

APRIL 2025

SISKIYOU COUNTY FLOOD CONTROL & WATER
CONSERVATION DISTRICT

Scott Valley Groundwater Sustainability Plan WY 2024 Annual Report



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Executive Summary

The Scott Valley Groundwater Sustainability Plan (GSP) was adopted in December 2021 by the Siskiyou County Flood Control and Water Conservation District, the Groundwater Sustainability Agency (GSA) for the Scott Valley groundwater basin (Basin; see [Figure 1](#)). The GSA formed in accordance with the Sustainable Groundwater Management Act (SGMA) of 2014 to coordinate, develop, and implement a GSP for the Basin (DWR Basin No. 1-005). The GSP was submitted to the California Department of Water Resources (DWR), ahead of the January 31, 2022 deadline for high and medium priority basins.

California Water Code (CWC) §356.2 requires the submission of an annual report to DWR by April 1 of each year following the adoption of the GSP. The annual report includes information for the preceding water year. This is the fourth annual report submitted to DWR and provides an update on Basin conditions and GSP implementation progress for water year (WY) 2024 (October 1, 2023 to September 30, 2024). It also includes changes in conditions that have occurred between the baseline year assessed in the GSP and the conditions in WY 2024. CWC §356.2 requires annual reports to include general information about the Basin and GSP, groundwater elevation data (contour maps and hydrographs), groundwater extraction, surface water supply, changes in groundwater storage, and a description of progress towards implementation of the GSP since the adoption of the previous annual report. [Table 1](#) provides a summary of the definition of undesirable results included in Chapter 3 of the GSP. **Overall, there were no occurrences of undesirable results and minimum thresholds (MTs) have not been exceeded in WY 2024 for the applicable sustainability indicators.**

For WY 2024, the Fort Jones CDEC station has precipitation record lower than its long-term mean (WY 1936-2024), but has shown increased precipitation compared to the dryer years in the past five years (i.e., WY 2020 to 2022). On December 19, 2023, the State Water Resources Control Board adopted a drought emergency regulation in the Shasta and Scott River Watersheds¹, which has been in effect during the WY since its approval on February 1, 2024.

Groundwater Levels

Measured groundwater levels in water year 2024 do not indicate the occurrence of undesirable results. Fall 2024 groundwater levels were compared to the MO and MT. The minimum groundwater level measurement taken in September – October 2024 was used for each well (“fall low”). None of the fall low measurements in the groundwater level representative monitoring point (RMP) network were below their MT in Fall 2024. Undesirable results for Groundwater Levels are defined to occur when 25% of fall measurements in the RMP network are below the MT for 2 consecutive years.

¹https://www.waterboards.ca.gov/drought/scott_shasta_rivers/

Therefore, undesirable results do not occur for Groundwater Levels. Contour maps of groundwater elevation are shown in Section 2.1 and hydrographs are included in Appendix A.

Groundwater Storage

The **Groundwater Storage** uses groundwater levels measured at RMPs as a proxy to assess compliance with the SMCs. Since no RMP wells recorded a fall low groundwater level measurement below the MT for two consecutive years, no undesirable results occurred for the **Groundwater Storage**.

Water Use and Groundwater Budget

Total groundwater extractions for the 2024 water year are estimated to be 35,720 AF (Section 2.2). Total water use is estimated to be 65,240 AF (Section 2.4). The Scott Valley Integrated Hydrologic Model (SVIHM) was used to develop a water budget for the basin to estimate the change in storage of the Scott Valley Basin during water year 2024. The estimate of basin storage decreased about 3,940 AF during the water year (Section 2.5).

Land Subsidence

Land subsidence was measured by satellite data (i.e., InSAR). Estimated land subsidence was less than 0.1 ft of subsidence, which avoids the occurrence of undesirable results. A map of land subsidence in water year 2024 can be found in Section 4.6.

Groundwater Quality

Groundwater quality SMCs are defined for nitrate and specific conductance. Measured groundwater concentrations during water year 2024 are presented in Section 4.5 and do not indicate the occurrence of undesirable results. No RMPs exceeded the MT for nitrate. Specific conductivity was not measured in any of the RMPS in Water Year 2024, as the monitoring frequency is not annual.

Plan Implementation Progress

Progress continues in the implementation of the GSP. Summary of progress on the implementation of the GSP in water year 2024, including implementation of projects and management actions, and an overview of plan implementation activities anticipated for the coming year can be found in Chapter 5 of this report.

Recent years have seen the introduction of additional regulations that were not considered in the approved Groundwater Sustainability Plan (GSP), submitted in 2022. These regulations influence the assumptions made within the GSP regarding water usage and the implementation of the GSP itself. Notably, the State Water Resource Control Board's (SWRCB) Scott and Shasta River Watersheds Emergency Regulations authorize water use curtailments when measured flows fall below the established emergency minimum flows, as outlined in the regulation. This functions as a management action, not implemented by the GSA, that influences the Basin's path to sustainability, as measured with the defined sustainable management criteria.

Ongoing research is being conducted to evaluate and quantify the effects of these regulations on the sustainability indicators, using the SVIHM. Additionally, the SWRCB is working to establish permanent instream flow requirements for the Scott and Shasta Rivers. The GSA will continue to track and engage with these regulations and evaluate the consequences for the GSP implementation. The GSA is already implementing projects to achieve the interim milestones and measurable objectives set for the interconnected surface water sustainability indicator.

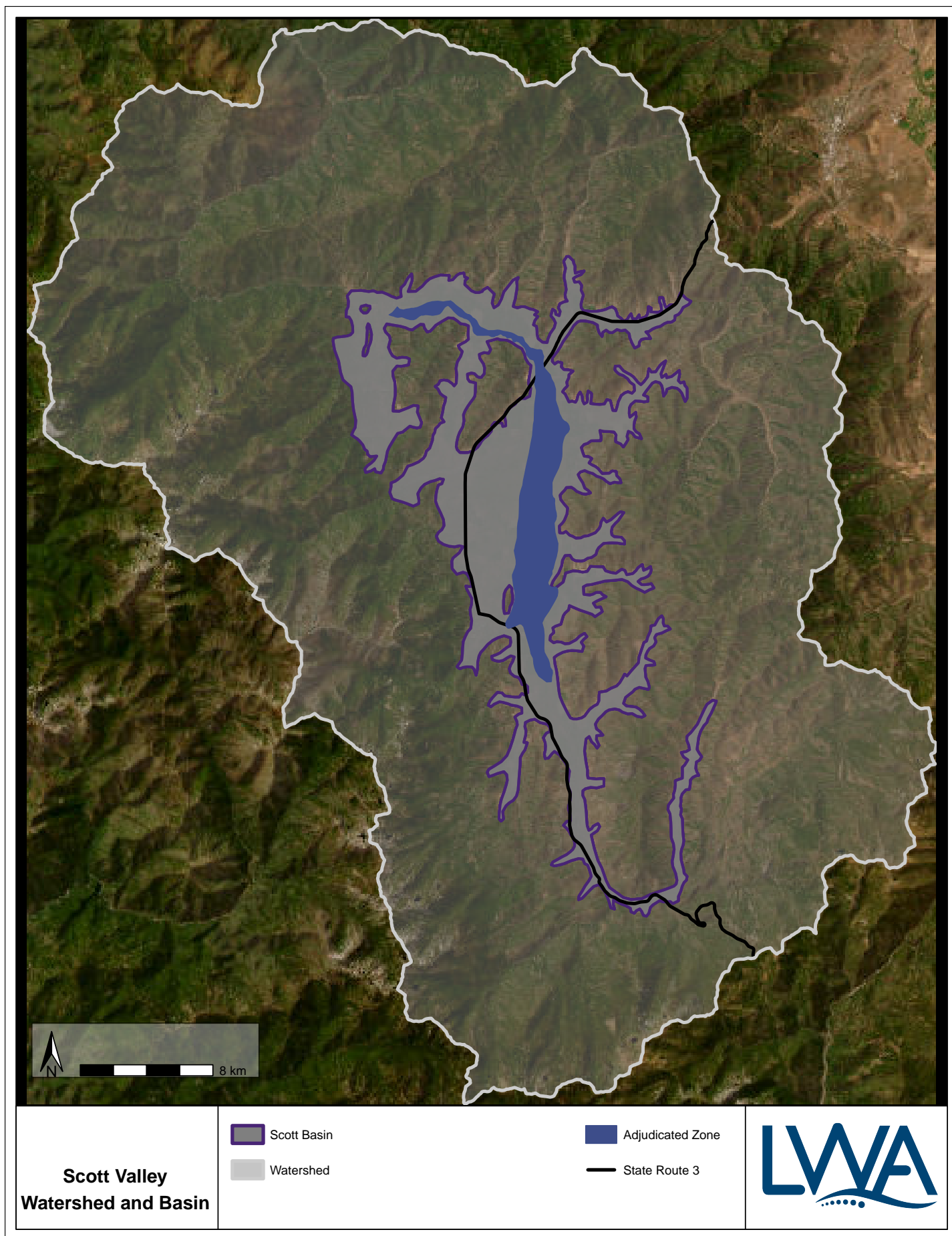


Figure 1: Scott Valley Bulletin 118 basin boundary (DWR 2018) and area subject to the 1980 Scott River Adjudication Decree (Superior Court of Siskiyou County 1980).

Table 1: Summary of Sustainable Management Criteria.

Sustainability Indicator	Minimum/Maximum Threshold (MT)	Measurable Objective (MO)	Undesirable Result Defined	WY 2024 Annual Report Status
Groundwater Levels	Historic maximum depth to water measurement prior to 2015 with a buffer of 10% of historic max depth or 10 feet, whichever is smaller.	75th percentile of the fall measurement range (i.e., water levels > 25% of historic record).	The fall low water level observation in any of the representative monitoring sites in the Basin falls below the respective minimum threshold for 2 consecutive years.	No occurrence of undesirable results, with data gaps at wells Q32, QV09, QV01 and QV18
Groundwater Storage	Groundwater levels used as a proxy for this sustainability indicator.	Groundwater levels used as a proxy for this sustainability indicator.	Same as "Chronic Lowering of Groundwater Levels."	No occurrence of undesirable results, with data gaps at wells Q32, QV09, QV01 and QV18
Water Quality	Nitrate = 10 mg/L, Specific Conductivity = 900 umhos/cm	More than 90% of wells monitored for water quality maintain their range of water quality measurements measured during 1990 to 2020.	More than 25% of groundwater quality wells exceed the maximum threshold for concentration and/or concentrations in over 25% of groundwater quality wells increase by more than 15% per year, on average over ten years.	No occurrence of undesirable results.

Table 1: Summary of Sustainable Management Criteria. *(continued)*

Sustainability Indicator	Minimum/Maximum Threshold (MT)	Measurable Objective (MO)	Undesirable Result Defined	WY 2024 Annual Report Status
Interconnected Surface Water	Average 15% stream depletion reversal caused by groundwater pumping from outside the adjudicated zone in 2042 and thereafter.	Average relative stream depletion reversal of 20% or above in 2042 and thereafter.	Ecological stress from <15% average stream depletion reversal of the depletion caused by groundwater pumping outside of the adjudicated zone in 2042 and later, as defined by specific reference scenarios with SVIHM.	To be evaluated with current data (ahead of 2027 GSP Evaluation).
Seawater Intrusion	This sustainability indicator is not applicable in the Subbasin.		Not applicable for the Basin.	
Land Subsidence	<0.1 ft of subsidence in any one year.	Maintain current ground surface elevations.	Groundwater pumping induced subsidence is greater than the minimum threshold of 0.1 ft (0.03 m) in any single year;	No occurrence of undesirable results.

Chapter 1

Introduction

1.1 Purpose

Annual reports will be completed throughout the course of GSP implementation. The purpose of these reports is to provide periodic updates on the progress towards Basin sustainability, current Basin conditions, and any improvements and/or additions to the monitoring networks. Changes in land ownership, well status, monitoring personnel availability, or monitoring program participation may limit data collected at the representative monitoring sites, as identified in the GSP. As changes to monitoring site status occur, the monitoring network is reevaluated to ensure adequate measurement density and spatial coverage of the Basin.

1.2 Scott Valley GSA

The Siskiyou County Flood Control and Water Conservation District is the sole GSA for the Basin. The Siskiyou County Flood Control and Water Conservation District Act (Cal Uncod. Water Deer, Act 1240 §§ 1-38) was adopted by the State Legislature in 1959. This Act established a special district of the same name, and of limited powers that could provide flood protection, water conservation, recreation and aesthetic enhancement within its boundaries. At the time of its creation, the jurisdictional boundaries of the Flood District were smaller than those of the County. In 1983, following County of Siskiyou Local Agency Formation Commission (LAFCO) action, the balance of the County was annexed into the District, making its jurisdictional boundaries coincide with the County. The District is governed by a Board of Directors that is composed of the Board of Supervisors; however, the District is a separate legal entity from the County, with independent rights and limited powers set forth in its originating act. The District's purpose is the conservation and control of storm, flood, and other waters and ensuring beneficial use thereof.

The Siskiyou County Flood Control and Water Conservation District approved the GSP for Basin in December 2021 and submitted the GSP to DWR in January 2022. The GSA submits an annual report to DWR documenting the progress in achieving groundwater sustainability, by April 1st, for each preceding water year. The monitoring data for the preceding water year is compiled to present the most current groundwater conditions to identify whether the Sustainable Management Criteria (SMCs) were met. Additionally, all progress in project management action implementation is presented.

