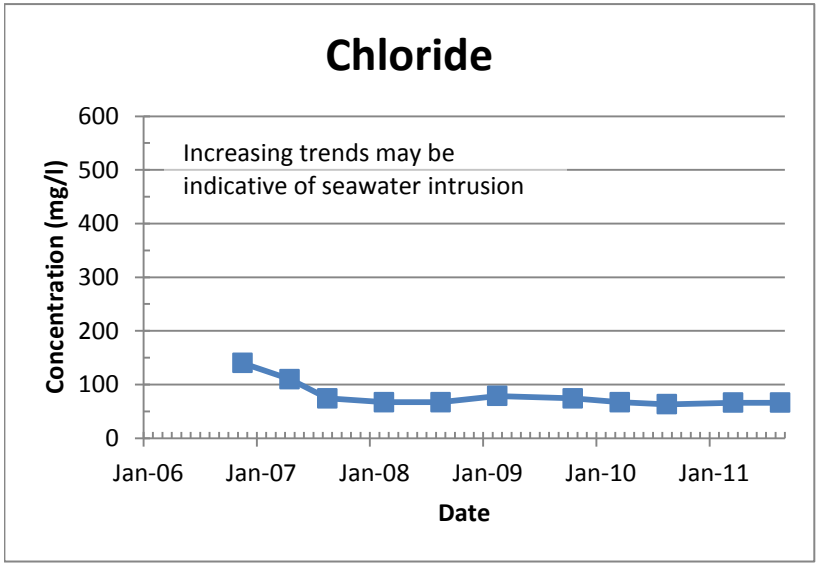


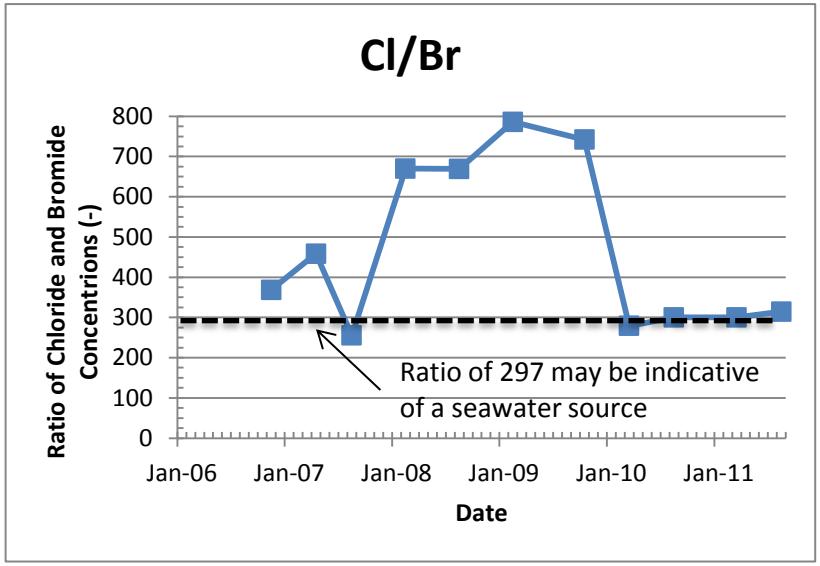


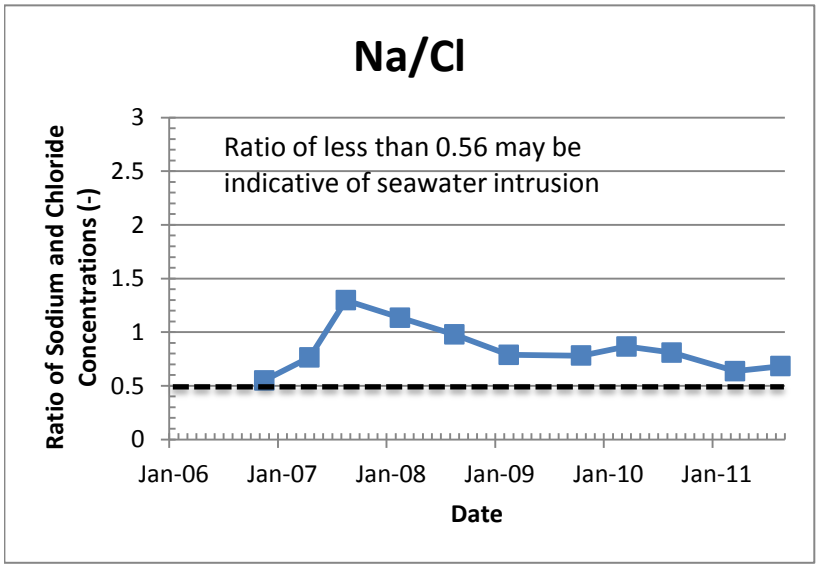


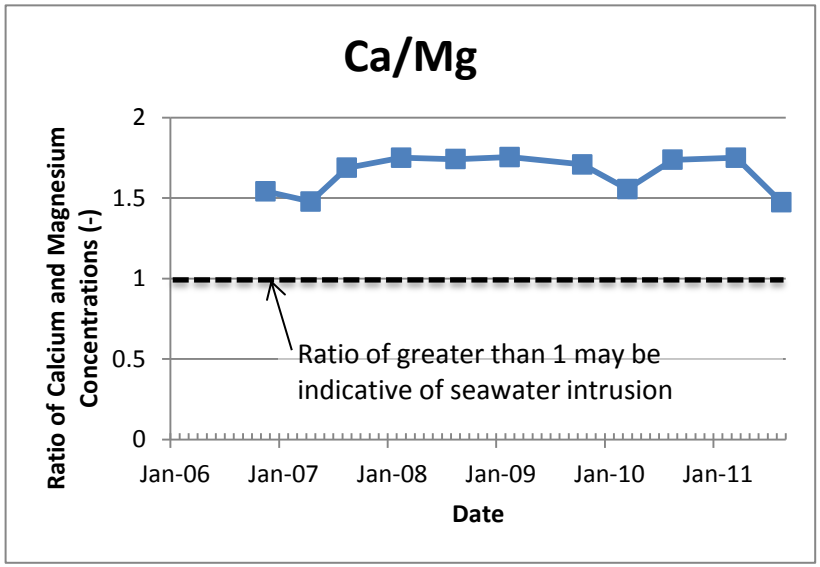


Seawater Intrusion Indicators for Well Burlingame-M

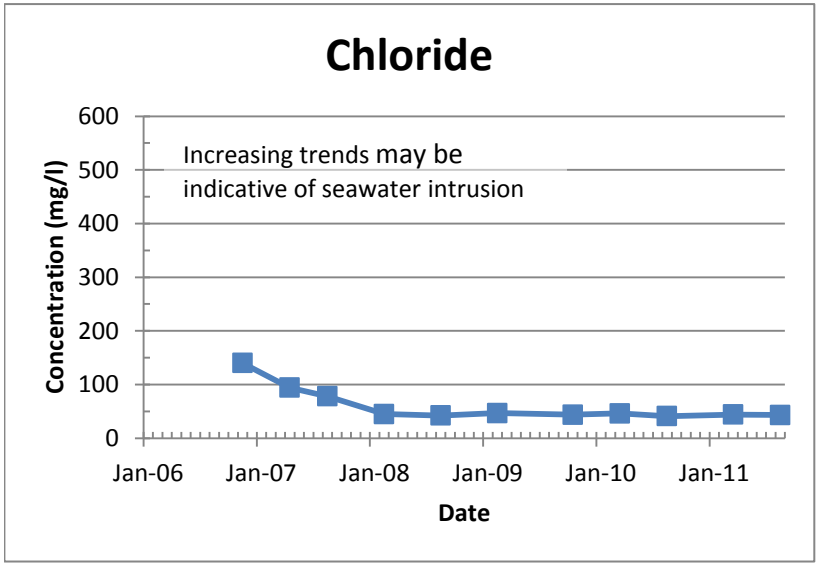


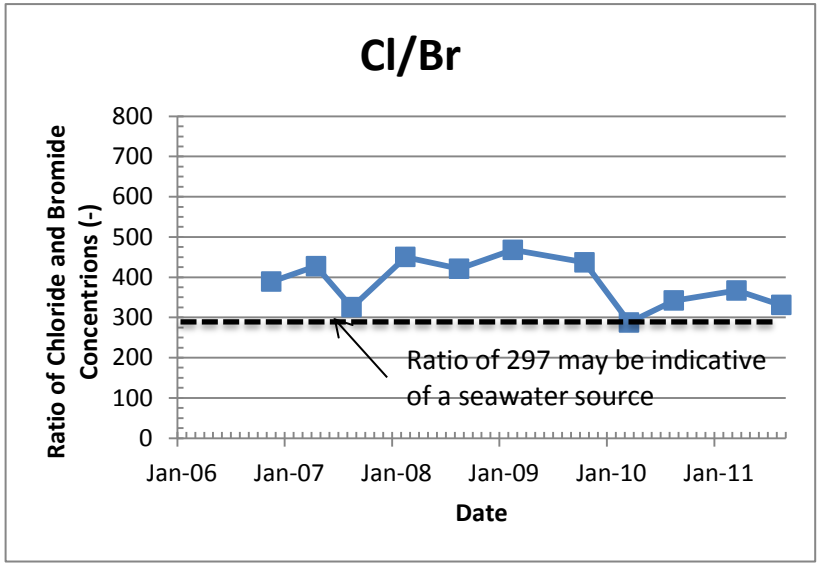


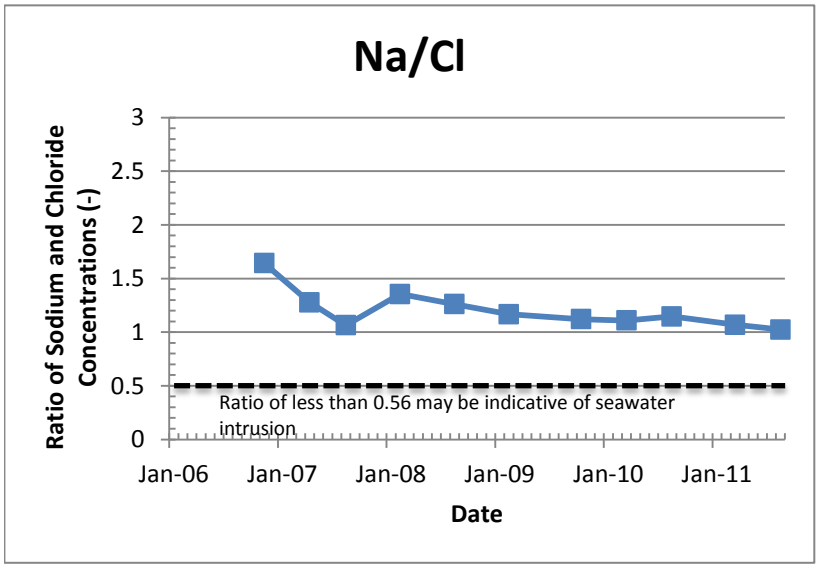


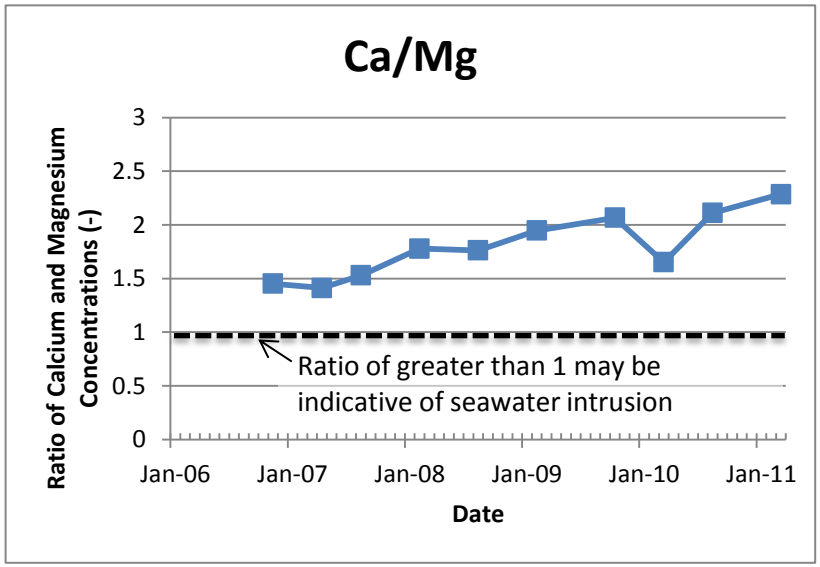


Seawater Intrusion Indicators for Well Burlingame-D

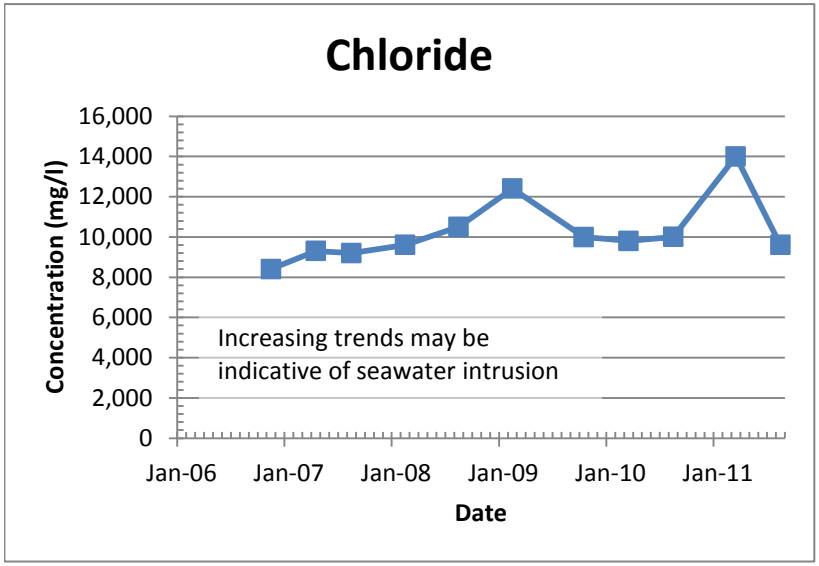


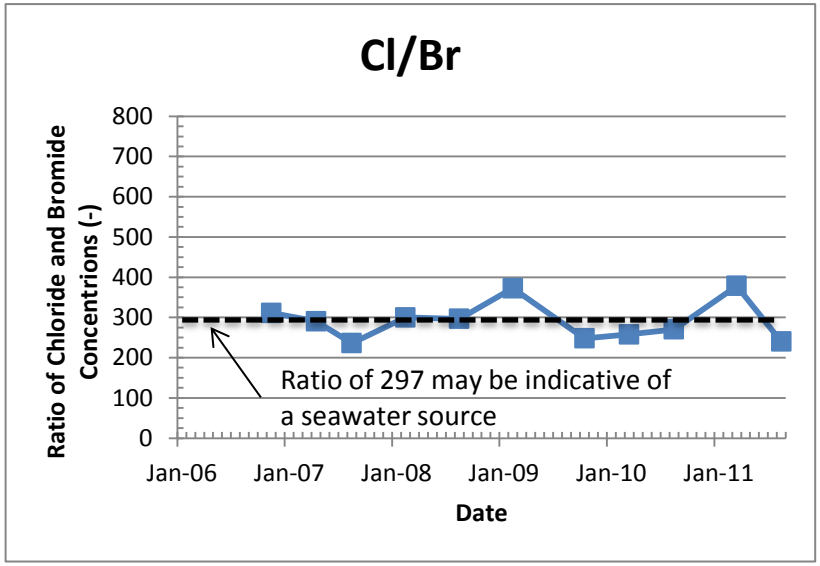