1.3 Basin Description

The Scott Valley Groundwater Basin (“Basin”) is located in the Scott River watershed (“Watershed”), part of the larger Klamath River watershed which spans sections of Northern California and Southern Oregon. The Basin covers 100 sq mi (259 sq km) while the Watershed is much larger, encompassing 814 square miles (2,108 square km). Under the 2019 basin prioritization conducted by the California Department of Water Resources (DWR), the Basin (DWR Basin 1-005) was designated as medium priority (DWR [2019](#)).

Scott Valley is encircled by mountain ranges with the Scott Bar, Marble, Salmon, and Scott Mountains to the north, west, southwest, and south, respectively, and hills and ridges east of the Scott Valley that divide the Scott and Shasta watersheds. The Scott River is the main water feature in the Basin, and is one of the major undammed streams in California. Within the Basin boundary, the Scott River flows south to north until it turns westward near Fort Jones. The Scott River flows northwest out of the Basin, traveling around the Scott Bar Mountains through a steep canyon to join the Klamath River at River Mile 143 ([Harter and Hines 2008](#)). The Basin includes two areas not required to form GSA or develop GSPs under SGMA: the interconnected zone covered by a groundwater adjudication (Figure 1) and the Quartz Valley Indian Reservation (Figure 1.1). While outside the jurisdiction of the GSA, these portions of the Basin are considered by the GSP as they are within or adjacent to the GSA area. In 1980, the Scott River and some of the surrounding interconnected groundwater were adjudicated by decree No. 30662 ([Superior Court of Siskiyou County 1980](#)). Pursuant to Water Code section 10720.8, DWR requires adjudicated basins to submit reports by April 1 of each year. These reports must include data on groundwater elevation, storage, and extraction, as well as surface water use. An adjudicated basin report for the Scott River Stream System is submitted to DWR annually in accordance with this requirement¹.

¹<https://sgma.water.ca.gov/adjudbasins/report/publicview>

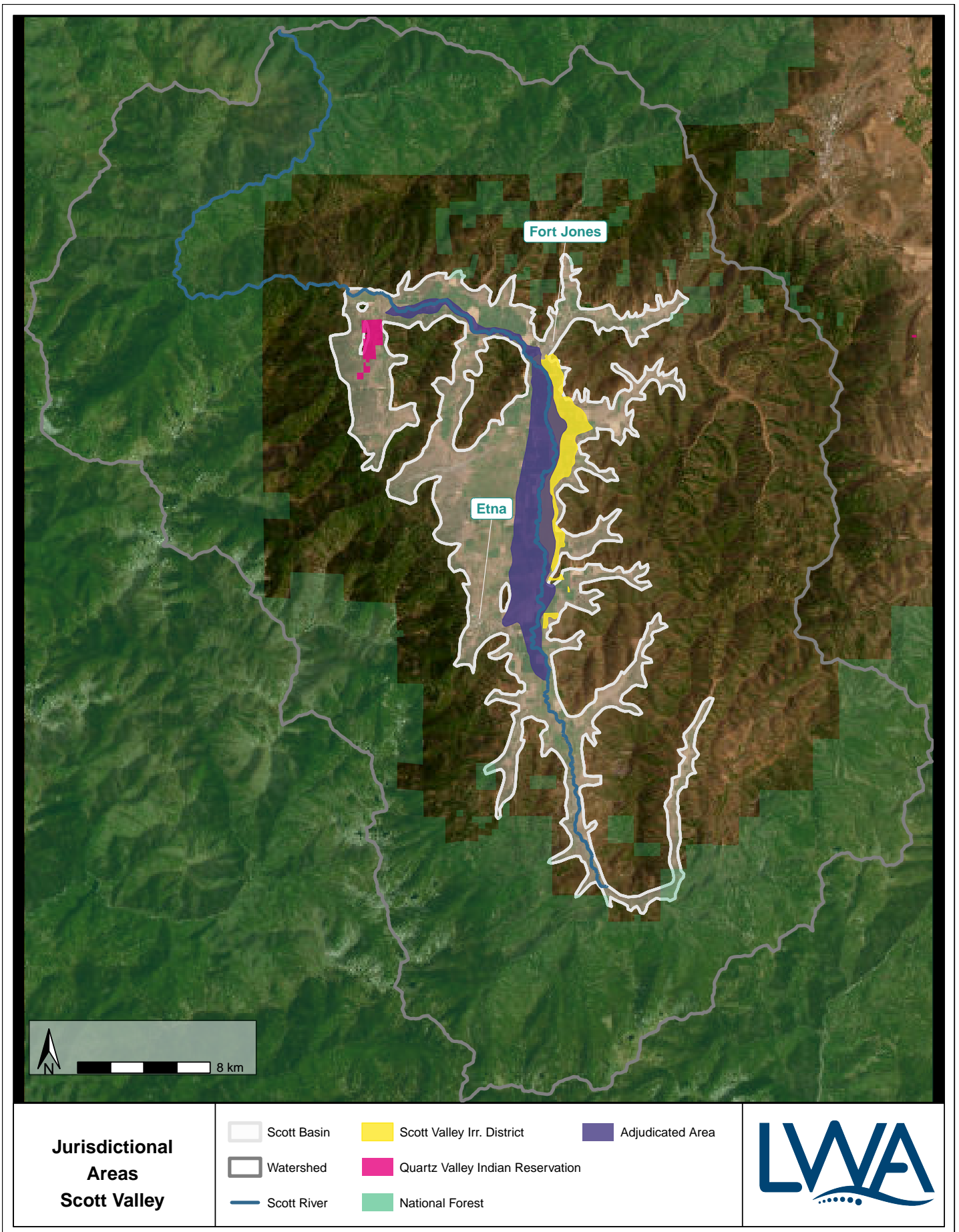


Figure 1.1: Jurisdictional areas within Scott Valley.

The Basin boundary encompasses the incorporated communities of Etna and Fort Jones; the unincorporated communities of Callahan, Greenview, and Quartz Valley/Mugginsville; and the Quartz Valley Indian Reservation (QVIR) on tribal trust lands. The population of Scott Valley was estimated at 8,000 (SRWC 2005), including the populations of the two incorporated towns. In the 2010 Census, the number of residents of Fort Jones and Etna was estimated at 839 and 737, respectively (U.S. Census Bureau 2012). Three communities in Scott Valley are categorized as disadvantaged: Fort Jones, Etna, and Greenview (Figure 1.3). Fort Jones relies on groundwater as a municipal water source, while Etna is reliant on surface water. A water district, the Scott Valley Irrigation District (SVID) serves water to users east of the Scott River (Figure 1.1). The Scott Valley and Shasta Valley Watermaster District, which manages the diversion of surface water in accordance with court adjudications or agreements, is operational in the Basin for French and Wildcat Creeks.

The majority of land within the Scott River watershed is under private ownership (two-thirds of the total area) with the remaining area managed by QVIR, the United States (U.S.) Department of the Interior Bureau of Land Management (BLM) and U.S. Forest Service (USFS) (Harter and Hines 2008). Much of the watershed surrounding Scott Valley is National Forest land. According to land use surveys conducted by DWR (DWR 2017), half of the Basin area is covered by agriculture, with most of that split approximately evenly between pasture and an alfalfa/grain rotation.

Scott Valley has two major geologic components, the alluvial deposits in the valley and the underlying bedrock, which also forms the surrounding mountains. The Basin boundary generally corresponds to the area covered by valley alluvium, bounded by the contact between the alluvium and older bedrock. The complex geology of Scott Valley has previously been simplified by grouping geologic units into four main categories: Quaternary deposits, granitic bedrock, mafic and ultramafic bedrock, and sedimentary bedrock (NCRWQCB 2005). Generally, Quaternary deposits are composed of unconsolidated gravel sand and soils and make up the low gradient valley floor, extending up some tributary valleys. The granitic bedrock is in the mountains to the west of the Valley, ranging in composition from granite to granodiorite (NCRWQCB 2005; Mack 1958). Mafic and ultramafic bedrock is largely altered to serpentine and is found in the Marble Mountains in the northeast part of the Watershed and the Scott Mountains in the southeast part of the Watershed. Mafic and ultramafic bedrock also form a discontinuous band, extending from the southeast to northeast regions of the Watershed.

Folding, faulting, and shearing have caused deformation which has, in the last 1–2 million years, caused subsidence of the valley floor and uplift of the mountains (NCRWQCB 2005). In the Quaternary and late Tertiary, faulting resulted in a depression in the middle portion of Scott Valley, which lies several hundred feet lower than the bedrock in the northern part of the valley. Streams have deposited sediment throughout this area, resulting in the alluvial fill that comprises the main water bearing units today. The Basin underlying the alluvial floodplain is the primary groundwater feature in the area. Valley alluvium is mostly Recent in age with a few isolated Pleistocene sections along the edges of the Valley. As defined by DWR (2004), the Basin is 28 mi (45km) in length, 0.5 to 4 mi (0.8 to 6 km) in width and covers a surface area of 100 sq mi (259 sq km). The predominant water-bearing units in Scott Valley are Quaternary stream channel, floodplain, and alluvial fan deposits (DWR 2004). The combined thickness of the water-bearing units is somewhat irregular, with the greatest thicknesses (estimated at 200 feet in Tolley, Foglia, and Harter 2019), located in central-western region of the Basin, and thinning out towards the Basin boundary.

1.3.1 Climate

Scott Valley has a Mediterranean climate with distinctive seasons of cool, wet winters and warm, dry summers. The orographic effect of the mountains to the west and south of the Valley creates a rain-shadow in eastern areas of the Valley. The higher elevation areas to the west and south of the Valley historically receive greater annual precipitation than the east side of the Valley. At elevations below 4,000 ft (1219 m), precipitation mostly occurs as rainfall, as is the case on the valley floor. Precipitation accumulates as snow in the surrounding mountains, with a rain-snow transition zone between 4,000 and 5,000 ft (1219 and 1524 m) ([McInnis and Williams 2012](#)).

The long-term historical precipitation record indicates that recent average precipitation and snowfall are lower than levels recorded in the middle of the 20th century. Over the past 15 years, the 10-year rolling average precipitation has been consistently below the long-term average of 20.8 inches and has shown a decreasing trend. Additionally, average snow depth at snow measurement stations near the western boundary of the Watershed has gradually decreased over time. Although, the snow depths have remained relatively stable at three stations near the southern boundary of the Watershed. There has also been a decrease in the percentage of precipitation falling as snow on a regional scale over the past 70 years, as noted by Lynn et. al ([2020](#)). As shown in [Figure 1.2](#), total precipitation in WY 2024 was about 5 inches less than WY 2023, but was greater than the some of the dryer years over the past 10 years (i.e., WY 2020-2022).

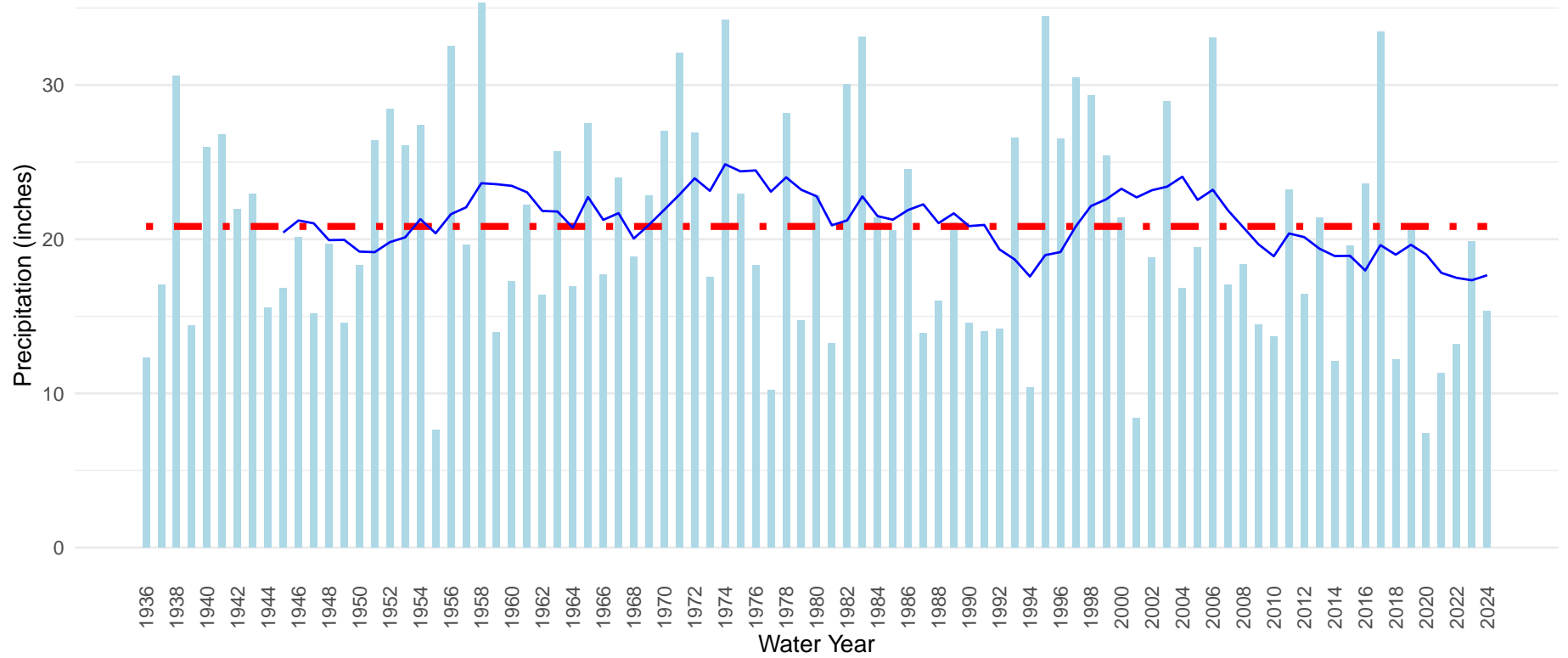


Figure 1.2: Fort Jones annual precipitation, water year 1936 to 2024, according to CDEC data. The long-term mean is shown as a red dashed line, and the ten year rolling mean is the blue trendline.