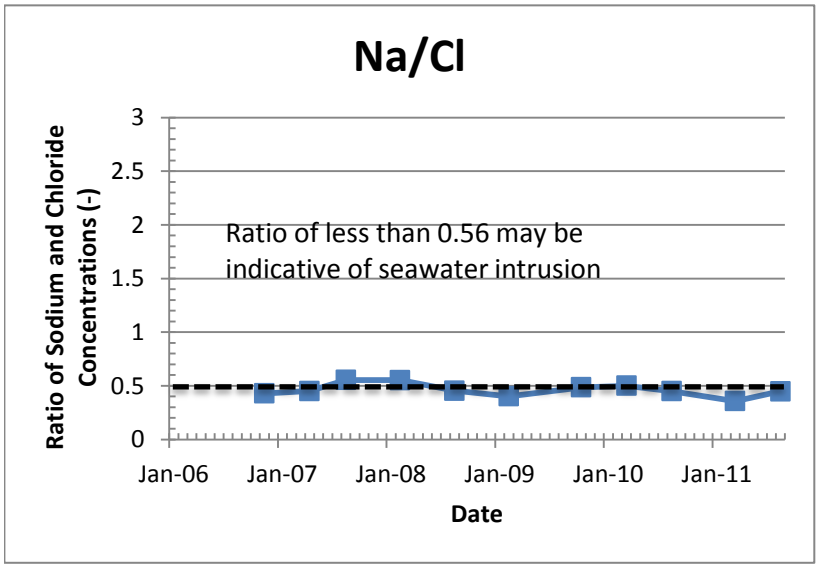


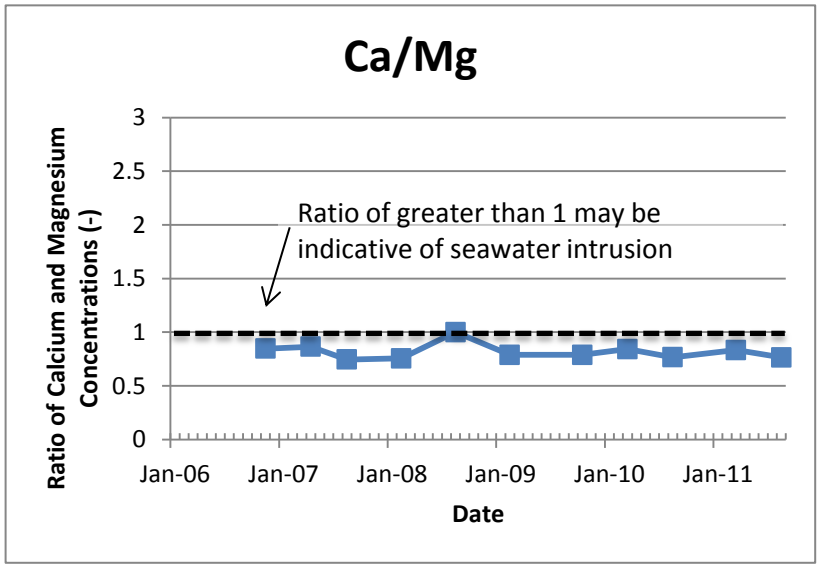


Seawater Intrusion Indicators for Well SFO-S

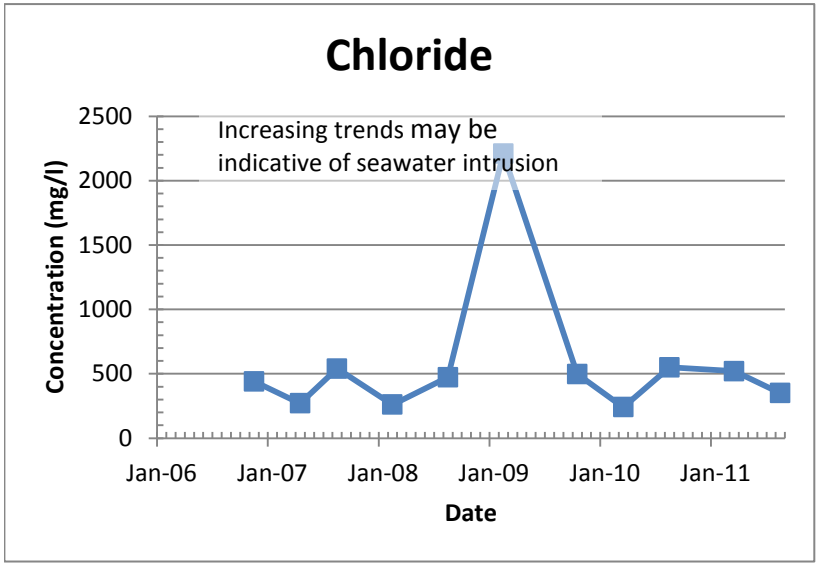


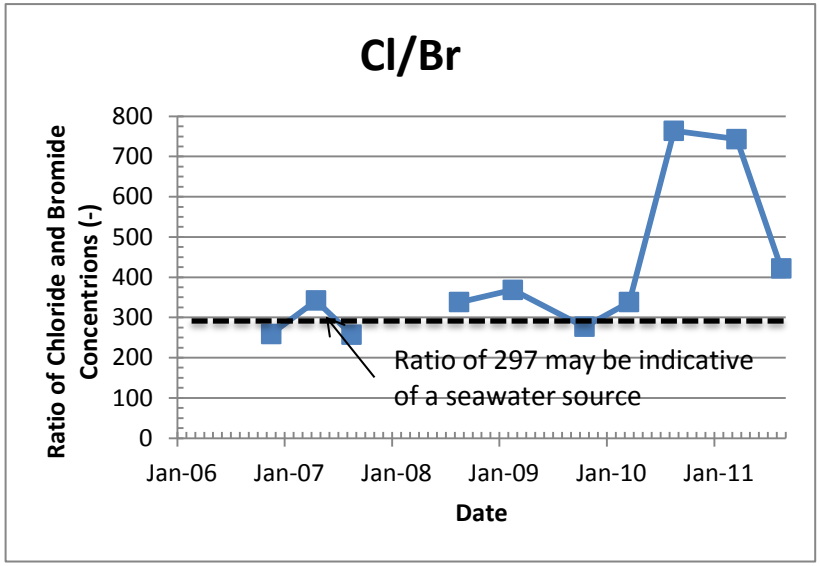


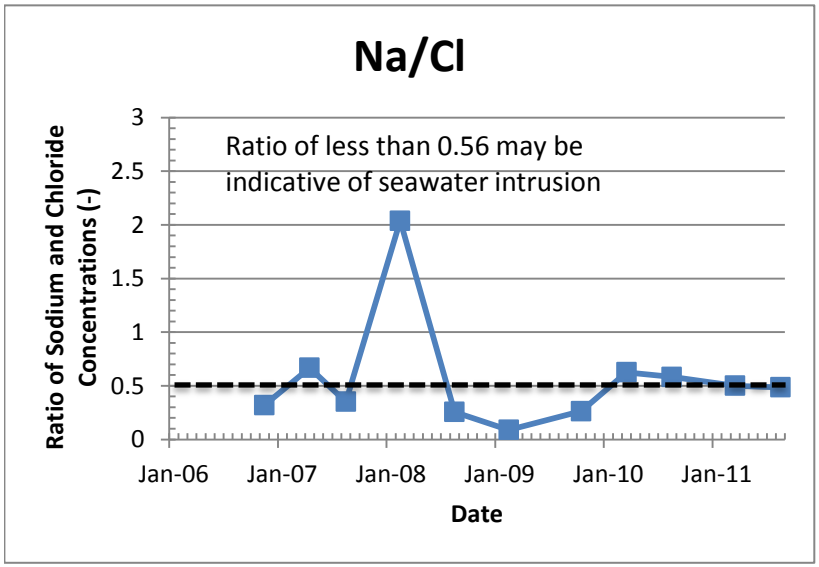


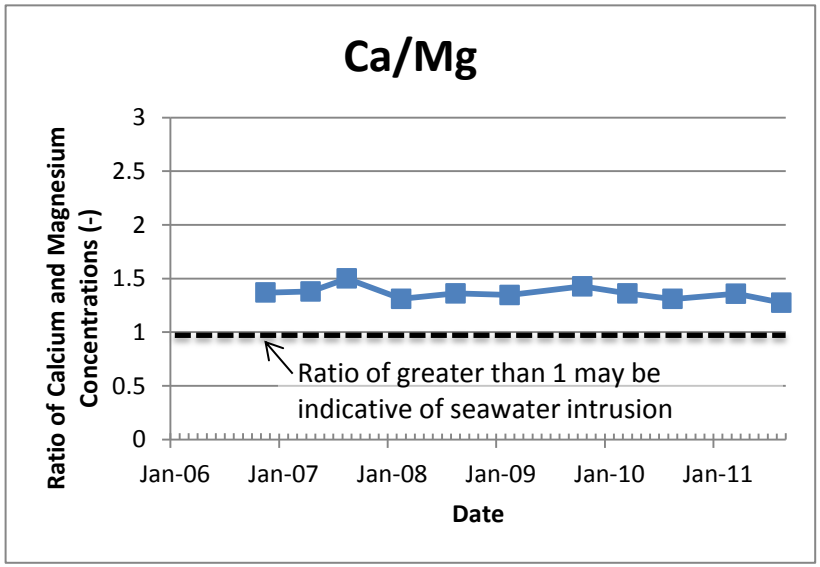


Seawater Intrusion Indicators for Well SFO-D

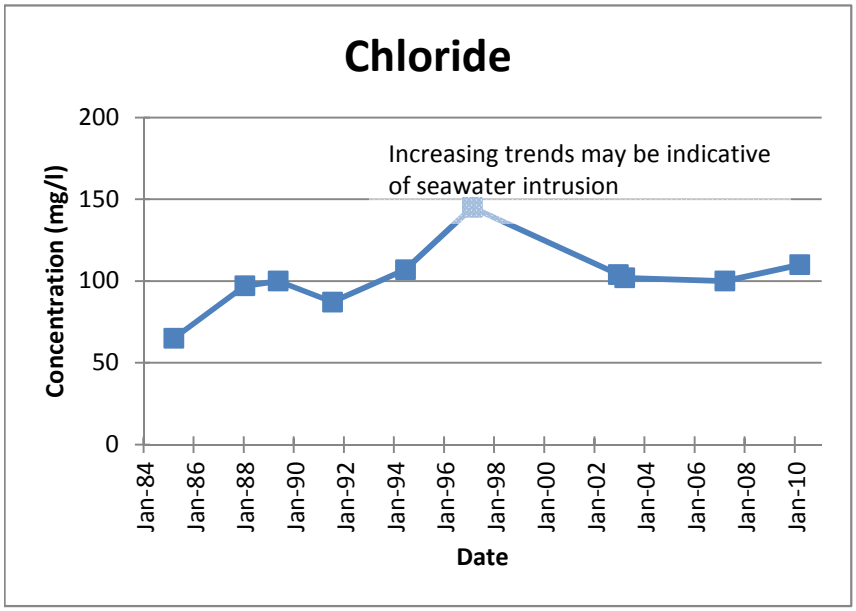


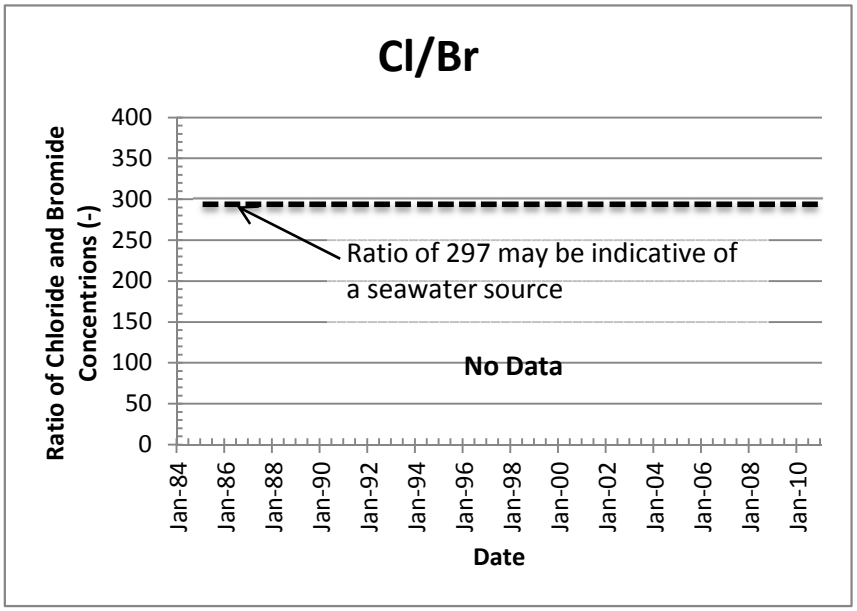


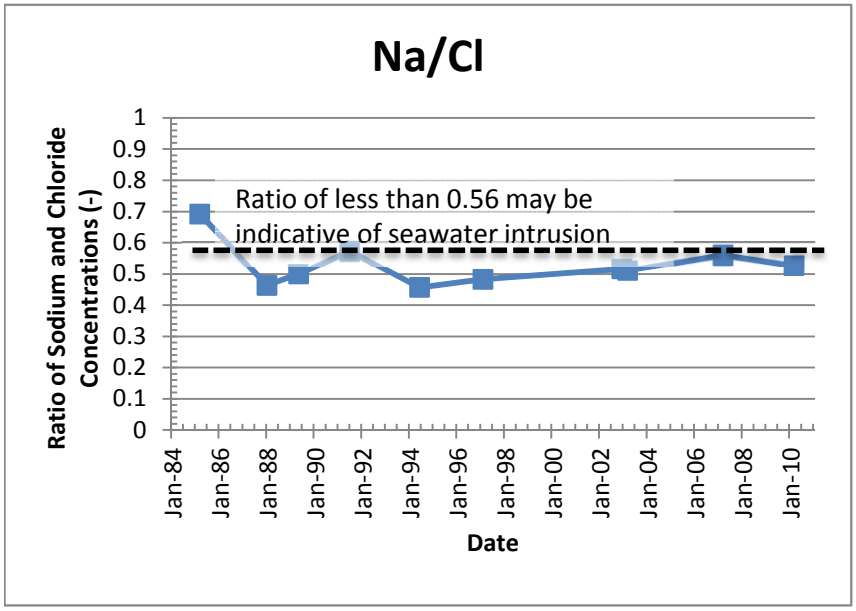


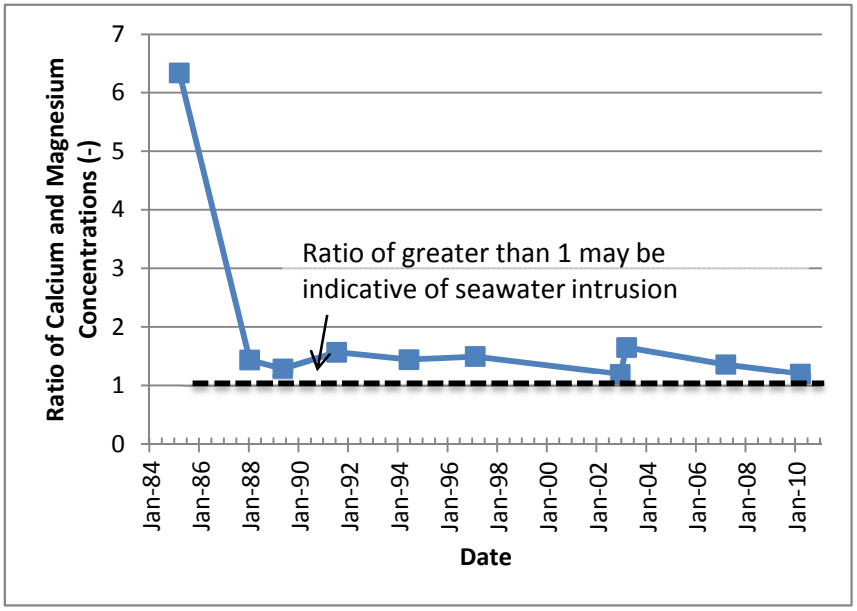


Seawater Intrusion Indicators for Well SB-15