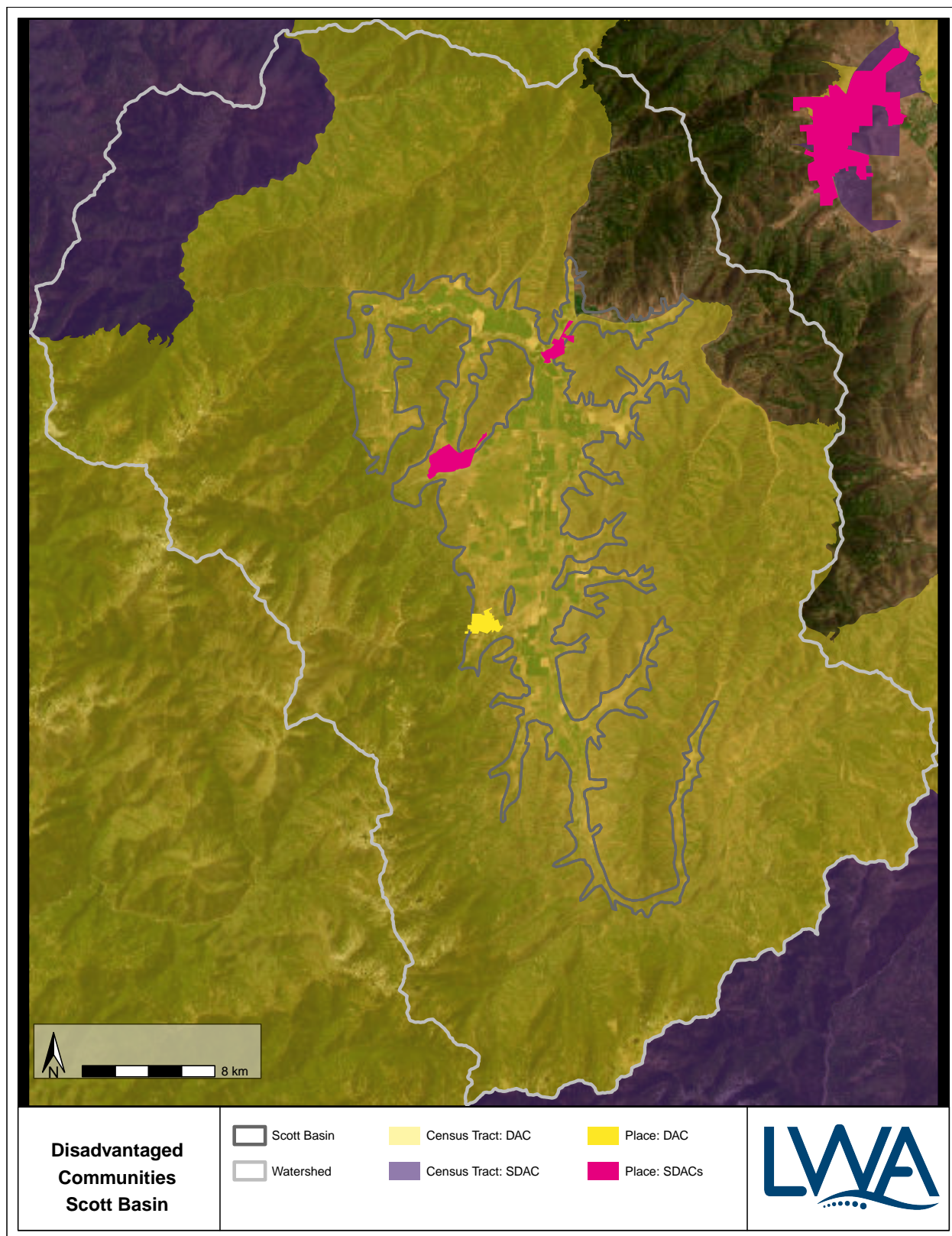


Figure 1.3: Based on the 2016 U.S. Census, place and tract boundaries of Disadvantaged Communities (DACs: $\$42,737 \leq \text{MHI} < \$56,982$) and Severely Disadvantaged Communities (SDACs: $\text{MHI} < \$42,737$) in the Scott Valley watershed, using data from the DWR DAC Mapping Tool (DWR 2016b).

1.3.2 Drought Emergency Regulations

In May 2021, Governor Gavin Newsom declared a drought emergency for 41 counties in California, including Siskiyou County. A proclamation in September 2024 by Governor Gavin Newsom terminated the states of emergency in 19 counties in California but the state of emergency remained in effect for Siskiyou County. In August 2021, the State Water Resources Control Board (SWRCB) adopted drought Emergency Regulations, regarding the Scott and Shasta Rivers which were read-opted, with amendments, in July 2022². These Emergency Regulations authorized curtailments of surface water diversions when flows did not meet SWRCB approved drought emergency minimum monthly flow targets.

On May 23, 2023, the Karuk Tribe of California, Environmental Law Foundation, Pacific Coast Federation of Fishermen's Associations, and Institute for Fisheries Resources submitted a petition for rulemaking to the State Water Board requesting a permanent regulation establishing minimum flows in the Scott. After an August 15, 2023 hearing on the petition, the State Water Board directed Division of Water Rights staff to move forward with an emergency regulation and identify the scientific work needed to pursue long-term flows in the Scott River and Shasta River watersheds, and update the Board on that work. The new emergency regulation for Scott and Shasta River Watersheds was adopted on December 19, 2023 and became effective since approval on February 1, 2024.

Effective July 25, 2024, The Division of Water Rights issued two Orders curtailing surface water and groundwater diversions in the Scott River Watershed:

- Order WR 2024-0024-DWR: Curtails surface water diversions in the Scott River watershed.
- Order WR 2024-0025- DWR: Curtails adjudicated groundwater rights and groundwater diversions associated with parcels listed in Attachment A of the Order, for the Scott River watershed.

It is unknown at this time the impacts curtailment of surface water diversions had on the underlying aquifer and impacts to rural residential and groundwater dependent ecosystem (GDE) water use are still being evaluated.

²https://www.waterboards.ca.gov/drought/scott_shasta_rivers/

Chapter 2

Groundwater Basin Conditions

2.1 Groundwater Elevations

This section describes the change in groundwater elevations in WY 2024 and general observations of groundwater level declines or increases in WY 2024. This summary includes quantified changes observed during the water year, hydrographs and contour maps of groundwater elevation. The contour maps and hydrographs below include available data that has undergone quality assurance and quality control processes. As such, coverage is limited and only part of the Basin is represented. Additional hydrographs can be found in **Appendix A**.

[Figure 2.1](#) shows groundwater elevation timeseries for select wells in each hydrogeologic zone to illustrate the historical record of these wells. **Appendix A** shows hydrographs of the SMC network, showing measurable objectives, primary triggers, and minimum thresholds along with hydrographs of other wells in the Basin that are not included in the SMC network.

[Figure 2.2](#) and [Figure 2.3](#) show groundwater elevation contours for the seasonal high and low groundwater conditions, typically observed in March and October, respectively. Both [Figure 2.2](#) and [Figure 2.3](#) show characteristically lower groundwater elevations in the northeast portion of the basin (near Fort Jones) that are increased towards the Basin's western, southern, and southeastern boundaries. Regions of highest elevation are the in the northwest arm of the Basin near Quartz Valley and the Basin's southern valley at the confluence of French Creek and the Scott River. [Figure 2.3](#) shows groundwater conditions in Fall 2024, marking conditions at the end of WY 2024.

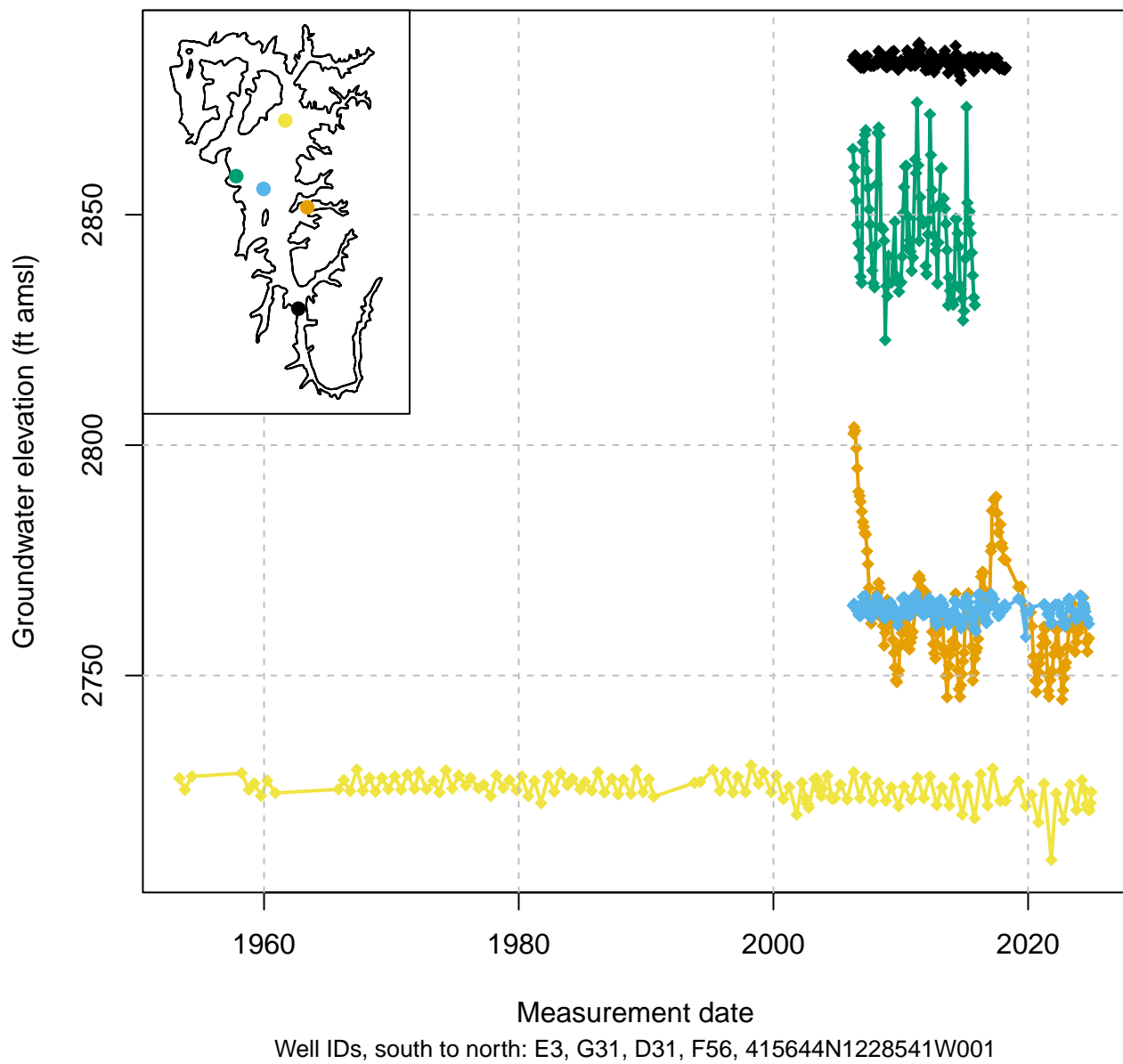


Figure 2.1: Select long-term groundwater elevation measurements in five wells, one located in each hydrogeologic zone of the Scott Valley Groundwater Basin.

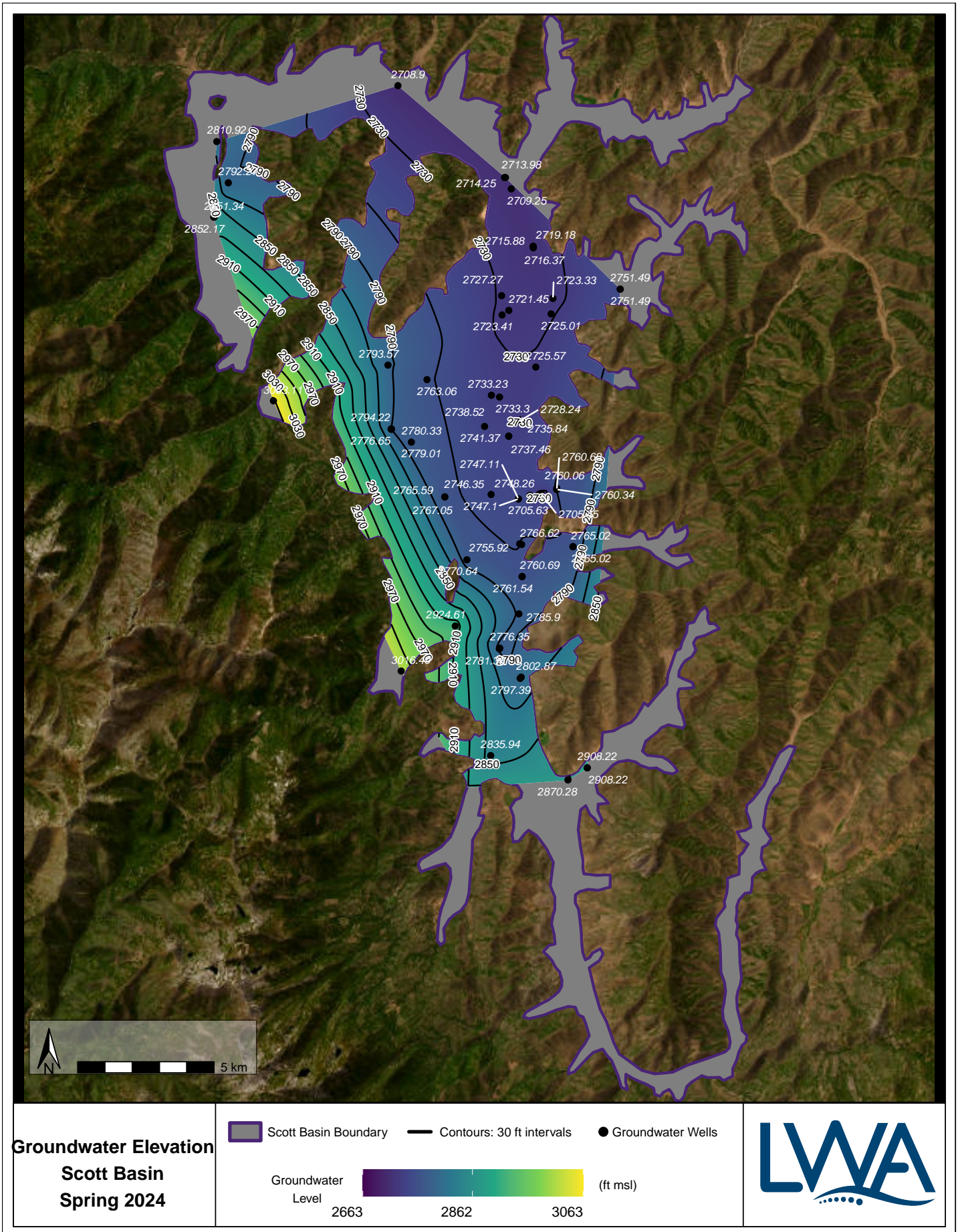


Figure 2.2: Scott Valley Groundwater Elevations, Spring 2024.