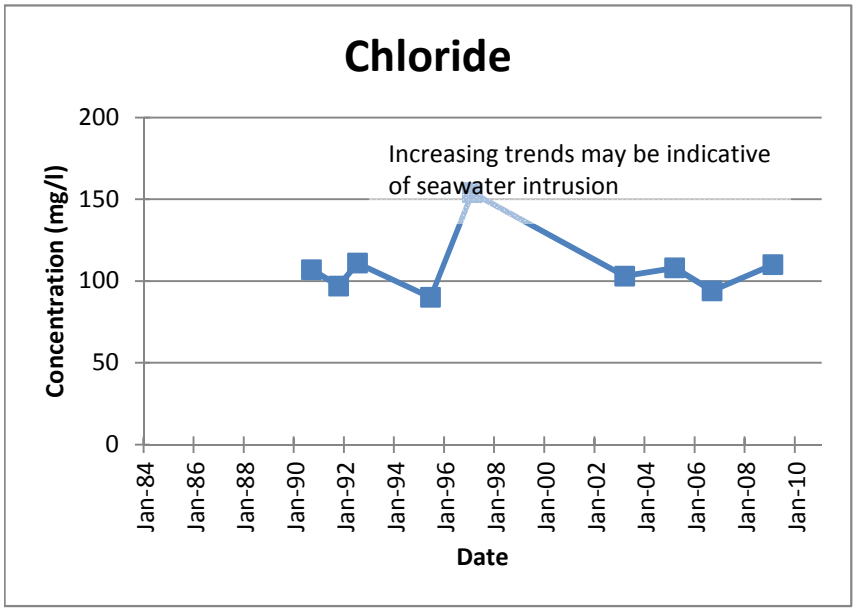


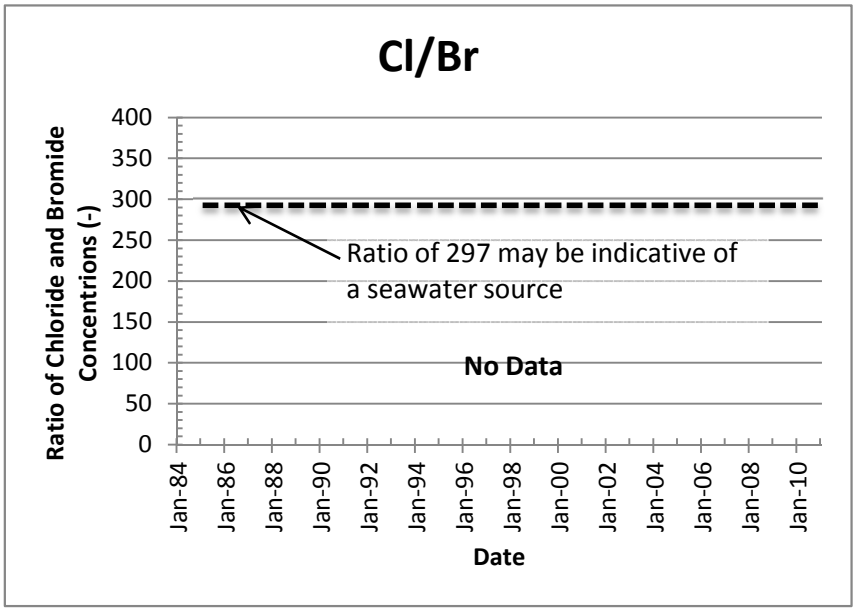


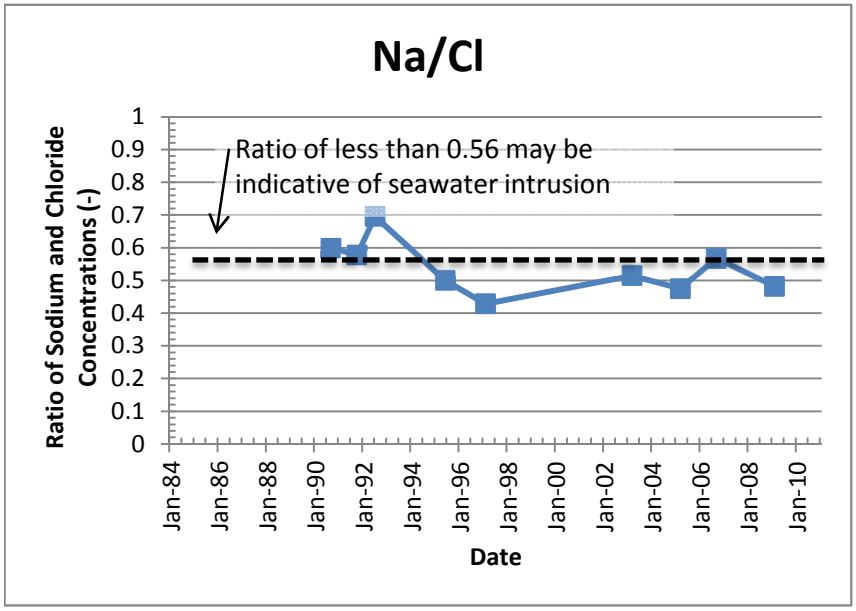


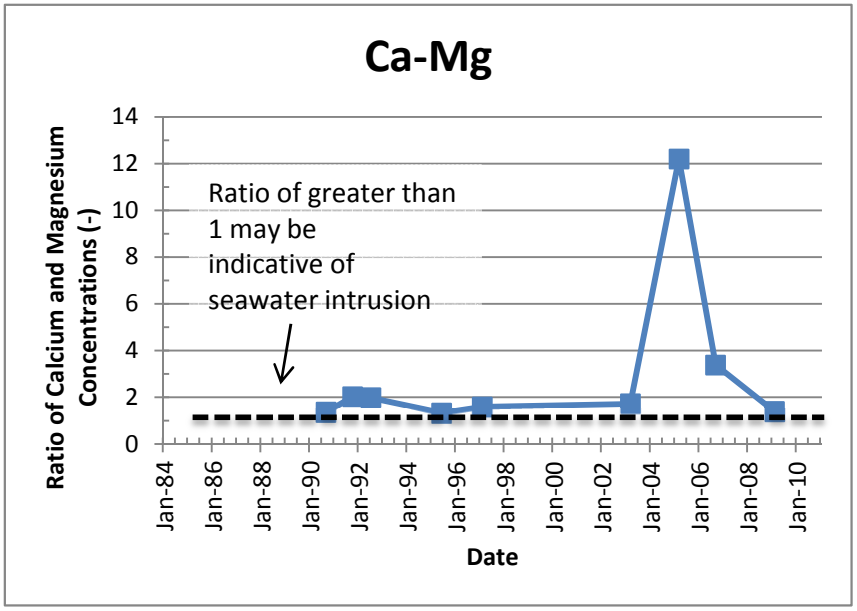


Seawater Intrusion Indicators for Well SB-16

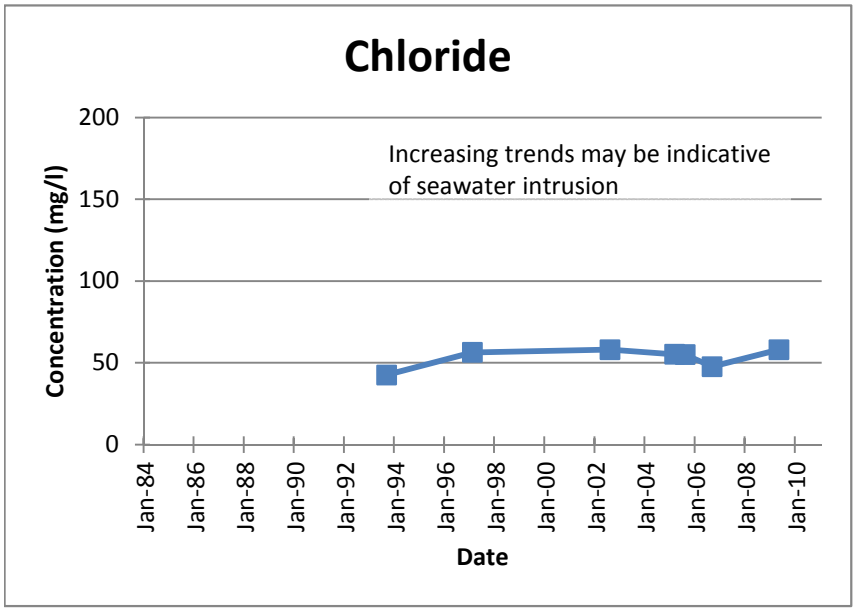


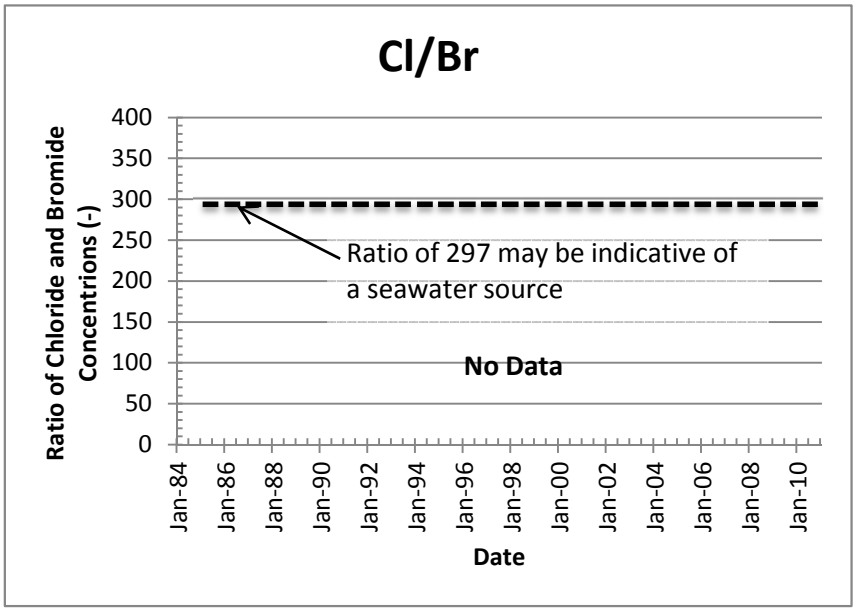


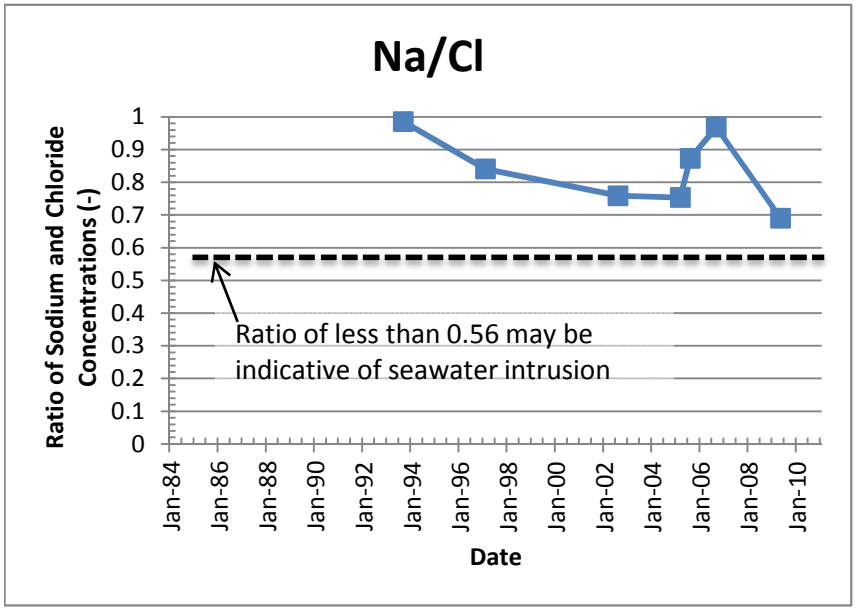


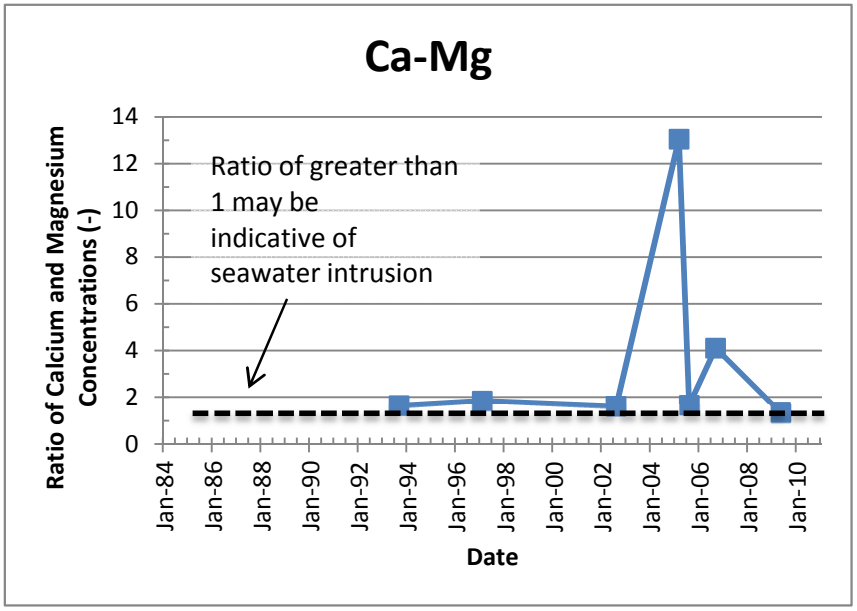


Seawater Intrusion Indicators for Well SB-17

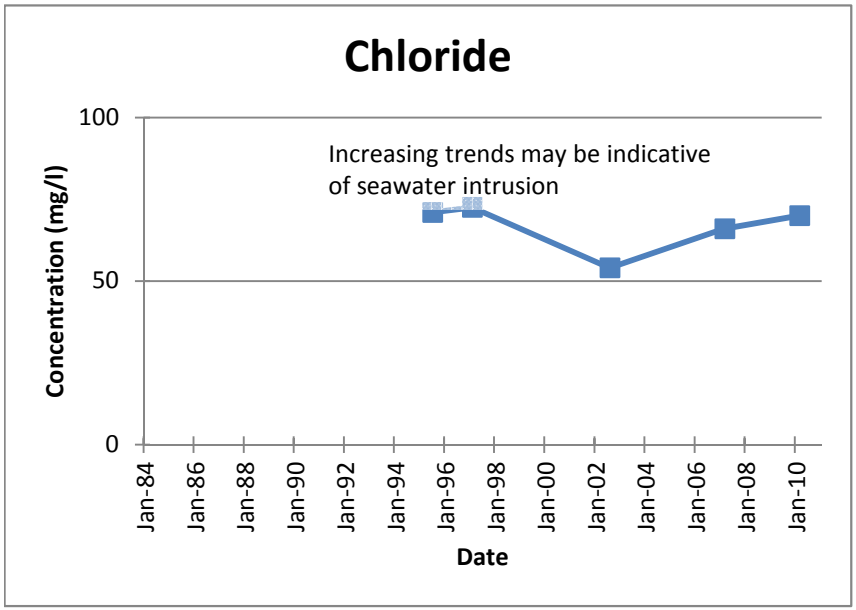


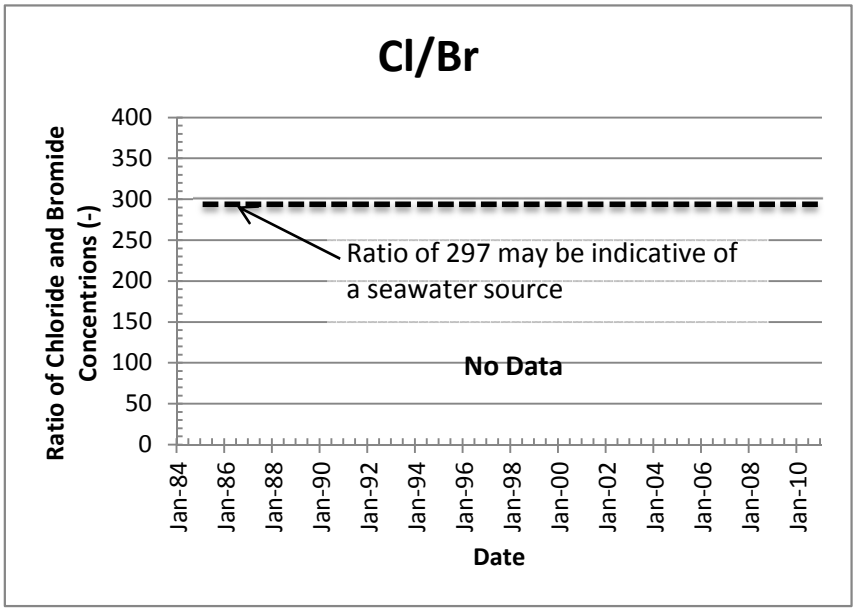


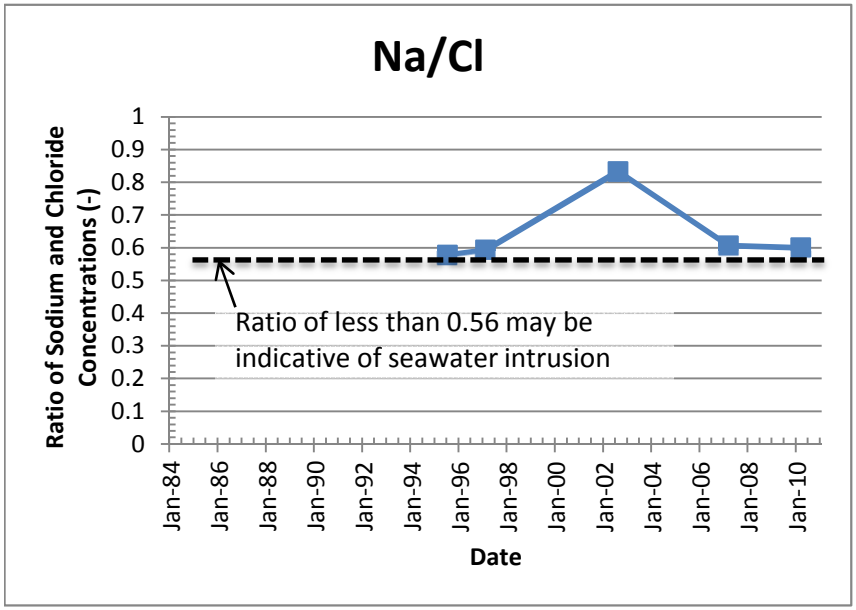


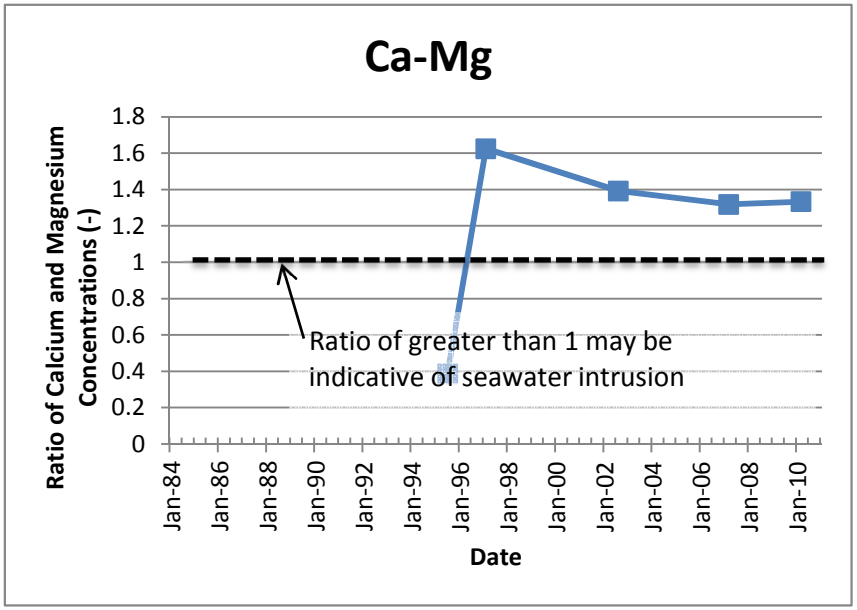


Seawater Intrusion Indicators for Well SB-18

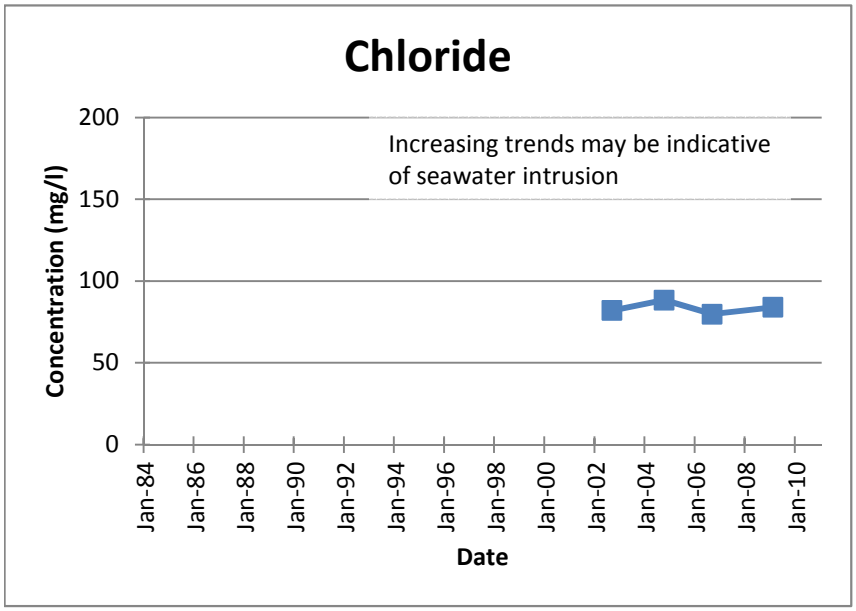


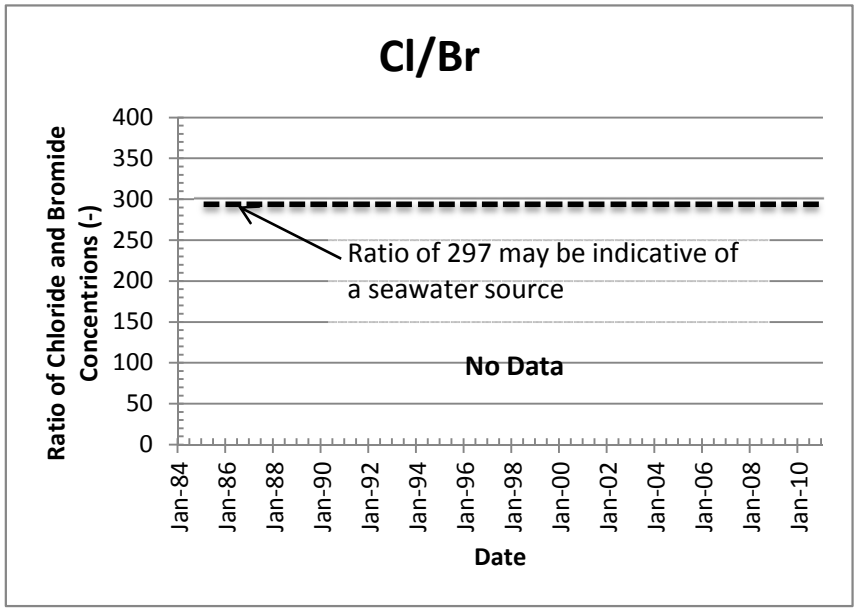


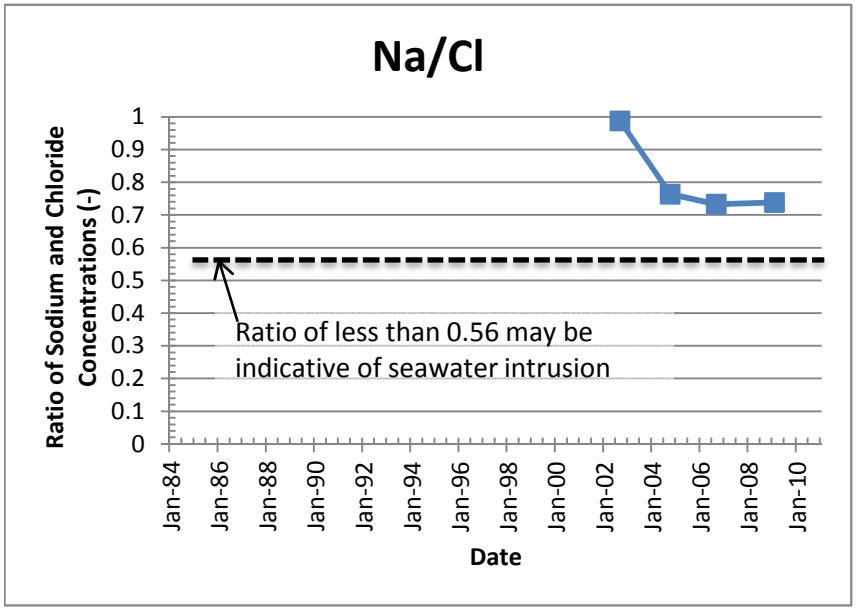


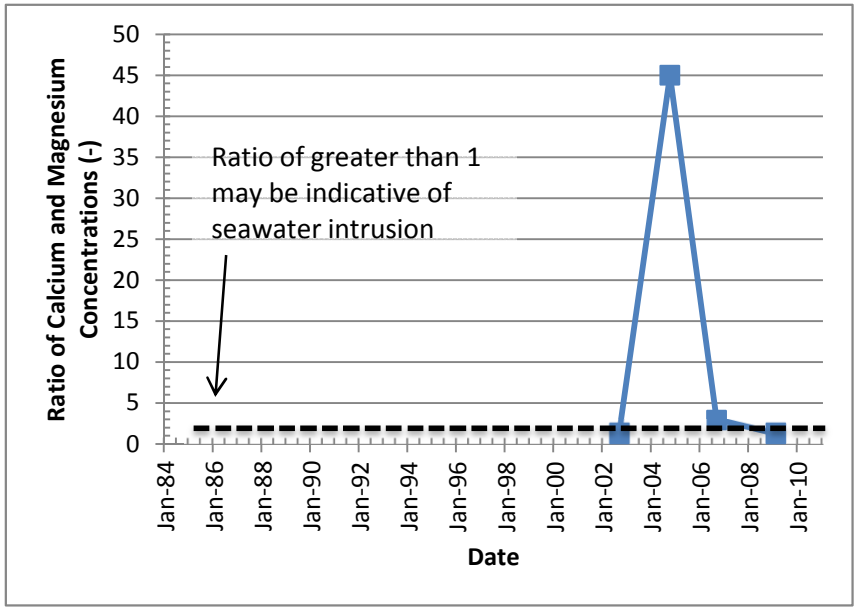


Seawater Intrusion Indicators for Well SB-20

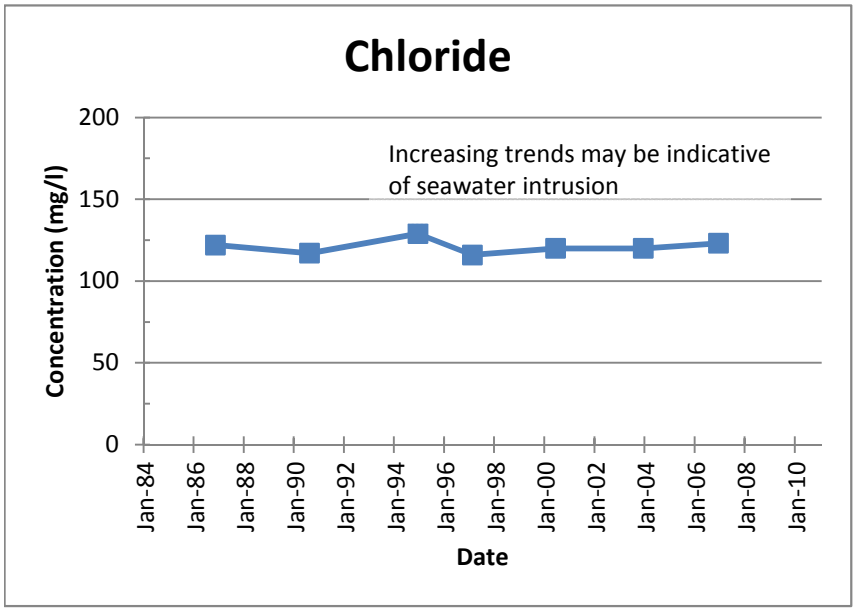


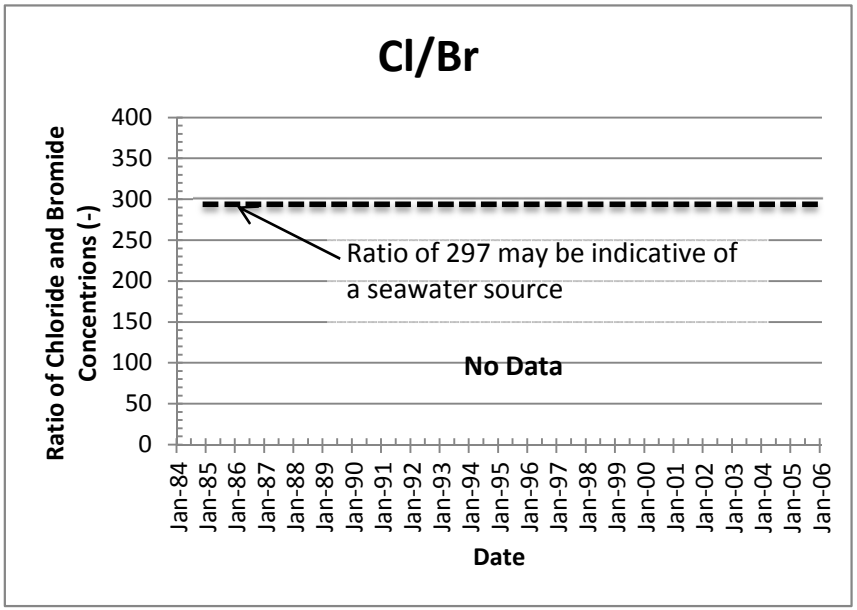


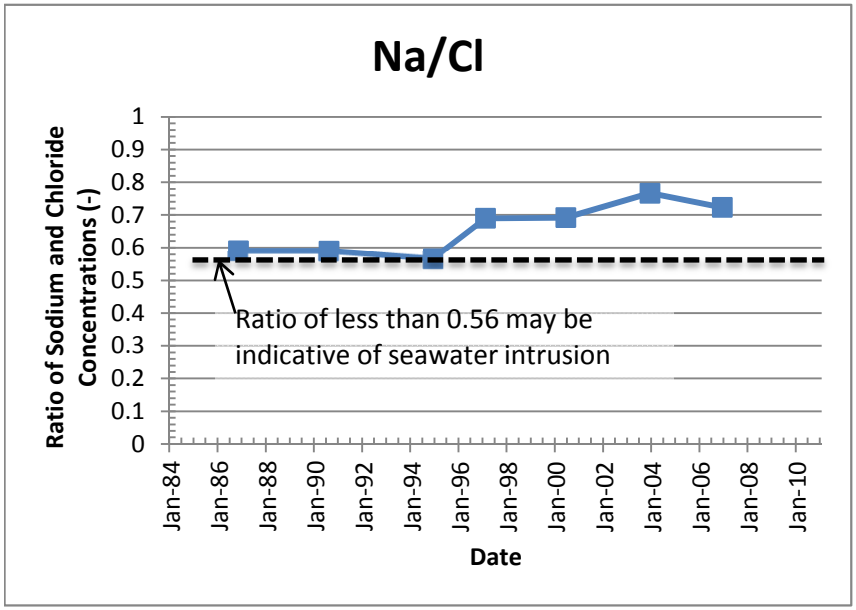


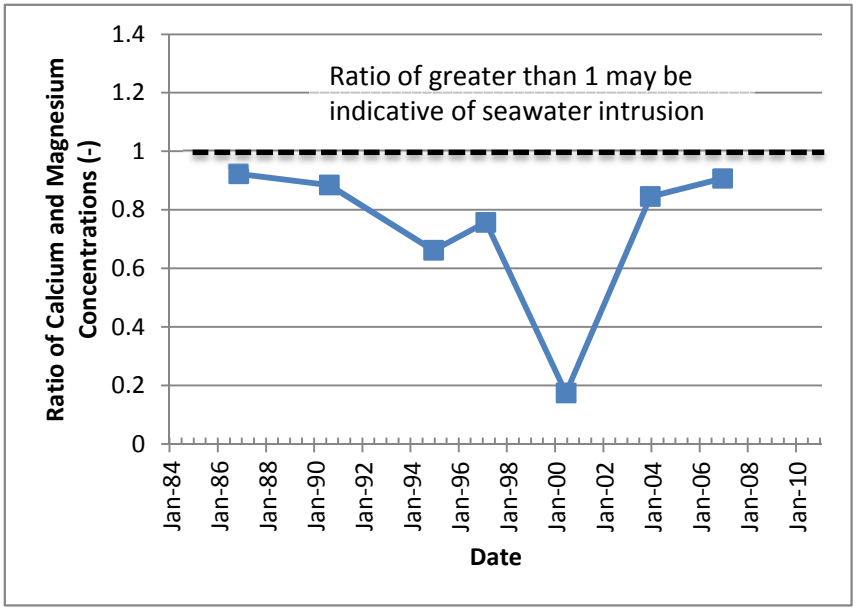


Seawater Intrusion Indicators for Well 01-14

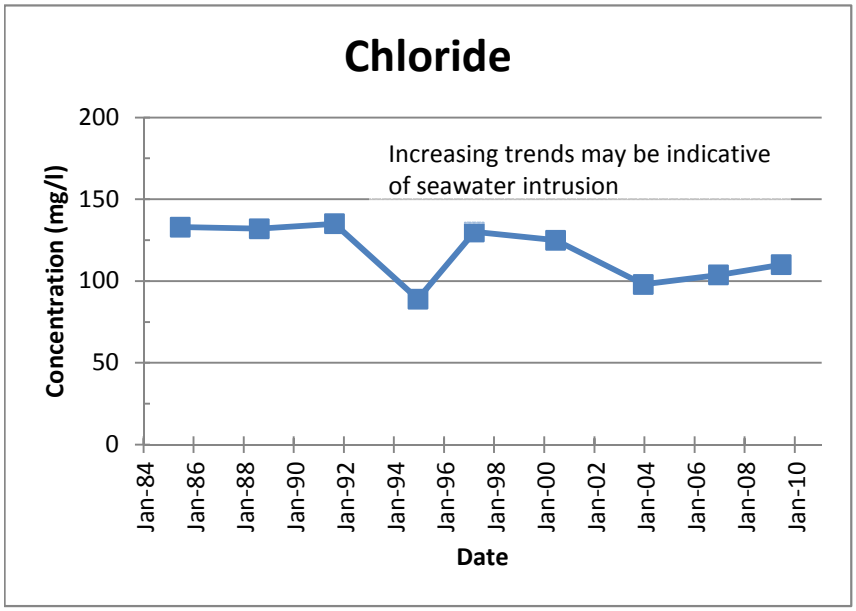