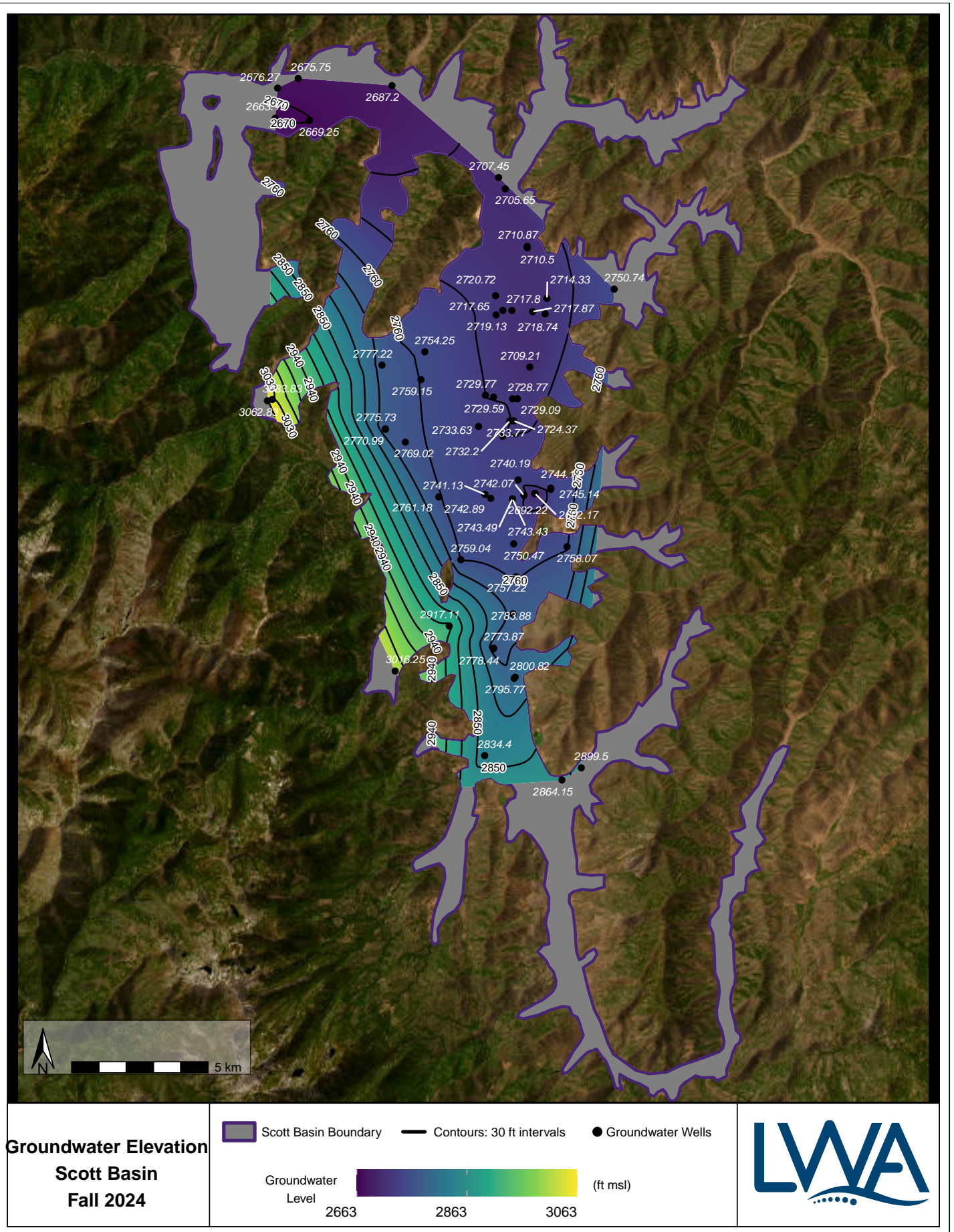


Figure 2.3: Scott Valley Groundwater Elevations, Fall 2024.

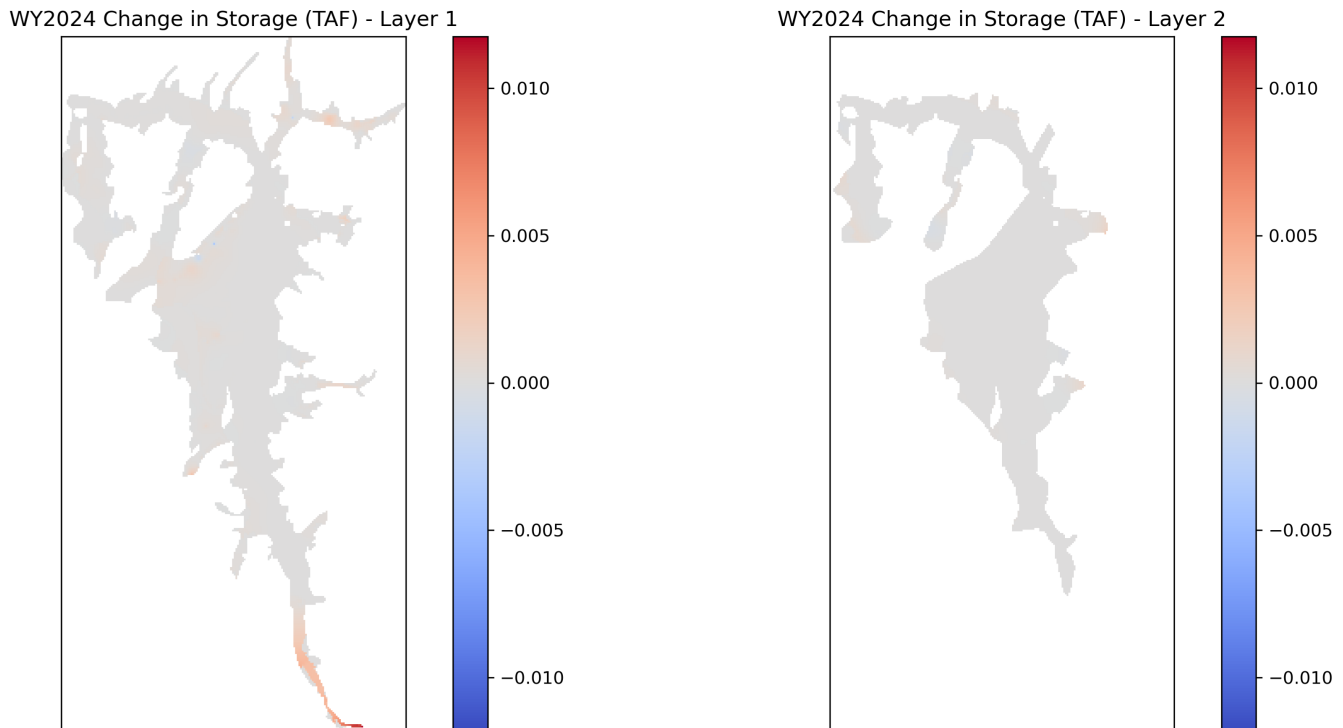


Figure 2.4: Groundwater storage change based on the BVIHM groundwater model simulation. Budget terms 'Flow from Outside' and 'Flow to Outside' refer to flow entering and exiting the groundwater basin boundary. Incremental storage change is equal to annual storage change.

2.2 Groundwater Extractions

This section summarizes monthly groundwater extractions for water year 2024 with the data available and defines the method of measurement by water use sector. The best method available to estimate groundwater extraction in Scott Valley is through estimation with the Scott Valley Integrated Hydrologic Model (SVIHM). Values are based on the SVIHM with a 30% reduction in groundwater pumping due to local cooperative solutions (LCS) developed under the State Water Resources Control Board (SWRCB's) Drought Emergency Order for Scott Valley. The general location with volume and rate of groundwater extraction are provided in [Figure 2.5](#) and [Figure 2.6](#), respectively. As shown, the highest levels of pumping occur in the northern portion of the Basin near Fort Jones and also along the Scott River beginning near the confluence of French Creek.

Groundwater extraction for agricultural pumping, as estimated by SVIHM for WY 2024, is 34,720 acre-feet (AF). There is an additional 1,000 AF of groundwater extraction based on population data and municipal water use estimates¹.

¹Estimate assumes 1 AF per 3.5 persons/year and population of 3,520 people (population based on estimate in 2019 Basin Prioritization).

2.3 Surface Water Supply Used for Groundwater Recharge or In-Lieu Use

SGMA requires that the GSP annual report tabulate “Surface water supply used or available for use” (CCR §356.2 [b] [3]). For WY 2024 surface water supply was estimated by the SVIHM as 29,520 AF. A drought emergency curtailment order went into effect for the growing season of 2024, but this curtailment is not considered to have significantly reduced the amount of surface water use compared to the full allocation of previous years.

Surface water diversion was used for groundwater recharge in WY 2024, with 2,540 AF diverted for recharge. As discussed in the later section covering projects and management actions, flows in the Scott River met or surpassed the threshold in the temporary permit, thereby enabling meaningful groundwater recharge. The impact of the groundwater recharge is currently being evaluated with SVIHM. A breakdown of groundwater extraction and total water use by water use sector for WY 2024 is provided in [Table 2.1](#) and [Table 2.2](#), respectively.

2.4 Total Water Use

This section summarizes groundwater use and surface water available for use for the reporting period. Total water use is estimated by summing surface water supply data and estimated groundwater extraction. For WY 2024 total water use is estimated to be 65,240 AF.

2.5 Change in Groundwater Storage

The change in groundwater storage for the Basin was estimated based on the SVIHM. The change in groundwater storage for WY 2024 is estimated as -3,940 AF. For SMCs, groundwater levels are used a proxy for groundwater storage. The MT, MO, and IM are identical to those defined for groundwater levels.

[Figure 2.7](#) depicts water year type and annual change in groundwater storage, cumulative change in groundwater storage for the Basin based on historical data to the extent available, including from January 1, 2015 to the current reporting year. [Figure 2.4](#) shows the difference in groundwater level between fall low measurements in WY 2023 and WY 2024 and represents where groundwater storage changes are occurring.

WY 2024 GW Irrigation Volume by Field

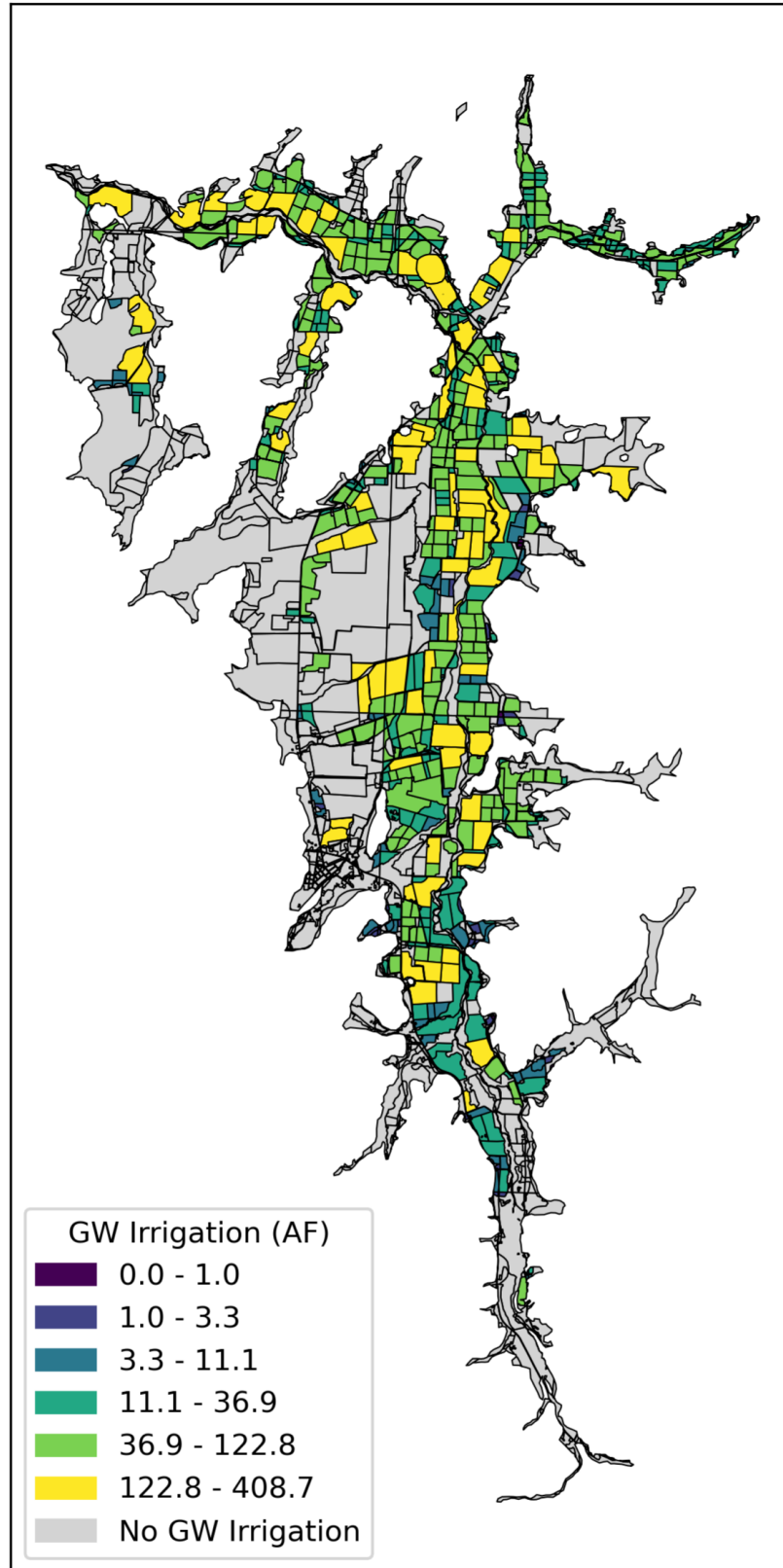


Figure 2.5: Map of land use polygon specific average annual pumping rates (acre-feet/year) between Fall 2023 and Fall 2024. This map provides an approximate spatial distribution of average groundwater extraction estimates that is still applicable to the current SVIHM.

WY 2024 GW Irrigation Depth by Field

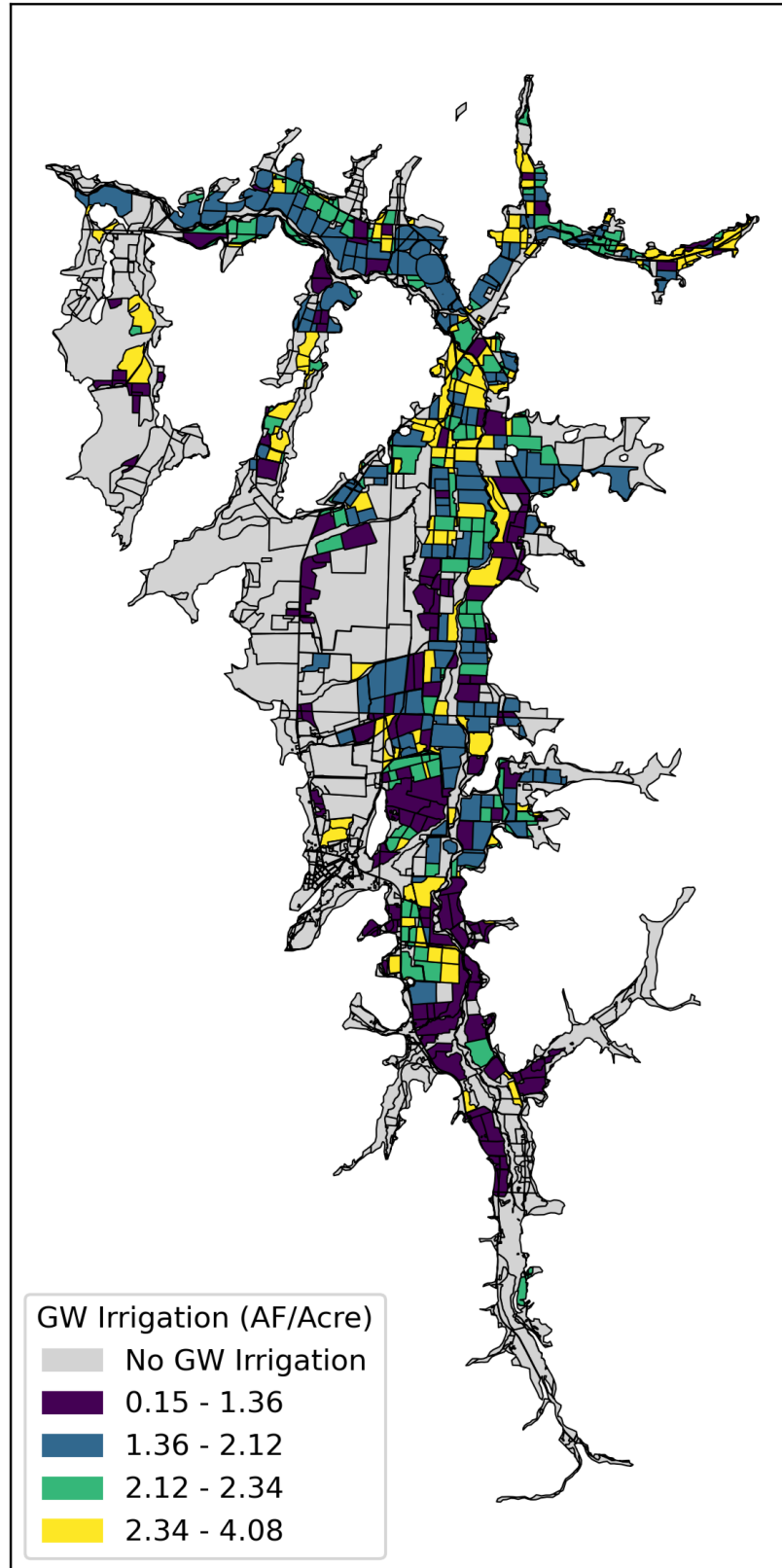


Figure 2.6: Map of land use polygon specific average annual pumping rates (acre-feet/acre/year) between Fall 2023 and Fall 2024. This map provides an approximate spatial distribution of average groundwater extraction estimates that is still applicable to the current SVIHM.

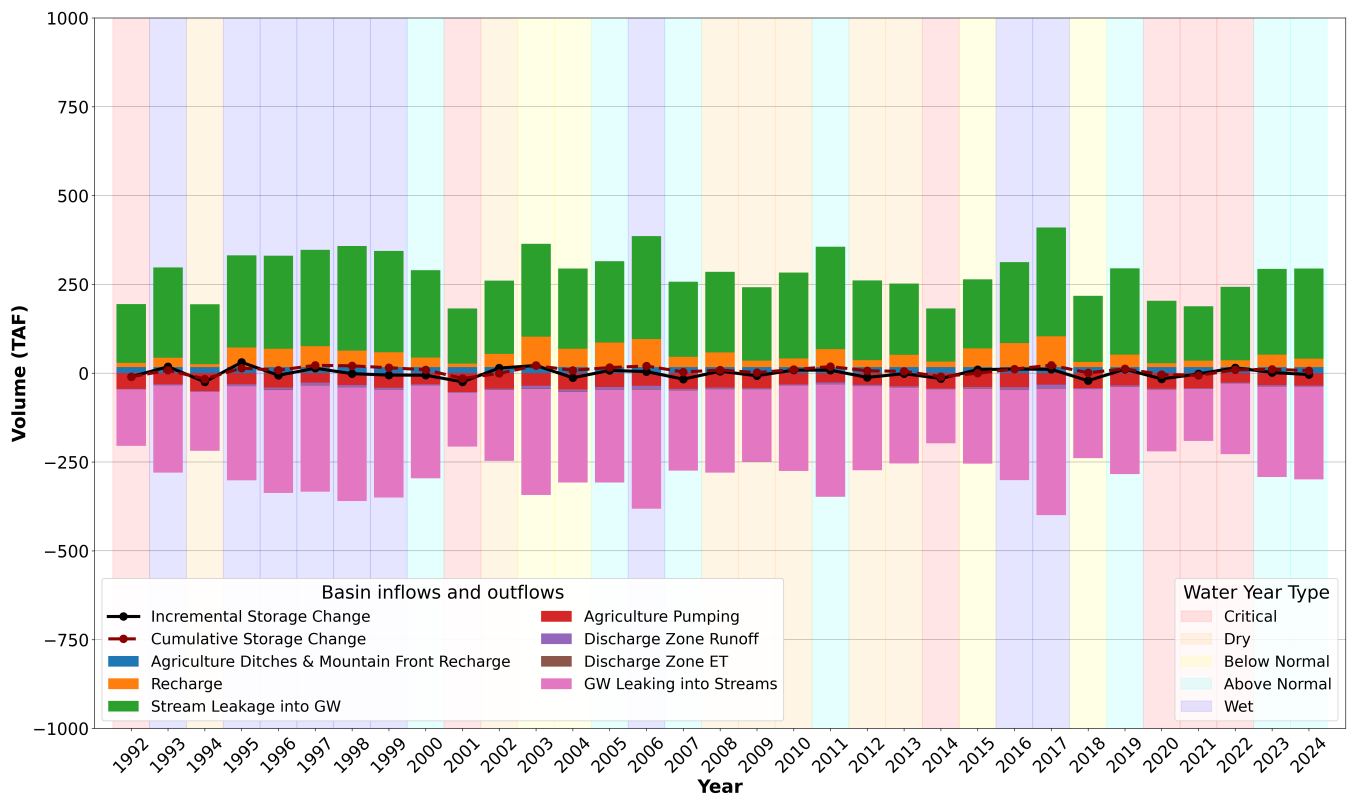


Figure 2.7: Groundwater storage change based on difference in fall groundwater contours between years as estimated by the SVIHM. 'dStorage' refers to the change in water storage such that positive dStorage refers to gains in water storage (more inflow than outflow over the time period), while negative dStorage refers to losses in water storage (less inflow than outflow over the time period).

Table 2.1: Groundwater Extraction in WY 2024 by water use sector.

Water Use Sector	Groundwater Extraction (AF)	Method	Accuracy
Urban / Domestic	1,000	Estimate	Other
Industrial	0		
Agricultural	34,720	Estimate	60-70%
Managed Wetlands	0		
Managed Recharge	0		
Native Vegetation	0		
Other	0		

Table 2.2: Total Water Use in WY 2024 by water use sector.

Category	Water Use Type/Sector	Applied Water (AF)	Method	Accuracy
WY 2024 Total	Total Water Use	65,240	Estimate	60-70%
Water Source Type	Groundwater	35,720	Estimate	60-70%
	Surface Water	29,520		
	Recycled Water	0		
	Reused Water	0		

Table 2.2: Total Water Use in WY 2024 by water use sector. *(continued)*

Category	Water Use Type/Sector	Applied Water (AF)	Method	Accuracy
Water Use Sector	Other	0		
	Urban / Domestic	1,000	Estimate	Other
	Industrial	0		
	Agricultural	34,720	Estimate	60-70%
	Managed Wetlands	0		
	Managed Recharge (1)	2,540		
	Native Vegetation	0		
	Other	0		

Note:

(1) Recorded surface water diversion from the SVID Recharge Project that benefits underground water storage.

Chapter 3

Monitoring Network

As described in Chapter 2, the groundwater level RMP network is a subset of the full GSP monitoring network. The groundwater level RMP network is used to evaluate SMCs for individual sustainability indices for the Basin and will continue be used to demonstrate the sustainability of the Basin through 2042. The full GSP monitoring network provides further insight into Basin conditions.

The GSP monitoring network consists of wells with continuous monitoring and hand-collected measurements ran by a few programs. Continuous monitoring offers the best data coverage while periodic monitoring is generally completed twice a year (spring and fall). A subset of the monitoring wells are instrumented with continuous dataloggers (temperature and water level measured collected every 15 minutes) with telemetry, while the rest of the wells come from California Statewide Groundwater Elevation Monitoring (CASGEM) Program, which collect measurements bi-annually, and voluntary programs of QVIR monitoring program and Community Groundwater Measuring Program, which collect measurements monthly to quarterly.

The expansion of monitoring network has been ongoing, and the continuous monitoring network developed during the first four years of GSP development and ongoing implementation is undergoing continued maturation and data collection. An update regarding the groundwater level monitoring network is further discussed in Chapter 5 (*Progress Toward Plan Implementation*).

The water quality RMP network is similarly a subset of the GSP monitoring network and is used to evaluate water quality SMCs. With the exceptions of streamflow, land subsidence, and stream depletion due to groundwater pumping, monitoring is performed using wells.

3.1 Groundwater Level Monitoring Network

The groundwater level network consists of twenty-nine representative monitoring point (RMP) wells in the Basin in the 2022 GSP. The distribution of RMP wells is shown in [Figure 3.1](#).

Water level monitoring network status update

Eleven wells were removed from the original monitoring network, and one well will be removed from the RMP network as requested by the land owner. Details on the current status of the RMP network are further discussed in Section *Chronic Lowering of Groundwater Levels* of Chapter 4 of this report. Updates on the RMP network will be provided in the first Five Year Assessment.