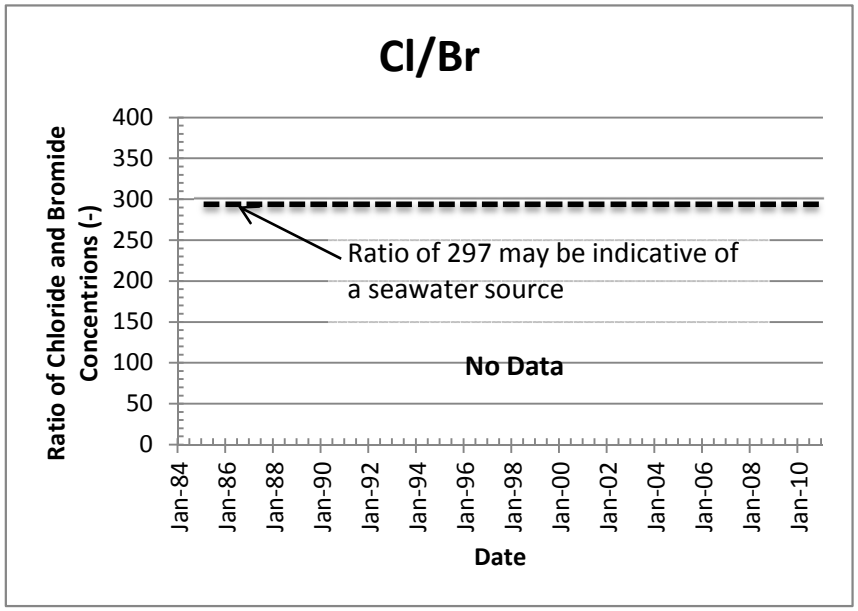


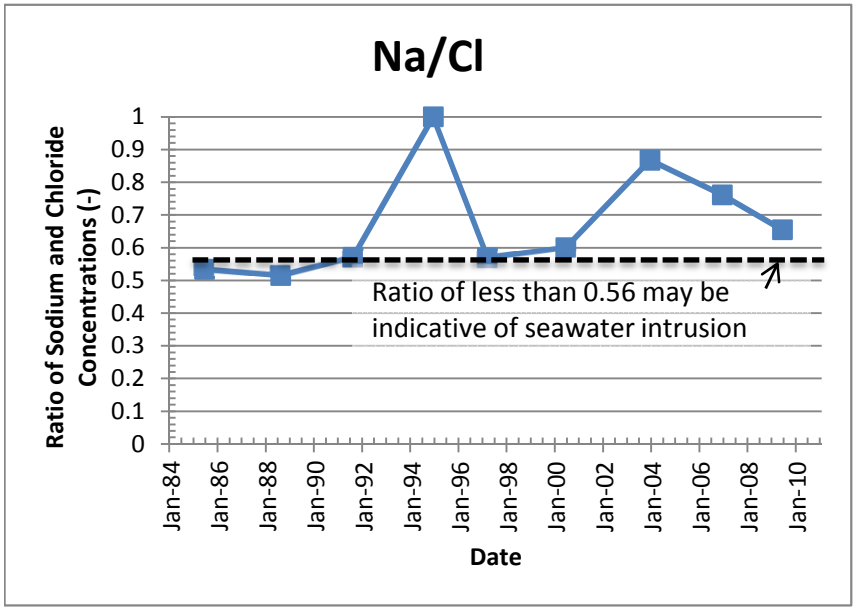


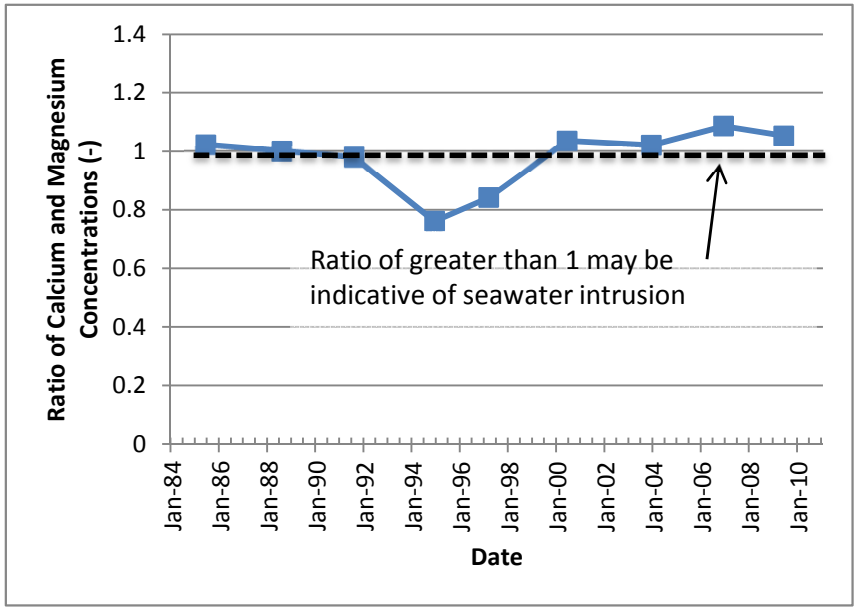


Seawater Intrusion Indicators for Well 01-15

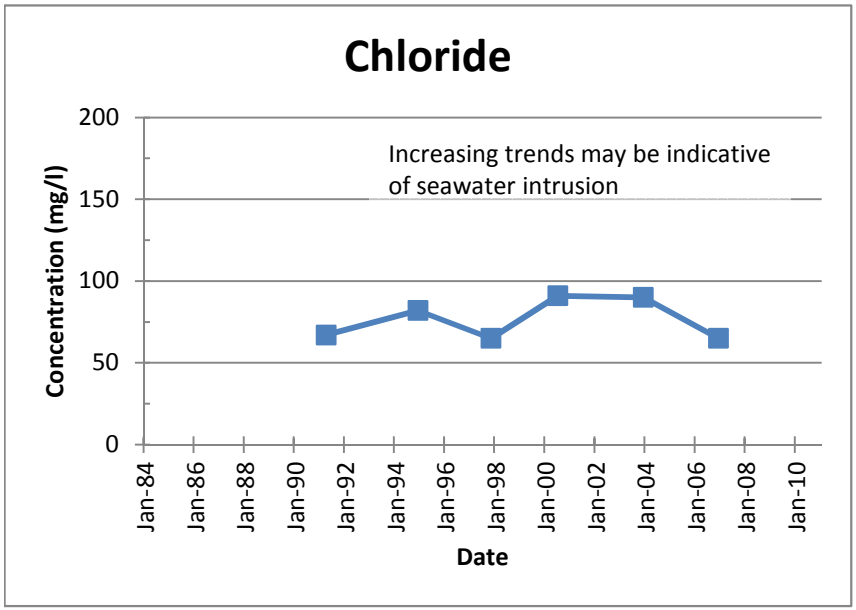


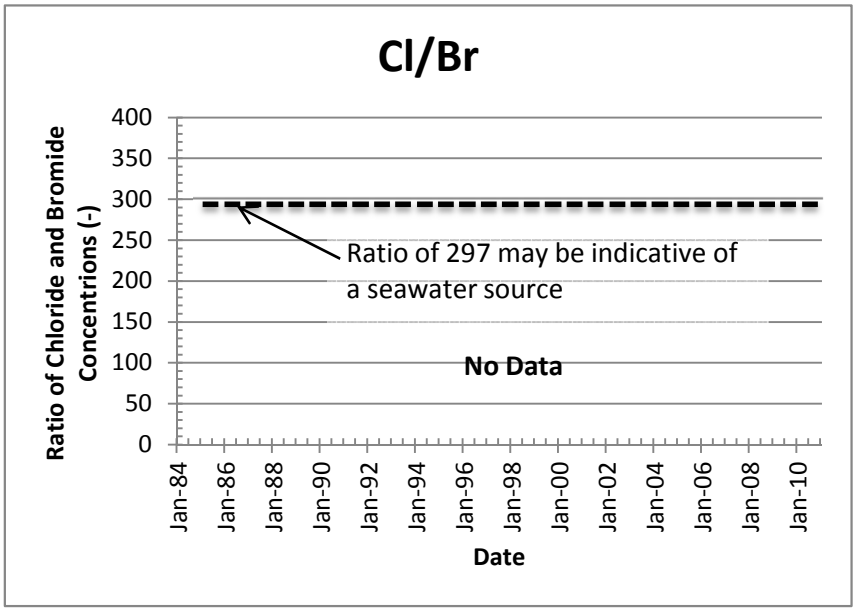


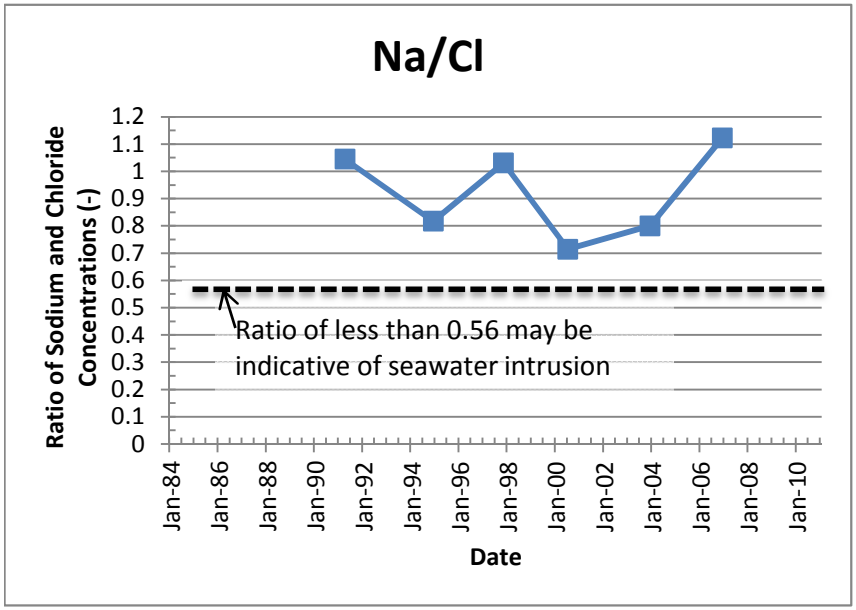


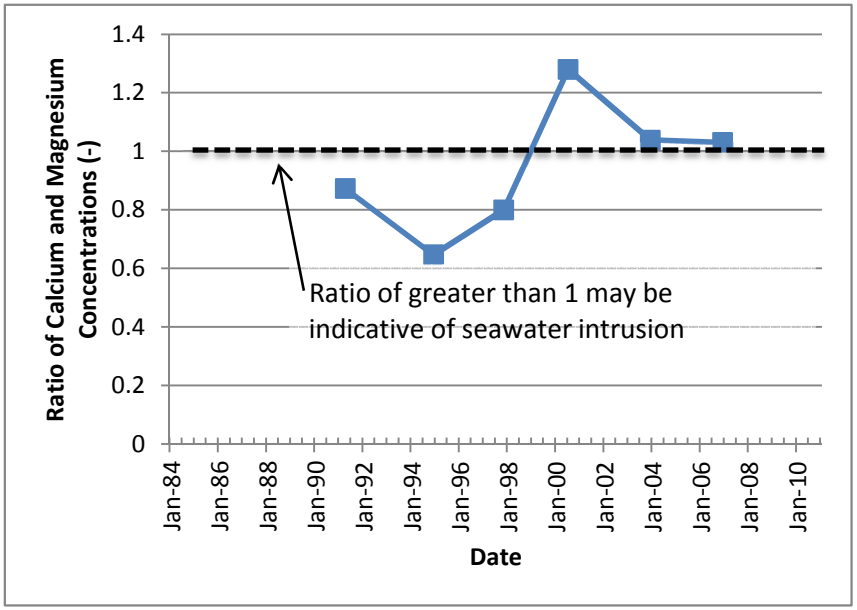


Seawater Intrusion Indicators for Well 01-18

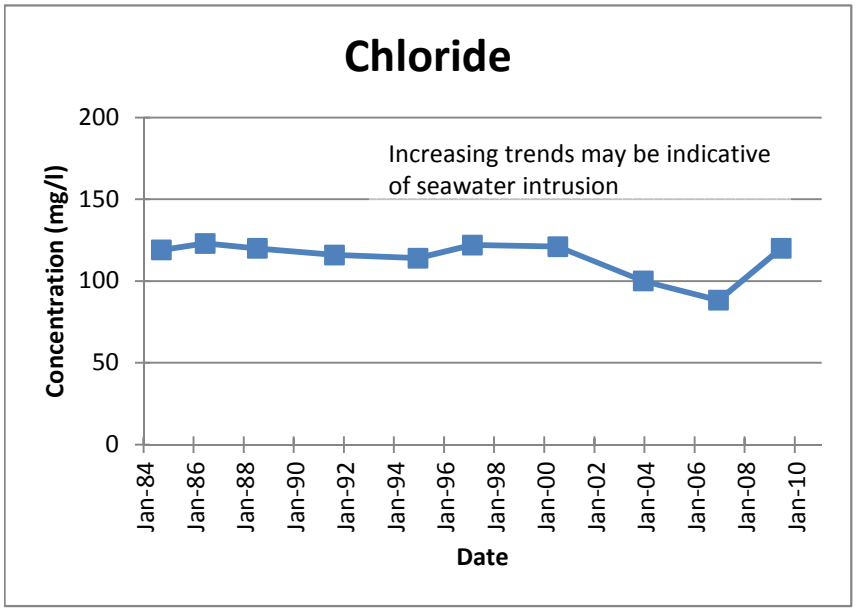


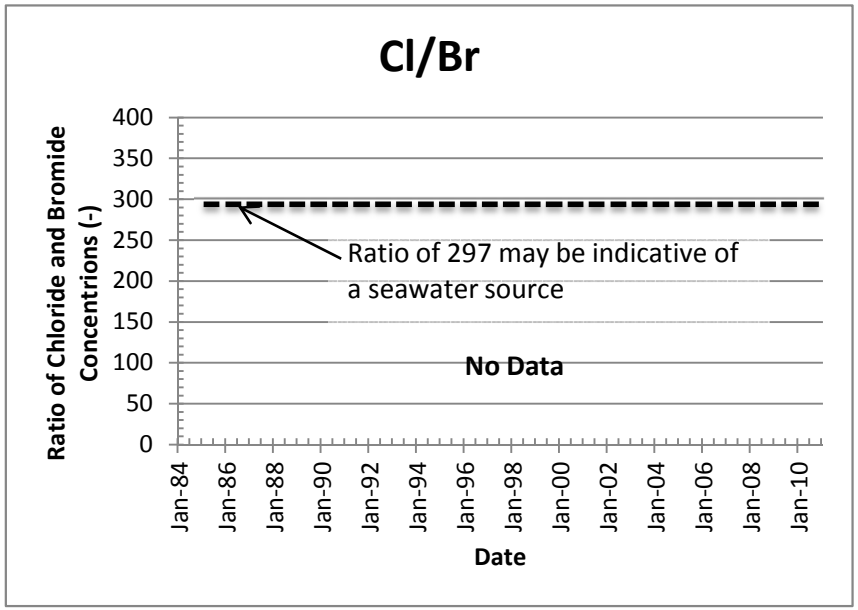


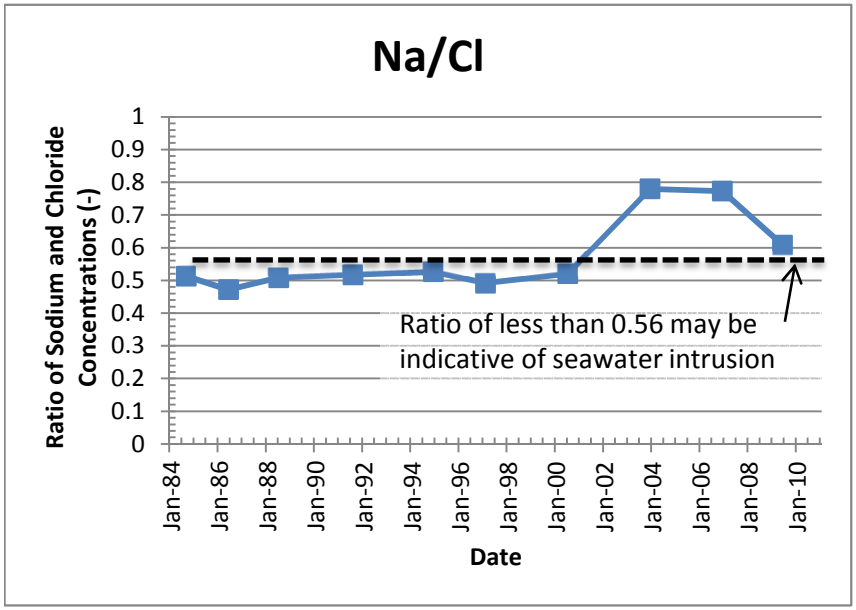