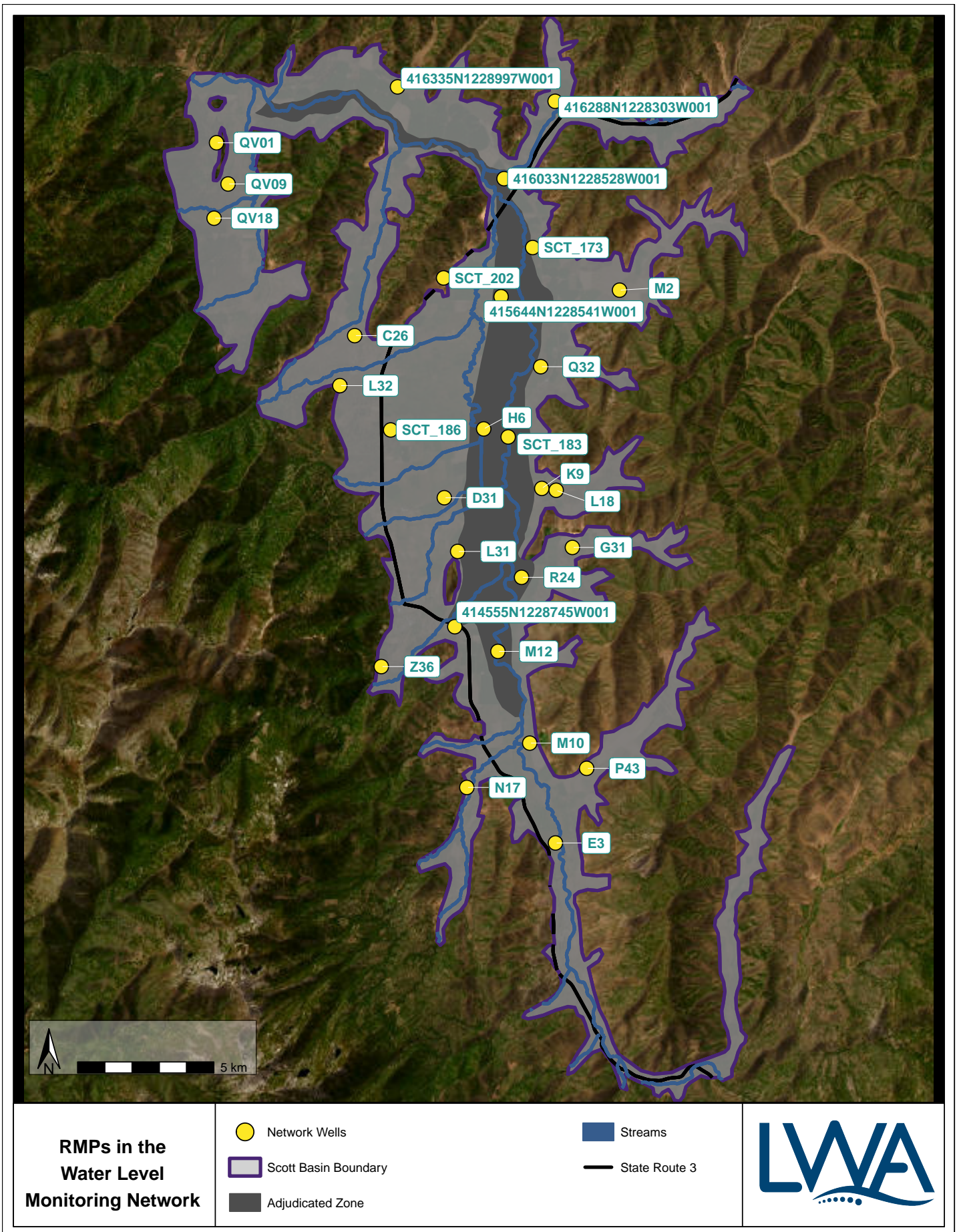


Figure 3.1: RMP Wells in the Water Level Monitoring Network.

3.2 Groundwater Quality Monitoring Network

Existing wells used for monitoring groundwater quality in the Basin include public water supply wells and monitoring wells, which are shown in [Figure 3.2](#). Initially, the groundwater quality monitoring network is based on wells that are regularly sampled as part of existing monitoring programs for the constituents for which SMCs are set: nitrate and specific conductivity. Efforts are currently underway to identify additional wells for inclusion in the water quality network.

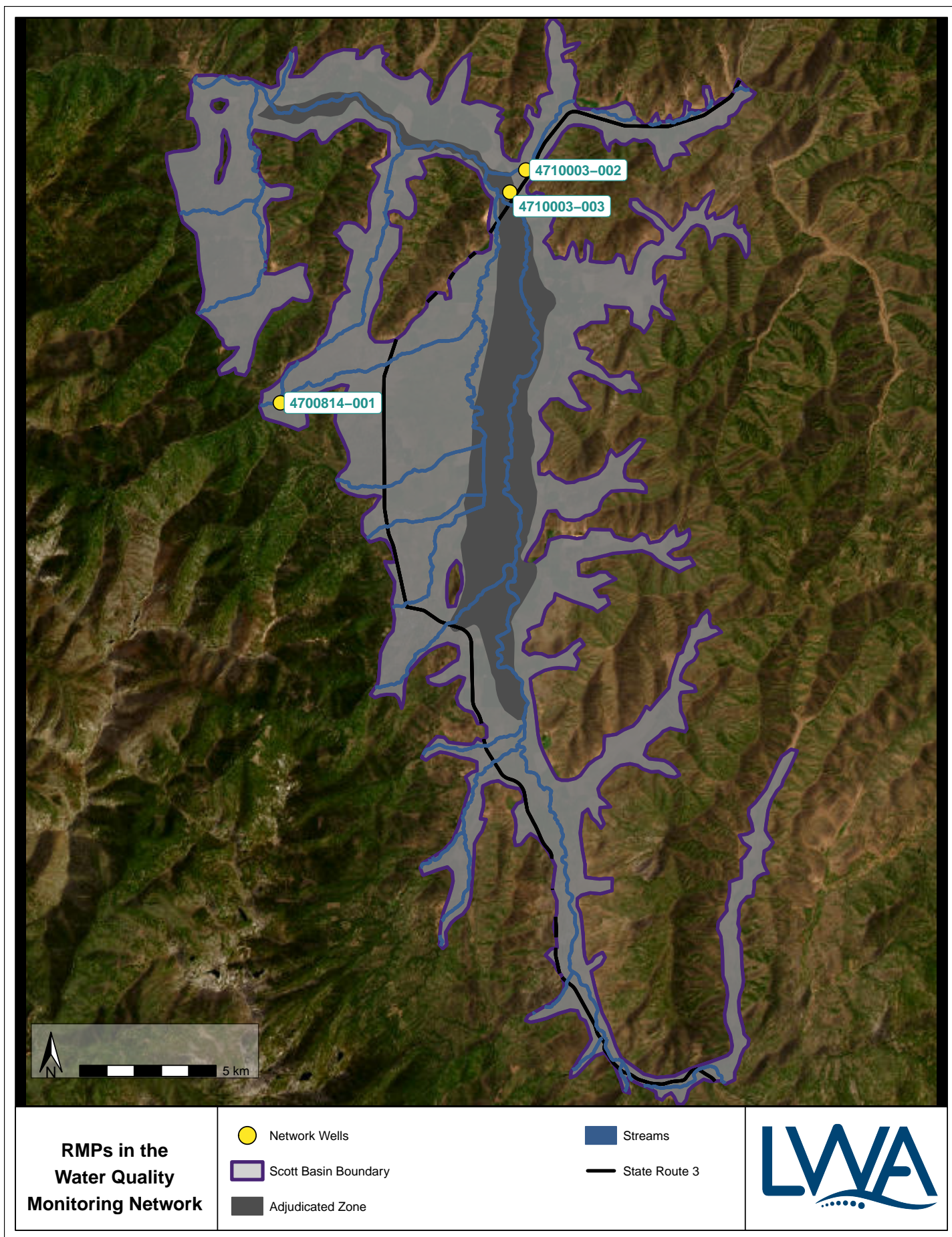


Figure 3.2: RMP wells in the Water Quality Monitoring Network.

Chapter 4

Sustainable Management Criteria

The GSP defines Sustainable Management Criteria (SMC) with respect to quantifiable impacts to beneficial users of groundwater that if exceeded, would lead to the identification of undesirable results. Here, we examine the six sustainability indicators: Groundwater levels, groundwater storage, seawater intrusion, degraded water quality, land subsidence, and depletions of interconnected surface water; we assess the status of these indicators in WY 2024 by comparing the SMCs to measured data. The SMCs include minimum and maximum thresholds, measurable objectives, and interim milestones.

4.1 Interim Milestones

Interim Milestones are anticipated to be achieved over the course of GSP implementation in increments of five years, pursuant to the CCR definition “Target values representing measurable groundwater conditions, in increments of five years, set by Agency as part of a Plan” [CCR Title 23, Division 2 §351(q)]. Progress toward achieving Interim Milestones since submitting the GSP are provided in the AR Section “Groundwater Basin Conditions”. Further updates are expected in the first Five Year Assessment for the GSP, with status checks provided in future annual reporting.

4.2 Groundwater Levels

The RMPs and associated minimum thresholds (MTs) and measurable objectives (MOs) are shown in [Table 4.1](#). The minimum MO is set as the 75th percentile of the fall measurement range - i.e., the measurement at which 25 percent of groundwater elevation measurements fall below it. The primary trigger (PT) is set at the historic low groundwater elevation measurement. The MT is set at the historic low plus a buffer. The buffer is either 10 percent of the historic low, or 10 feet, whichever is smaller. At the time of GSP submittal, because undesirable results were not occurring, the management objective of the GSA is to maintain groundwater levels above historic lows and defined MTs. Interim milestones were determined to not needed for this sustainability indicator.

The status of WY 2024 water levels measured at RMPs in terms of fall low in comparison to their SMCs is shown in [Figure 4.1](#) and summarized in [Table 4.1](#). The fall low is the maximum depth to groundwater during the period of September 15 - October 31, 2024. On [Figure 4.1](#), Measurements

are sorted into the following categories: Near or Above Measurable Objective, Within Central Operational Range, Near Minimum Threshold, or At or Below Minimum Threshold. These ranges are defined below and are based on the MO, MT, and PT.

Near or Above Measurable Objective: measurement (depth to groundwater) < MO

Within Central Operational Range: MO < measurement (depth to groundwater) < PT

Near Minimum Threshold: PT < measurement (depth to groundwater) < MT

At or Below Minimum Threshold: measurement (depth to groundwater) > MT

Of the 13 RMPs monitored in fall 2024, none were below the established MTs, two were above the PT and below the MO, and the remaining 11 were above the established MOs. Sixteen of the twenty-nine RMPs did not have fall 2024 measurements. One of these sixteen RMPs were not monitored due to access difficulties. The fall water level collection in the three QVIR wells were not successful due to some technical difficulties that the field crew experienced with the levelers. Twelve RMPs were not monitored due to the landowner requesting that their well be removed from the RMP network. If issues with well access or measurements continue, appropriate steps will be taken to determine if wells with poor access should be removed from the network, or if future replacement wells are needed. An additional option the GSA is considering is the installation of a sensor for continuous measurements at wells. Updates on the status of the water level monitoring network will be provided in following Annual Reports.

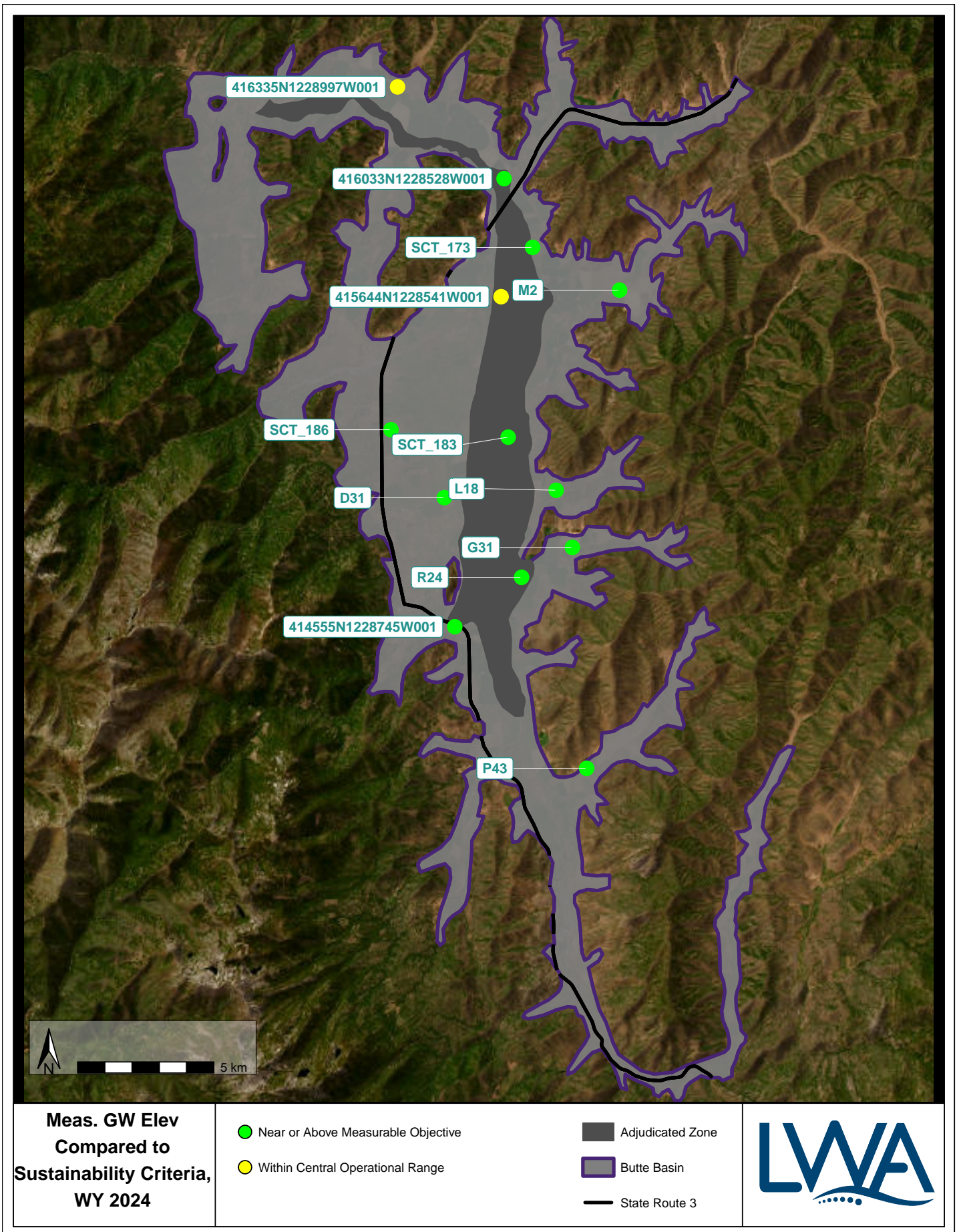


Figure 4.1: Status of the groundwater level RMP network for Fall 2024.

Table 4.1: Comparison of Fall 2024 groundwater measurements to SMC values. Measurements represent depth to groundwater and fall low is defined as the maximum depth to groundwater during the period September 15 - October 31, 2024.

Well Code	Well Name	MT (ft bgs)	PT (ft bgs)	MO (ft bgs)	2024 Fall Low (ft bgs)	Status
414555N1228745W001	42N09W27N002M	25.9	23.5	18.2	16.2	Above MO
415644N1228541W001	43N09W23F001M	14.5	13.2	8.5	10.6	Above PT, below MO
416033N1228528W001	43N09W02P002M	29.7	27.0	20.1	19.9	Above MO
416288N1228303W001(2)	44N09W25R001M	24.4	22.2	17.8	NA	No measurement
416335N1228997W001	44N09W29J001M	49.2	44.7	40.6	41.8	Above PT, below MO
C26*	C26*	22.2	20.2	14.3	NA	No measurement
E3*	E3*	11.4	10.3	7.4	NA	No measurement
H6*	H6*	10.7	9.8	6.9	NA	No measurement
K9*	K9*	45.3	41.2	37.1	NA	No measurement
L31*	L31*	26.0	23.6	19.6	NA	No measurement
L32*	L32*	68.4	62.2	48.7	NA	No measurement
M10*	M10*	8.2	7.4	6.5	NA	No measurement
M12*	M12*	18.7	17.0	16.6	NA	No measurement
M2	M2	83.3	75.8	67.4	59.1	Above MO
N17*	N17*	40.4	36.7	24.2	NA	No measurement
P43	P43	21.3	19.4	14.1	9.8	Above MO
Q32(1)	Q32(1)	14.4	13.1	9.7	NA	No measurement
R24	R24	17.8	16.2	13.8	12.3	Above MO
SCT_173	SCT_173	18.5	16.9	16.3	14.2	Above MO
SCT_186	SCT_186	38.5	35.0	34.5	29.6	Above MO
QV09(3)	QV09(3)	45.1	41.0	39.8	NA	No measurement
D31	D31	11.6	10.5	7.8	7.2	Above MO
G31	G31	89.4	81.3	77.0	69.9	Above MO
L18	L18	78.6	71.4	67.3	63.8	Above MO
Z36*	Z36*	50.1	45.5	33.9	NA	No measurement
SCT_202*	SCT_202*	150.0	140.0	140.0	NA	No measurement
QV18(3)	QV18(3)	74.9	68.1	65.4	NA	No measurement
QV01(3)	QV01(3)	17.8	16.2	14.7	NA	No measurement

SCT_183	SCT_183	20.9	19.0	18.7	14.9	Above MO
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Note:

(*) Wells removed from the RMP network as requested by the land owner.

(1) The fall lows was not available at Q32 due to access difficulty.

(2) 416288N1228303W001 will be removed from the RMP network as requested by the land owner.

(3) Fall lows were not available at QV01, QV09 and QV18 due to technical difficulty with the levelers during the attempt of fall measurements.

4.3 Groundwater Storage

Groundwater levels are the proxy for groundwater storage and the sustainability management criteria are identical. According to the United States Geologic Survey, estimates of groundwater storage rely on groundwater level data and sufficiently accurate knowledge of hydrogeologic properties of the aquifer. Direct measurements of groundwater levels can be used to estimate changes in groundwater storage. As groundwater levels fall or rise, the volume of groundwater storage changes accordingly. Unacceptable groundwater decline indicates unacceptable storage loss. The hydrogeologic model outlined in Chapter 2 of the GSP provides the needed hydrogeologic properties of the aquifer. As with the groundwater level sustainability indicator, there is no occurrence of undesirable results for the groundwater storage sustainability indicator in WY 2024.

4.4 Seawater Intrusion

This sustainability indicator is not applicable in this Basin.

4.5 Groundwater Quality

This section compares groundwater quality monitoring to the GSP's sustainable management criteria and provides a summary of ongoing water quality coordination activities conducted by the GSA. Groundwater quality data for the evaluation is obtained from the Groundwater Ambient Monitoring and Assessment (GAMA) Groundwater Information System.

The maximum concentration of nitrate as N and specific conductivity sampled from the groundwater quality RMP network in WY 2024 is shown in [Table 4.2](#). Data sampled for constituents without SMCs but monitored by the GSA is shown in [Table 4.3](#). The results are compared to the MT and MO for each of the 3 groundwater quality RMPs in the network. The MT for nitrate as N is 10 mg/L (the Title 22 Primary Maximum Contaminant Level, or MCL), and the MT for specific conductivity is 900 micromhos/cm (Title 22 Recommended Secondary Maximum Contaminant Level, or SMCL). The MO is achieved when more than 90% of wells monitored for water quality maintain their range of water quality measurements measured during 1990 to 2020. Interim milestones are set equivalent to the MO of each RMP well.

Two RMP had water quality data for WY 2024. Well CA4700814_001_001, located near Kidder Creek Orchard Camp, had a nitrate measurement on May 30, 2024 of non-detect (expressed as less than half of the reporting limit), and CA4710003_003_003, located at and the southwest of Fort Jones, had nitrate measurements on March 4, 2024 of 2.11 mg/L. These concentration is below the MT of 10 mg/L and below the MO ([Table 4.2](#)). The status of specific conductivity in regards to the MO was not evaluated in WY 2024, as the monitoring frequency for this constituent is not annual. Efforts are underway to increase the sampling frequency of specific conductivity.

To ensure that current water quality data is available for future annual reports, efforts will be made to contact the monitoring entities of the wells with missing measurements to facilitate continued data collection. If this communication is not successful, a process to plan for the continued collection of representative water quality data will be developed. Options may include planning alternate monitoring entities for the wells, or inclusion of different wells in the network.

As per the GSP, SMC are not defined for benzene; however, data is provided and evaluated to track potential mobilization, or exceedances of the primary MCL (1 µg/L) in Table 4. It is noted that the well series beginning with T0609300118 is at a Leaking Underground Storage Tank (LUST) clean-up site and is expected to have high concentrations until cleanup is complete.

Table 4.2: Water quality data from WY2024 in the RMP network (Nitrate MT is 10 mg/L; Specific Conductance MT is 900 micromhos/cm).

Well ID	GSP ID	Nitrate MO (mg/L)	Nitrate WY 2024 Max Measurement (mg/L)	Nitrate Status	SC MO (micromhos/cm)	SC WY 2024 Max Measurement (micromhos/cm)	SC Status
CA4700814_001_001	4700814-001	1.02	<0.1	Below MT	NA	NA	No measurement
CA4710003_002_002(1)	4710003-002	4.28	NA	No measurement	526	NA	No measurement
CA4710003_003_003	4710003-003	2.83	2.11	Below MT	448	NA	No measurement

Note:
 (*) MOs with NAs indicate that the analyte is not historically monitored at the well. Measurements equal to NA indicate that well was not monitored for the analyte in WY2024.
 (1) Well is shown as inactive on the CA Public Drinking Water Watch data webpage.

Table 4.3: Water quality data from WY2024 for benzene.

Well ID	Analyte	Date	Result	Units	MCL
CA4710003_003_003	Benzene	2024-03-04	<0.5	ug/L	1
T0609300022-MW-1	Benzene	2023-11-27	11	ug/L	1
T0609300022-MW-2	Benzene	2023-11-27	930	ug/L	1
T0609300022-MW-3	Benzene	2023-11-27	3	ug/L	1
T0609300022-MW-4A	Benzene	2023-11-27	3.2	ug/L	1
T0609300022-MW-5	Benzene	2023-11-27	770	ug/L	1
T0609300022-MW-6	Benzene	2023-11-27	690	ug/L	1
T0609300022-MW-7	Benzene	2023-11-27	0.51	ug/L	1
T0609300022-MW-8	Benzene	2023-11-27	19	ug/L	1

4.6 Land Subsidence

To monitor subsidence, the Basin relies on data provided by DWR based on Interferometric Synthetic Aperture Radar (InSAR), a satellite-based remote sensing technique that measures vertical ground surface displacement changes at high degrees of measurement resolution and spatial detail. This data is made available through the DWR SGMA Data Viewer ¹ and shows overall subsidence less than 0.1 feet for the entire Basin during the water year 2024 (Figure 4.2). This avoids the occurrence of undesirable results as defined by the GSP.

¹<https://sgma.water.ca.gov/webgis/?appid=SGMADataViewer#currentconditions>

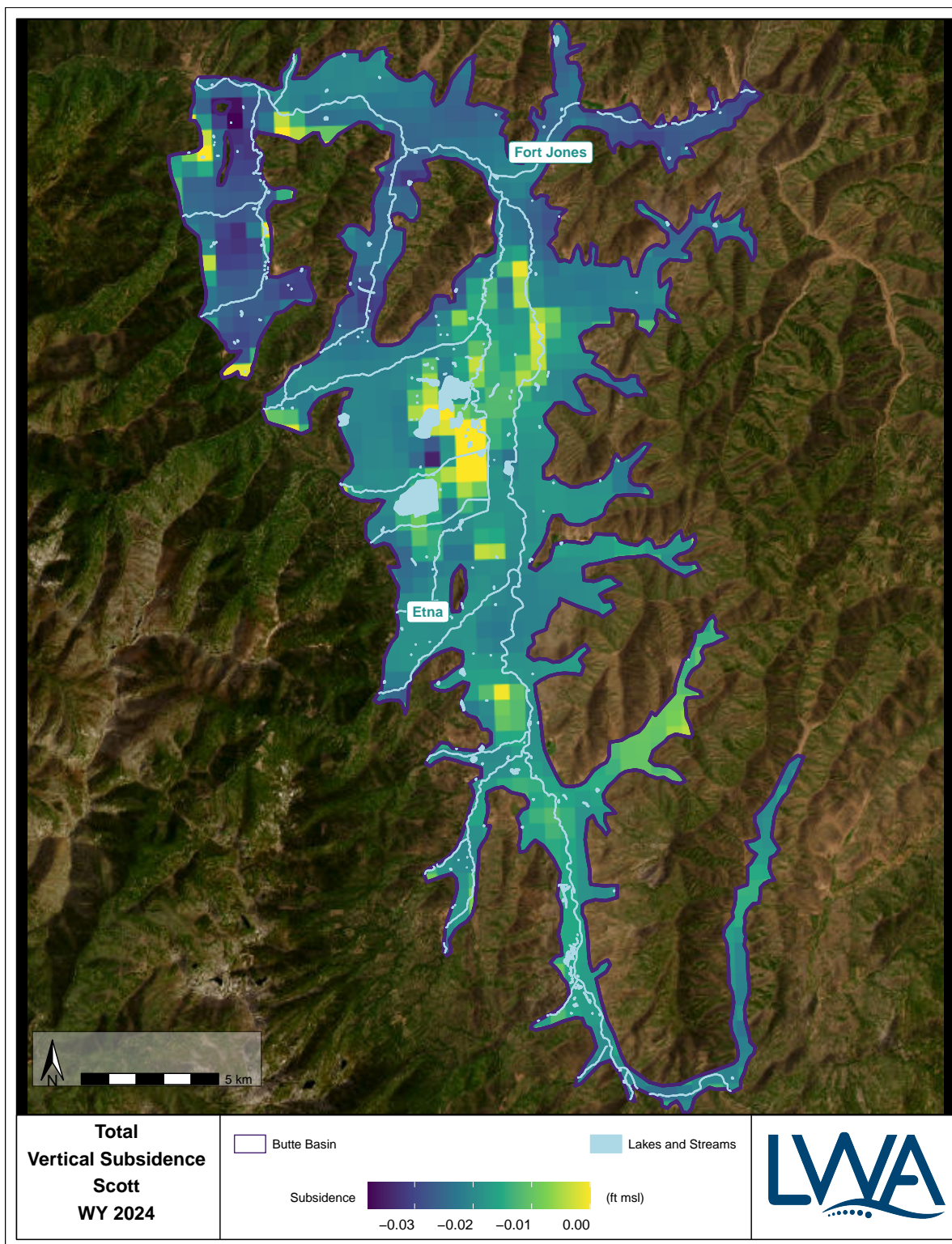


Figure 4.2: InSAR satellite measured total vertical subsidence (feet) in WY 2024. Note that the processed InSAR instrument and GIS conversion error is roughly ± 0.1 feet (<https://gis.water.ca.gov/arcgisimg/rest/services/SAR>).