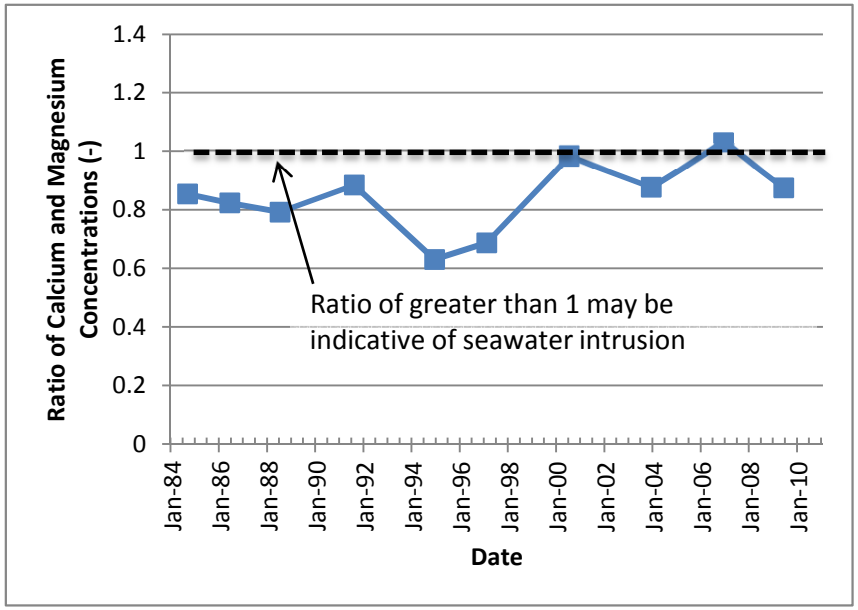


Seawater Intrusion Indicators for Well 01-19

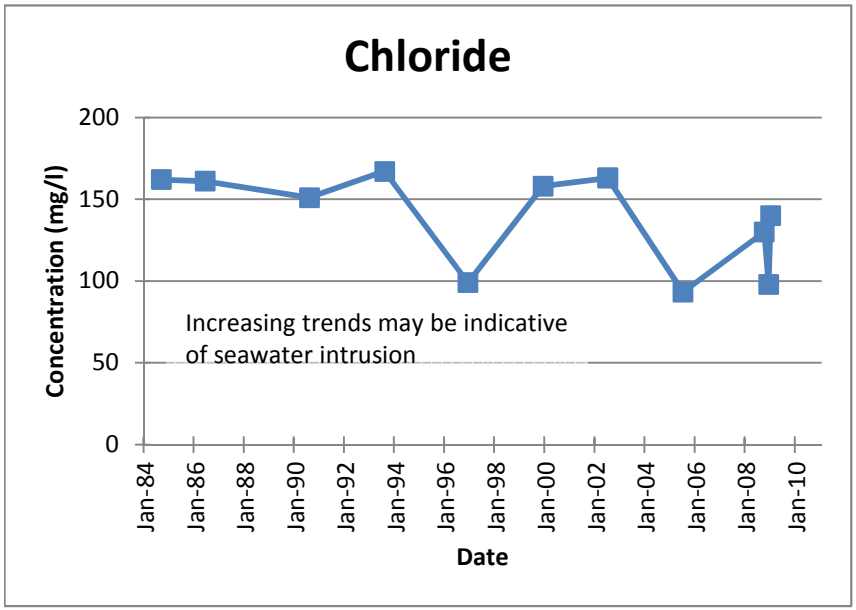


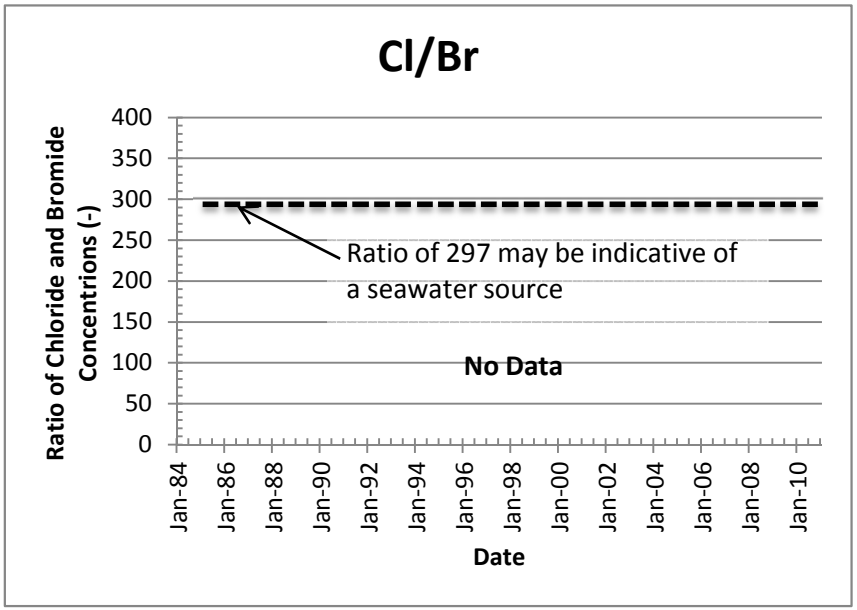


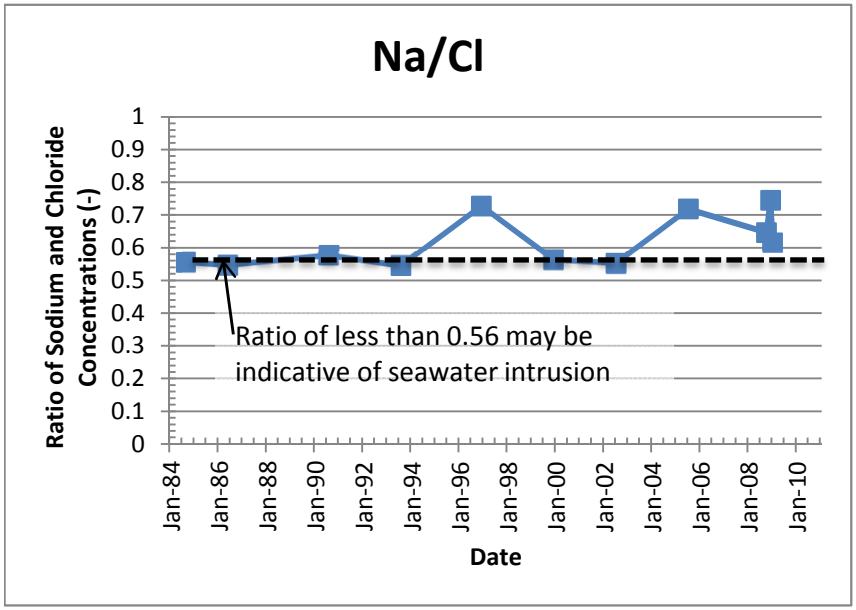


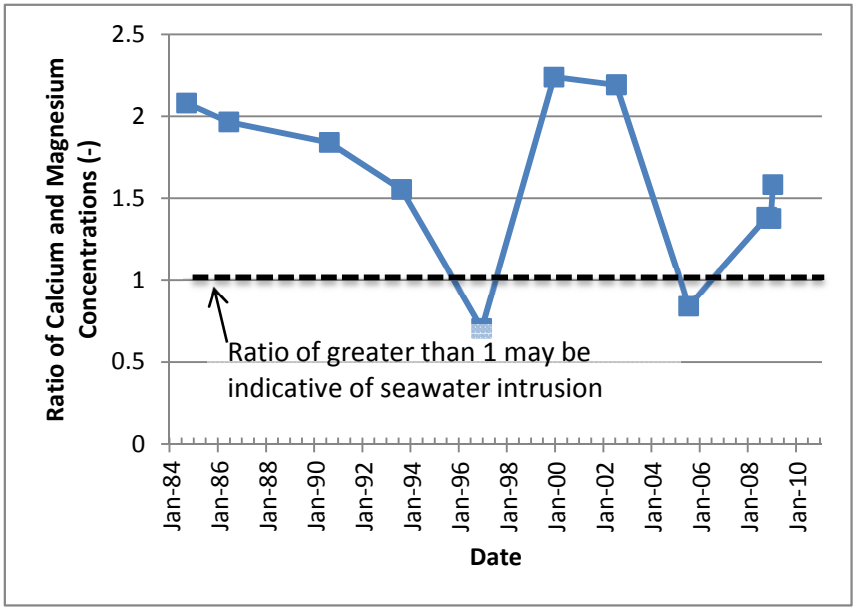


Seawater Intrusion Indicators for Well 01-20

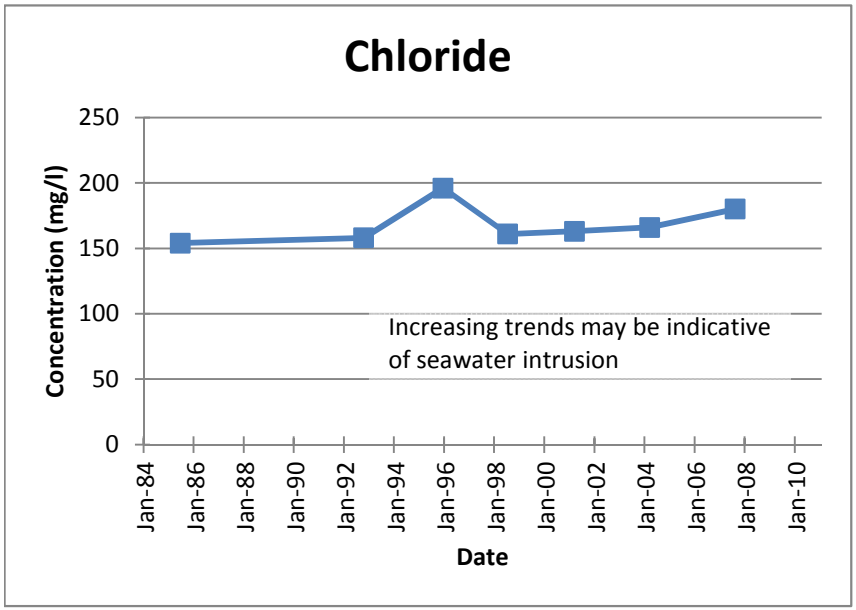


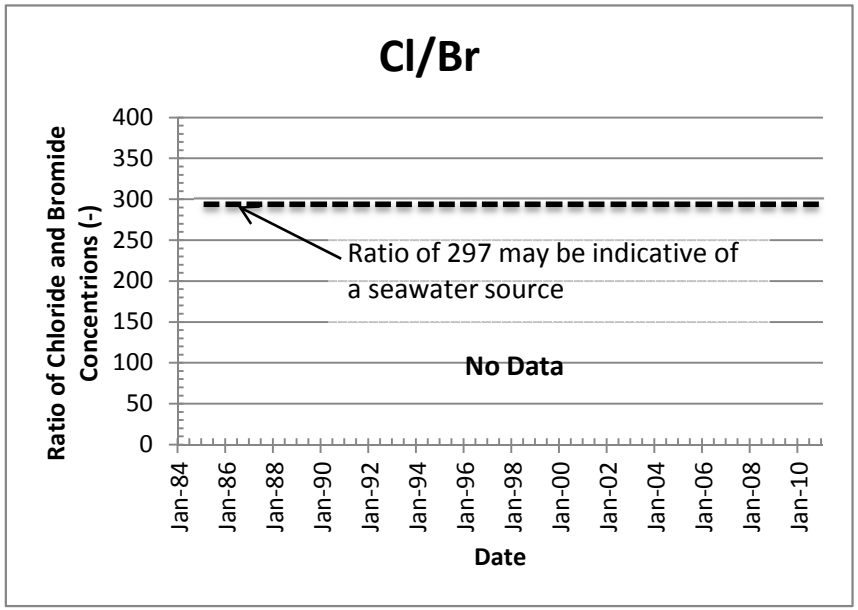


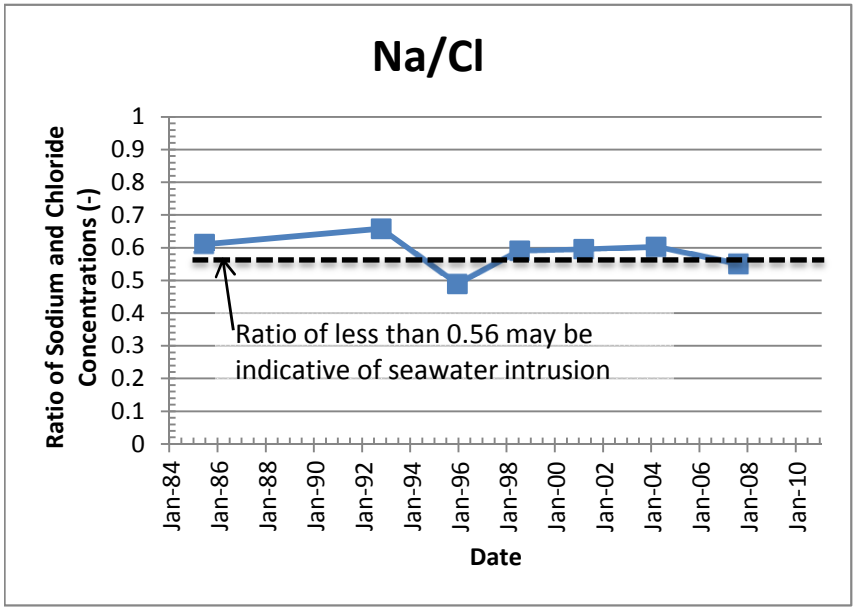


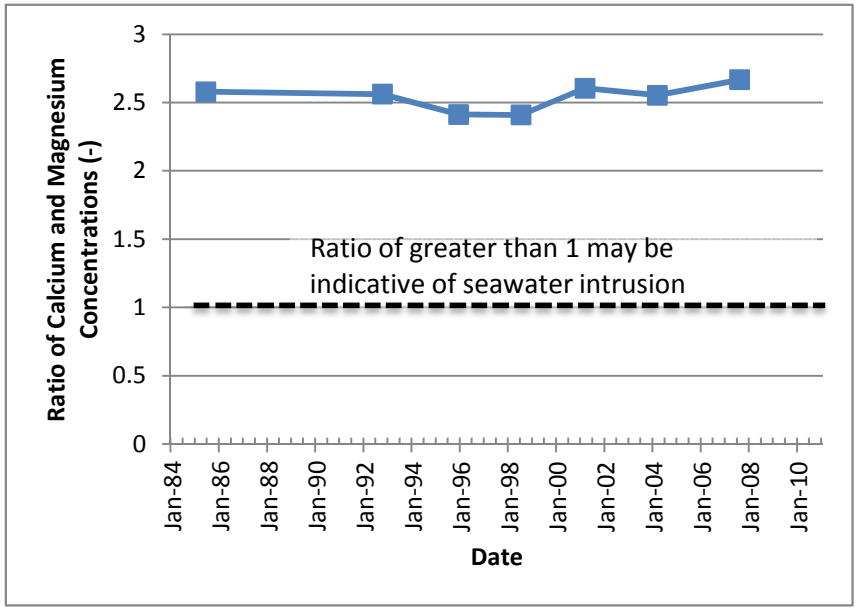


Seawater Intrusion Indicators for Well 01-21

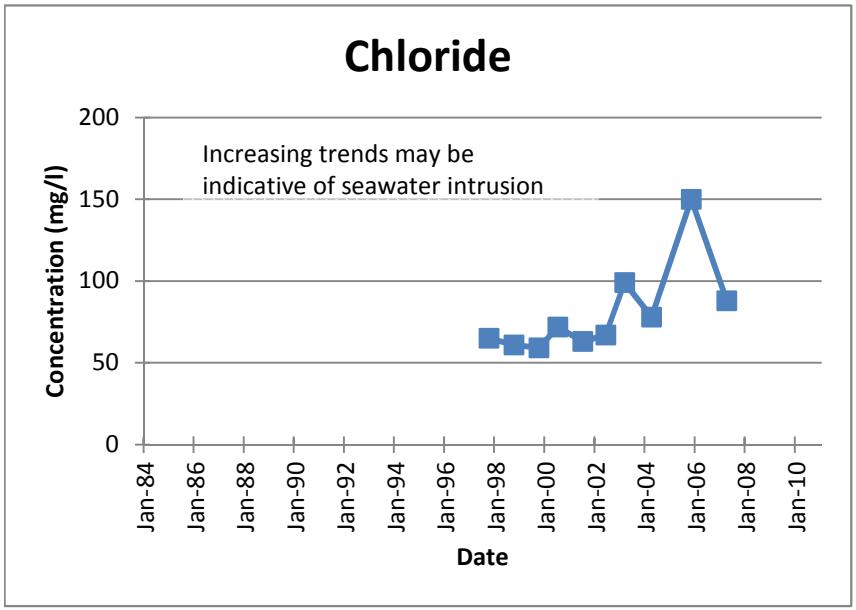


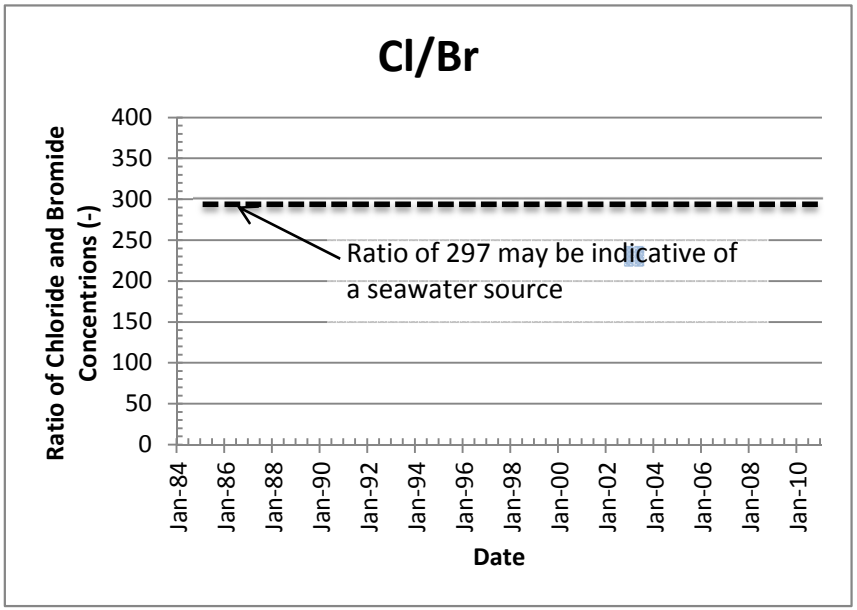


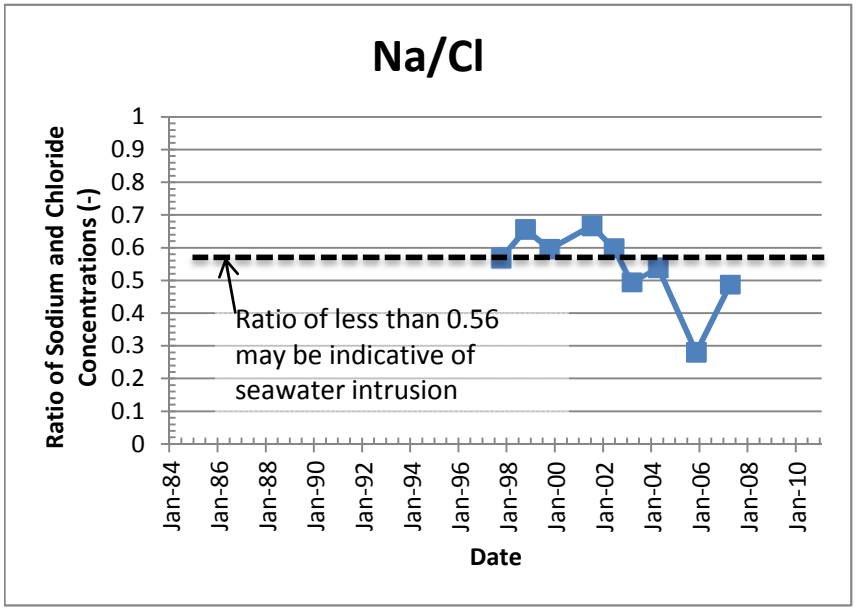


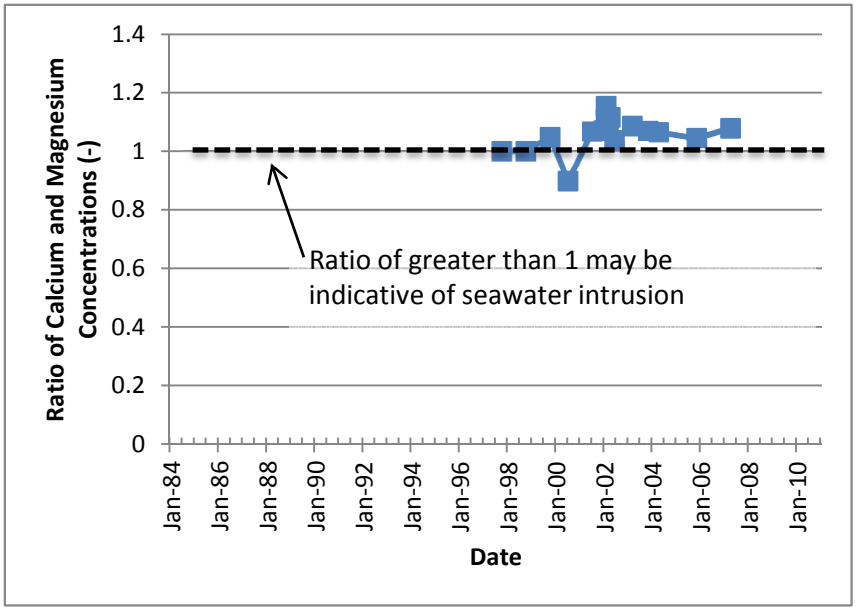


Seawater Intrusion Indicators for Well A Street

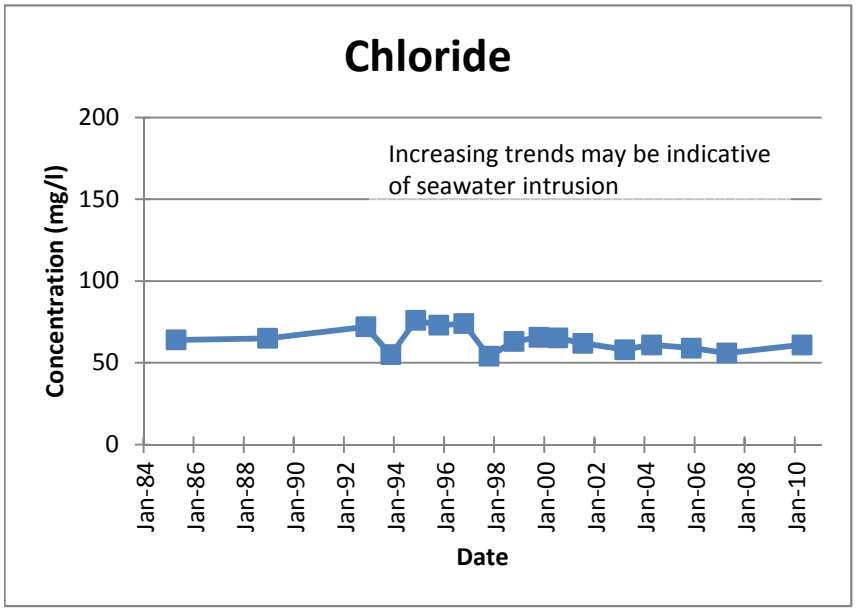


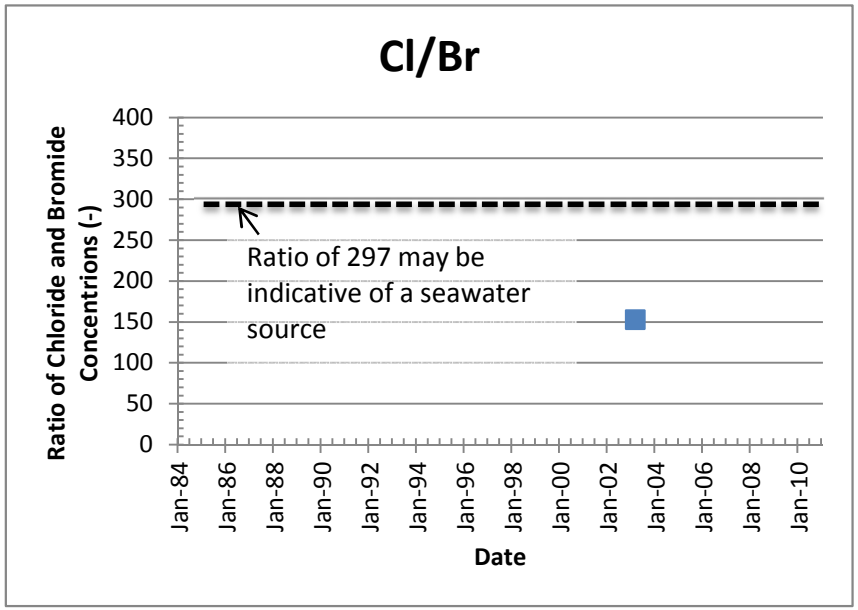


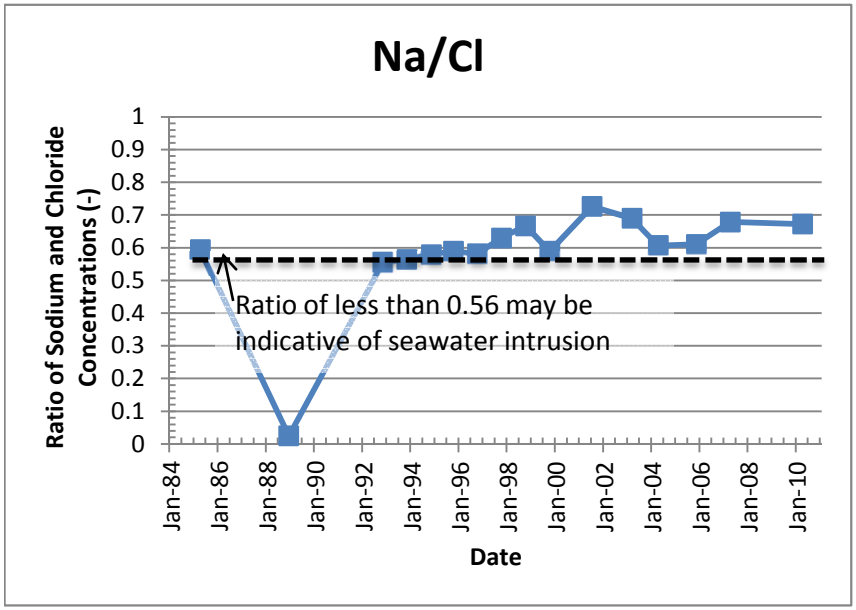


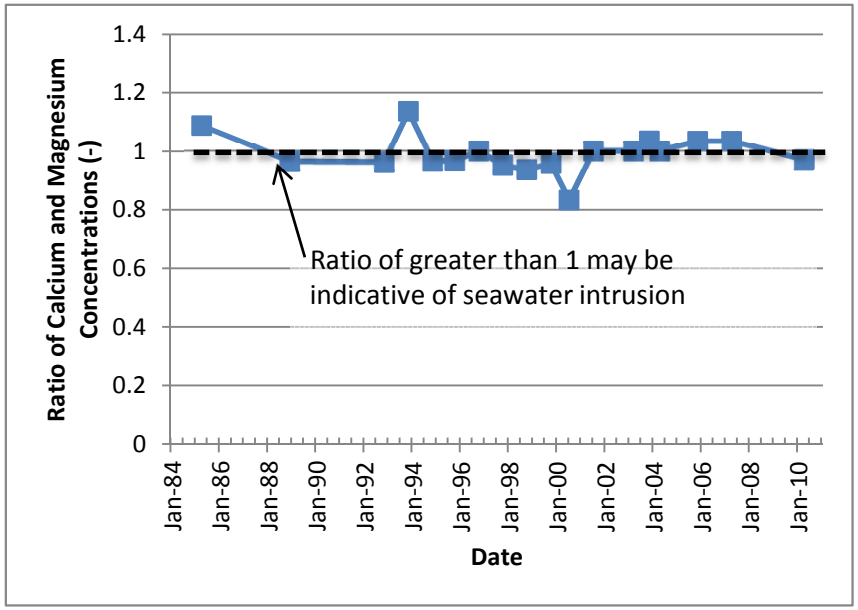


Seawater Intrusion Indicators for Well 4 Citrus

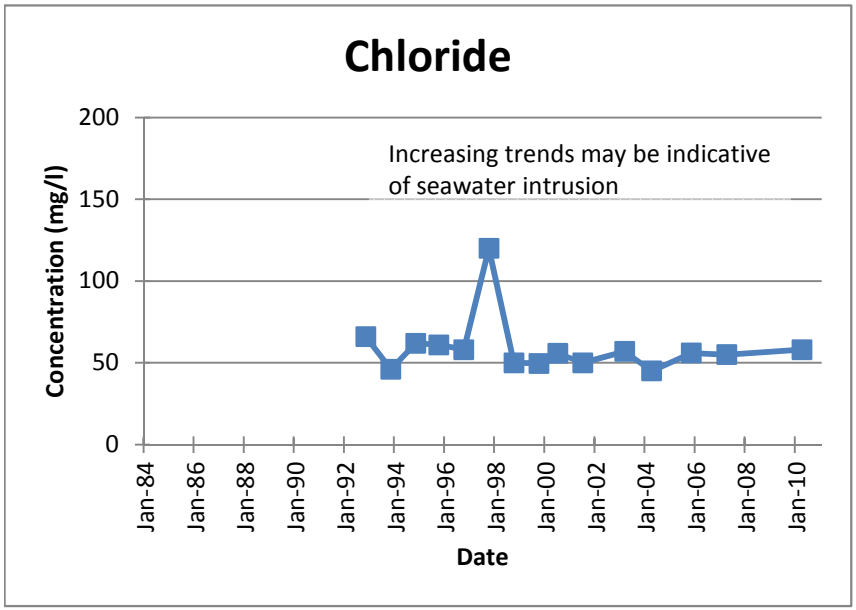


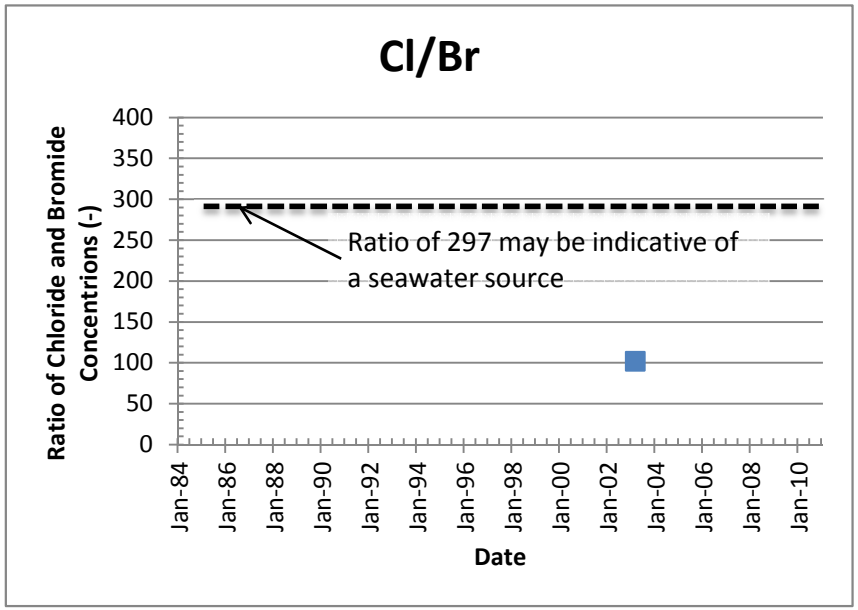


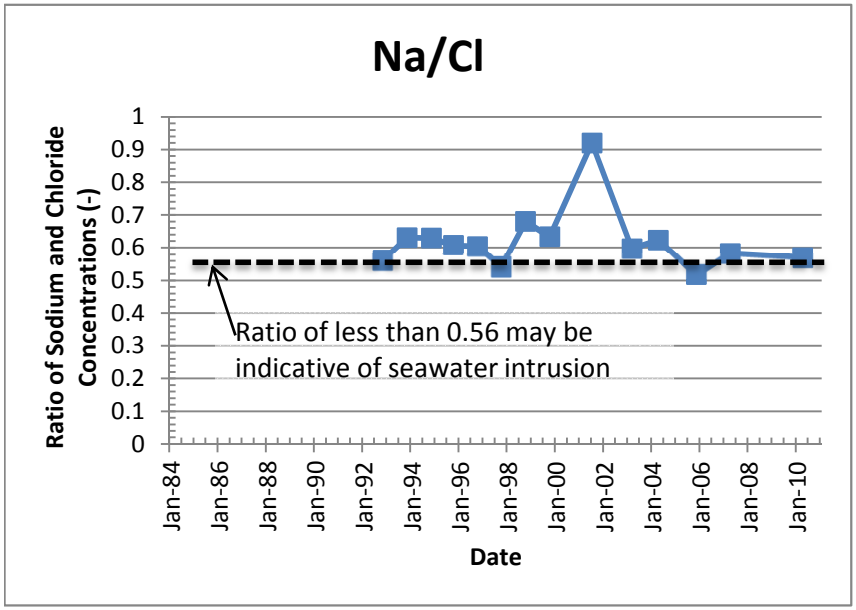


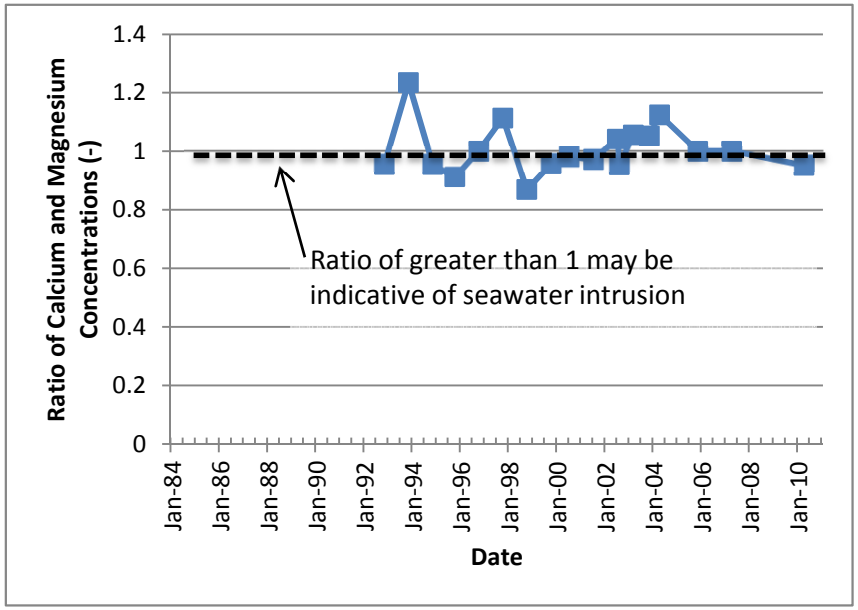


Seawater Intrusion Indicators for Well Jefferson

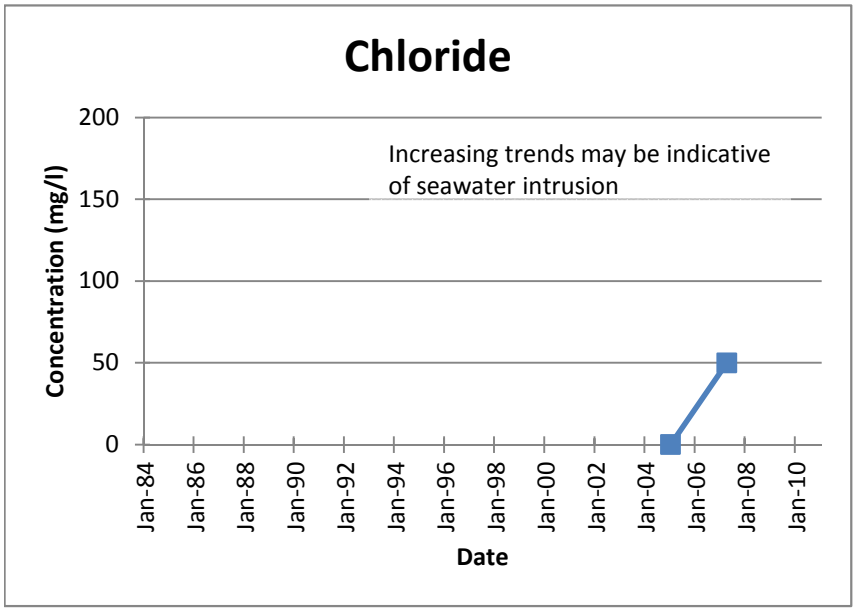


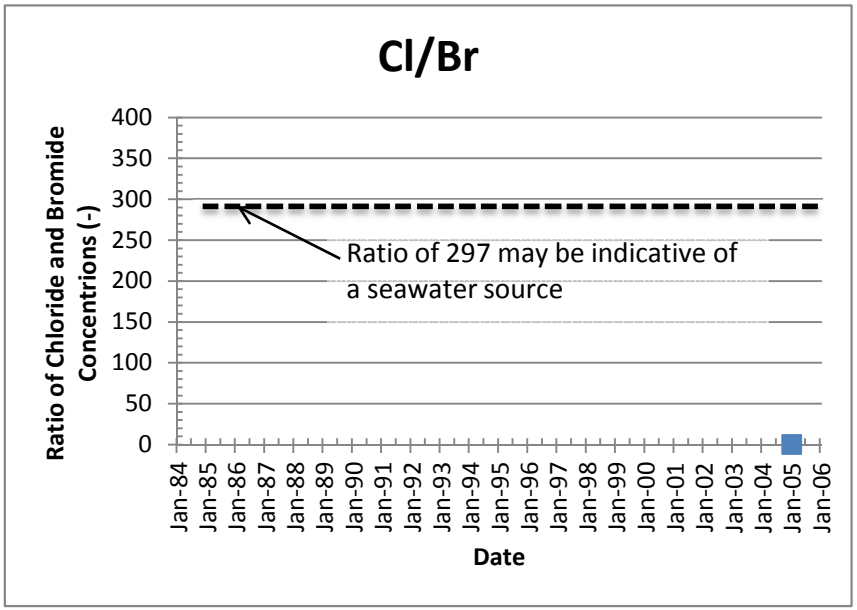


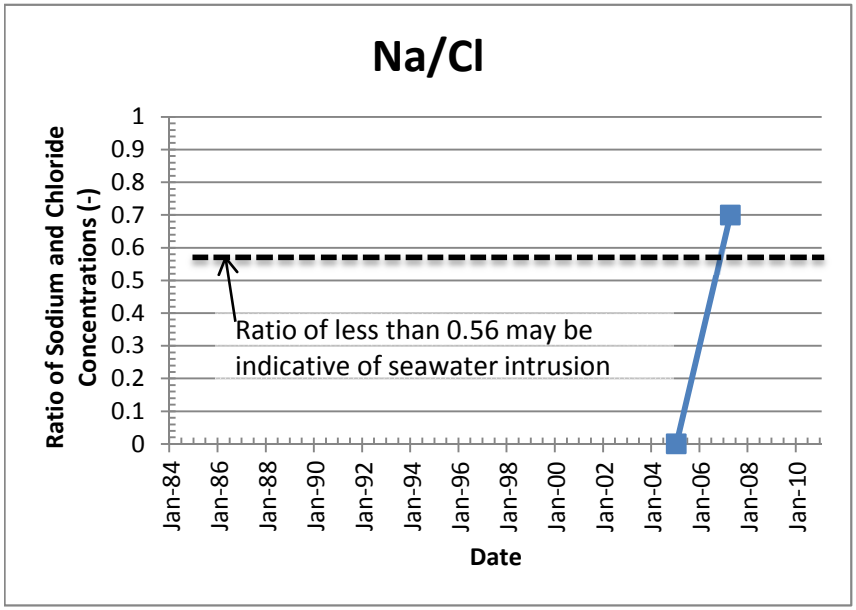


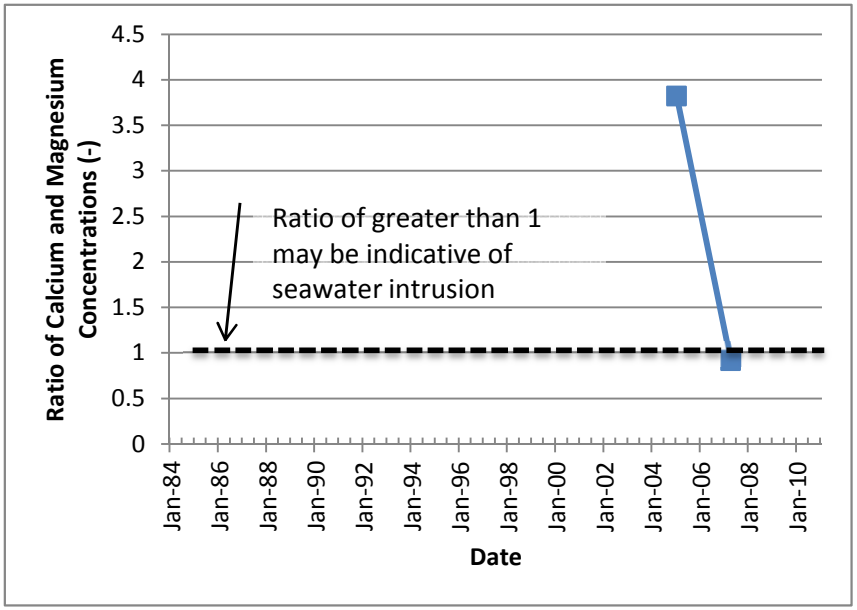


Seawater Intrusion Indicators for Well Junipero Serra

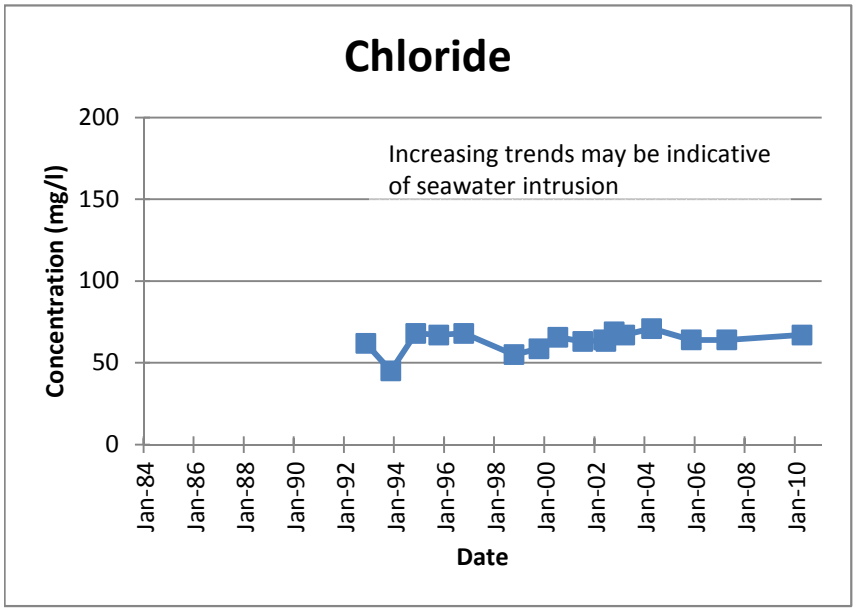


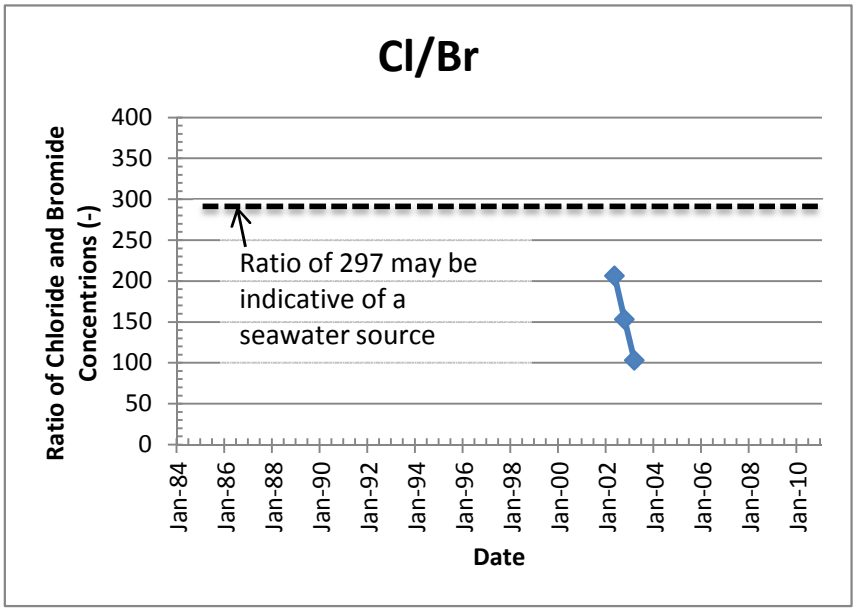


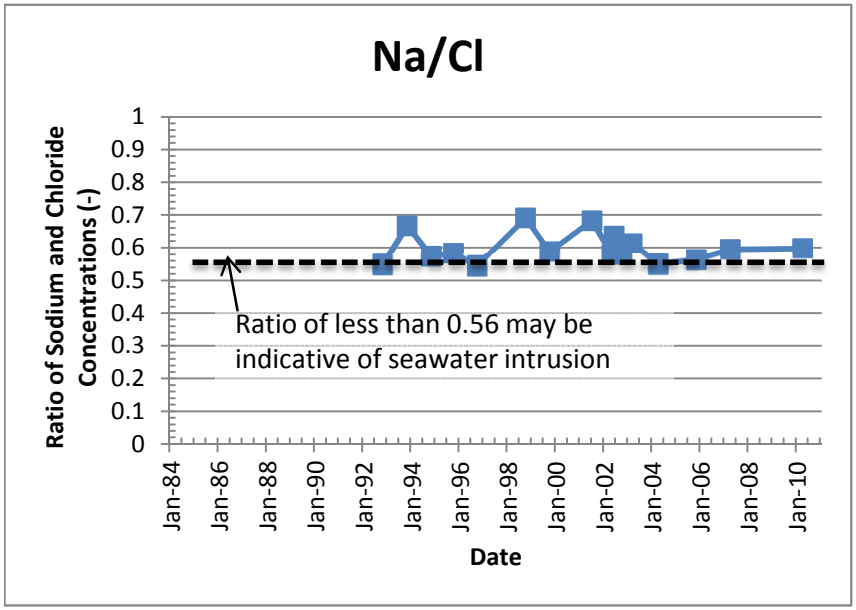


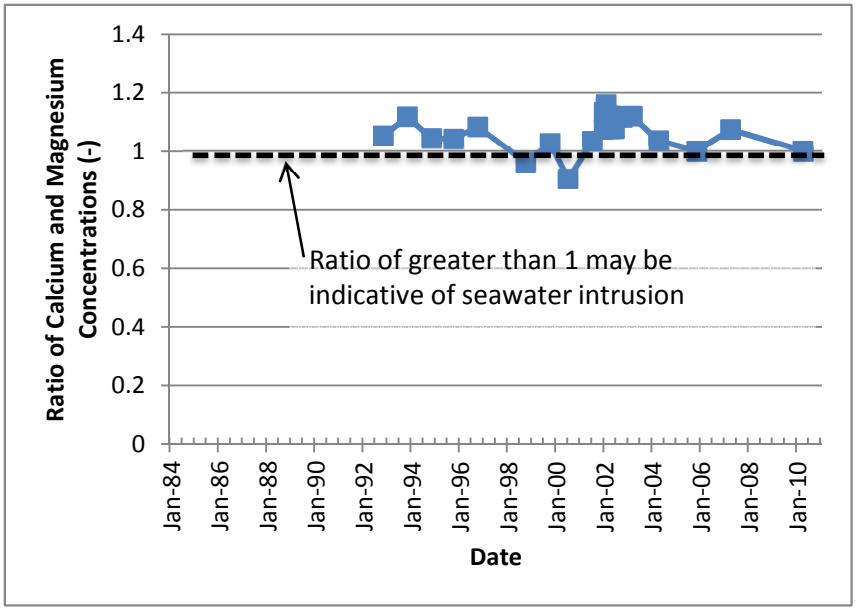


Seawater Intrusion Indicators for Well Vale









Seawater Intrusion Indicators for Well Westlake