4.7 Interconnected Surface Water

Interconnected surface waters in the Basin are not determined for WY 2024. The updated method using the SVIHM will be ready following additional model calibration and updates as part of the five-year evaluation. In future water years the SVIHM will be used to determine the location, timing and rate of interconnected surface waters in the Basin. However at the time of GSP submittal, it was determined that the basin conditions are below the MT and that the basin is experiencing undesirable results. These conditions likely continue in WY 2024.

The MT is defined as an average 15% stream depletion reversal caused by groundwater pumping from outside the adjudicated zone in 2042 and thereafter. The next interim milestone will be fulfilled by 2027, where PMAs have been implemented so that the yield average relative stream depletion reversal is at least 5%. The Scott Valley Irrigation District's groundwater recharge project is one of the PMAs that was implemented in WY 2023 to contribute to the 15% stream depletion reversal. The stream depletion reversal achieved through this implementation is being evaluated using SVIHM and, while results are not available for this annual report, they will be completed by summer 2025.

Chapter 5

Progress Toward Implementing the Plan

This section provides updates on progress towards implementing the GSP, including implementation of projects and management actions since adoption of the GSP and the most recent annual report. This section also describes projects and management actions that the GSA is coordinating with other agencies, as well as regulatory issues that impact groundwater management or water resources in the Basin. The project and management actions that are described in the GSP are summarized in [Table 5.1](#), which provides the status of the project, the project's management category (i.e., demand management), and targeted sustainability indicator.

The GSA continued activities (e.g. RMP data collection) necessary to implement the GSP and put the Basin on a path toward sustainable management and has made progress towards implementation of the project and management actions outlined in the GSP.

5.1 Implementation of Projects and Management Actions

5.1.1 Progress Made on Addressing Recommended Corrective Actions in the Department's GSP Determination

On April 27, 2023, DWR send a letter to the GSA, approving the Scott Valley GSP, with five recommended corrective actions. Below is the progress on implementing those actions:

RECOMMENDED CORRECTIVE ACTION 1 - Provide a current water budget as required by the GSP regulations. The current water budget is provided in the current report in [Figure 2.7](#), generated by SVIHM.

RECOMMENDED CORRECTIVE ACTION 2 - Provide a description of the relationship between established minimum thresholds for the chronic lowering of groundwater levels and how they avoid undesirable results for each of the other sustainability indicators.

The current minimum thresholds are based on the lowest historical groundwater level measurements, with a buffer that is either 10% of the historic maximum depth to water measurement, or 10 feet, whichever is smaller. This gives a buffer for operational flexibility under natural causes such as climate change while the GSA works toward groundwater sustainability. The GSP provided a well failure analysis, discussing the impact of the minimum thresholds on the groundwater basin.

RECOMMENDED CORRECTIVE ACTION 3 – Water Quality. The GSA is working with local agencies to expand the water quality network, which currently relies on public supply wells. The requested changes to the definition of undesirable results and minimum thresholds for water quality will require a network expansion and will be considered during the five-year update.

RECOMMENDED CORRECTIVE ACTION 4 – Stream Depletion SVIHM is in the process of being updated so interconnected surface water and stream completion can be determined for future water years. See Section 3 for additional work by the GSA regarding interconnected surface water.

RECOMMENDED CORRECTIVE ACTION 5 - The GSA should provide identification of the physical monitoring that will be used to support the SVIHM's estimates of depletions of surface water for the interconnected surface water monitoring network. Section 3 lists PMAs that expand physical monitoring for depletions of surface water, including stream gages and geochemical sampling.

5.1.2 Project Activities in WY 2024

The GSA continued activities (e.g. RMP data collection) necessary to implement the GSP and put the Basin on a path toward sustainable management. Quarterly Advisory Committee meetings continued in WY 2024 to track progress, provide updates on Basin conditions and discuss ongoing implementation actions including a well inventory, groundwater recharge projects, and upland management.

The progress of specific PMAs is described below:

SVID Recharge Project- Flows were above the minimum flow thresholds set in the temporary permit to divert and use water from the Scott River for the majority of the recharge window. Diversions for recharge commenced January 15 through March 31, 2024. A total of 2,539 AF was diverted for recharge. Of the total water diverted, 1,774 AF was applied to 10 different locations, totaling 261 acres. Currently, modeling scenarios using SVIHM are being run to evaluate instream flow benefits based on actual 2024 implementation.

Well Drilling Permits - The GSA continued to work with the Siskiyou County Environmental Health Department's well permitting staff to develop a new "Well Permitting Guidance Document" that will update the County well permitting policies and comply with the Governors Executive Order (EO N-3-24). The methodology in the draft "Well Permitting Guidance Document" was used on several test cases to further refine the guidance and criteria used to permit future wells.

Data Gaps and Data Collection – There was continued progress in 2024 to fill data gaps and increase data collection. Steps were taken to reduce data gaps in the Basin including the installation of continuous groundwater level and surface water monitoring sites to monitor and support the implementation of planned projects and management actions in WY 2024:

- A total of 21 groundwater level monitoring sites were added
- 9 rain sensors were installed
- 3 flow stations were installed on unlined irrigation ditches
- Over 14 different locations were sampled for geochemical constituents (isotopes and radon) that increased data collection related to, and understanding of, groundwater-surface water interactions in Scott River and tributaries.

Coordination was conducted with Scott River Watershed Council and QVIR to compare planned flow station additions in Scott Valley and collaborate as much as possible to avoid duplication of measurements and optimize the use of funding. Additionally, data collected and used to support GSP efforts was largely made accessible through the Data Management System (DMS)¹. The DMS provides access to well location and construction details, historical water level data, telemetered water level data (collected by the GSA and DWR), and lithology data.

SVIHM Model Update –The streamflow and recharge components of the Scott Valley Precipitation Runoff Modeling System (PRMS) model were updated. The PRMS model was updated with data from local monitoring stations (precipitation, temperature, and snowpack) and was extended to water year 2024.

Irrigation Efficiency Improvements – Workshops were held in 2024 on efficient water management for forage crops will be held in coordination with the University of California Cooperative Extension (UCCE) and the Tehama Resource Conservation District. The Workshop provided information on a Mobile Irrigation Lab that can provide on-site evaluations of irrigation systems and provide comprehensive reports to producers that detail how their irrigation system is performing, including tips, suggestions, and recommendations based on data collected during the inspection. After the workshop, UCCE visited a few farms in Scott and Shasta Valley and started planning for future farm assessment.

Upland Management – In WY 2024, various options for upland management projects and studies were evaluated. Existing spatial datasets of prescribed burns, wildfires, and past upland management projects were acquired to assess their impacts on water resources. During water year 2024, these spatial datasets were evaluated, and the locations of fires or management activities were correlated with existing data on streamflow, groundwater levels, precipitation, and snowfall. A methodology was then developed to evaluate their impact on water resources.

Public Outreach - The GSA has continued public outreach by visiting local well owners who report concerns about groundwater levels in their wells and also worked to develop opportunities to improve monitoring and data collection to aid the GSA in characterizing and improving groundwater reliability. Quarterly Advisory Committee meetings, open to the public, were also conducted.

5.2 Activities Anticipated for the Coming Year

The GSA intends to continue activities necessary to implement the GSP and put the Basin on a path toward sustainable management. This section provides an overview of implementation activities anticipated over WY 2025.

Data Gaps and Data Collection - In WY2025, the GSA plans to add evapotranspiration (ET) stations on representative fields to improve ET values used in the Scott Valley Integrated Hydrologic Model to evaluate water budget and run scenarios. Additionally, the GSA will focus on making progress on data gaps related to groundwater-dependent ecosystems ahead of the 5-year GSP update. Additional groundwater level, surface water monitoring, or rain stations may be added to support quantification of project benefits, as necessary. The DMS will continue to be developed. Improvements to the DMS include the addition of water quality data, stream gage data, and GSP specific data including RMPs and associated SMC.

¹<https://siskiyou-sigma.gladata.com/#>

Interconnected Surface Waters - Groundwater-surface water connectivity will continue to be evaluated in the Basin. The installation of stream gages to measure surface flows will occur at multiple sites as part of the implementation of specific projects, including in Scott River and tributaries. Coordination has been ongoing with Scott River Watershed Council Strategic (SRWC) and QVIR, who have a planned streamgage network for installation. Additionally, geochemical sampling will continue to be used to further understand interaction between surface and groundwater in the Basin, and spatial and temporal variations.

Well Inventory Program – During the upcoming water year the GSA is identifying parcels that likely have wells, but do not have wells identified in the WCR dataset. The parcels with likely wells will be included in the well inventory. A potential next step is to conduct outreach to owners of the parcels to confirm if a well exists on the property. Information from the Well Inventory will continue to be incorporated into the model and also be used to inform the Fee Study conducted to identify options to fund groundwater management in the Basin. The GSA will finalize the well inventory during WY2025.

Well Permitting – The GSA will continue to work with the Siskiyou County Environmental Health Department's well permitting staff to develop an updated "Well Permitting Guidance Document" that will comply with the Governor's Executive Order (EO N-3-24).

Upland Management – Data from existing spatial datasets of prescribed burns, wildfires, and past upland management projects will continue to be evaluated to assess their effects on water resources. Streamflow data, and other hydrologic data including precipitation and snowfall, will be used during the evaluation.

Public Outreach – The GSA will continue public outreach by working with the public to develop opportunities to improve monitoring and data collection. Quarterly Advisory Committee Meetings, open to the public, will also be conducted.

Regulatory Coordination - The GSA continues to track the SWRCB's emergency regulations, permanent flow setting process, and the resulting impacts on water use, the ability to achieve interim milestones for sustainable management criteria, and any changes to project and management actions. So far, in WY2025, the GSA has been engaged in the SWRCB's permanent flow setting process, which had an adopted resolution following the October 16, 2024, Board Meeting on Flow Efforts in the Scott River and Shasta River. On January 3, 2025, a Notice of Proposed Rulemaking for Minimum Flows in the Scott River and Shasta River Watersheds was released. A meeting on proposed emergency regulations was held on January 7, 2025, and an emergency action re-adopting regulations concerning Scott and Shasta River Watershed drought requirements was put into effect on January 27, 2025. The GSA anticipates continue to track and engage with the permanent flow setting process through public comments, coordination on relevant GSP implementation efforts, and sharing data collected through the GSA's monitoring networks.

Other notable regulatory items in the coming water year include the North Coast Regional Water Quality Control Board's (NCRWQCB's) Proposed Order No. R1-2025-0011 to Renew Order No. R1-2018-0018 and Order No. R1-2018-0019, Scott and Shasta River TMDL Conditional Waiver of Waste Discharge Requirements. Order No. R1-2012-0084, Order No. R1-2018-0018, Order No. R1-2023-0005, and Proposed Order No. R1-2025-0011 are all revisions and/or extensions of the requirements of Order No. R1-2006-0081, adopted on August 9, 2006 (Conditional Waiver). This extension allows time to develop Waste Discharge Requirements (WDRs) for ranchers in the Scott and Shasta River Watersheds. The GSA anticipates continuing to track and engage with this process to coordinate efforts and minimize overlap between the WDR and GSP implementation.

5.3 Coordination

State Water Resources Control Board – GSA staff meets biweekly with SWRCB staff to discuss updates and activities related to SWRCB’s Emergency Regulation Curtailments. The two parties discuss updates to curtailment actions in place, including Local Cooperative Extensions (LCS) and activities that may have impacts on groundwater management.

Karuk Tribe – During water year 2023 the GSA worked to finalize the Memorandum of Understanding (MOU) with the Karuk Tribe regarding coordinating on aspects of the GSP implementation in the Scott and Shasta basins, and the Final MOU was signed on May 3, 2023. Staff-to-staff meetings between the GSA and the Karuk Tribe were continued in WY 2024, with meetings taking place in February and April of 2024. The purpose of these meetings are to coordinate plans related to implementing the GSP, implementing the SGM Grants and further identifying opportunities for coordination at a staff-to-staff level. The Shasta groundwater committee has a Karuk staff member as a representative. GSA staff continually works with DWR provided facilitation support services staff to engage with the Karuk Tribe to discuss pertinent updates regarding GSP implementation and project development.

Regulatory Coordination: Instream Flow Requirements - In May 2023, a petition for rulemaking was submitted to the State Water Board by the Karuk Tribe of California, Environmental Law Foundation, Pacific Coast Federation of Fishermen’s Associations, and Institute for Fisheries Resources. This petition requested permanent regulation establishing minimum flows in the Scott River. A subsequent hearing on August 15, 2023 resulted in a decision to move forward with an emergency regulation and investigate the scientific work required to establish long-term flow requirements in both Scott and Shasta River Watersheds. The State Water Board adopted a new emergency regulation for the Scott and Shasta River Watersheds on December 19, 2023 and the Office of Administrative Law approved the emergency regulation on February 1, 2024. This regulation is in effect for one year, unless re-adopted or rescinded. ².

Table 5.1: Project and Management Actions Summary.

Project Title	Status	Category	Project Description
Well Drilling Permits	Existing/ Ongoing	Demand Management	Siskiyou County Well Drilling Permits (Standards for Wells, Title 5, Chapter 8 of Siskiyou County Code of Ordinances). Location limitations for new wells with respect to the interconnected zone (per Scott River Adjudication Decree No. 30662).

²https://www.waterboards.ca.gov/drought/scott_shasta_rivers/

Table 5.1: Project and Management Actions Summary. *(continued)*

Project Title	Status	Category	Project Description
Groundwater Use Restrictions	Existing/ Ongoing	Demand Management	Prohibition of the use of groundwater underlying Siskiyou County for cannabis cultivation (Article 7, Chapter 13, Title 3 of Siskiyou County Code of Ordinances).
Administrative Permit Process for Groundwater Extraction for use Off-Parcel from Which it was extracted.	Existing/ Ongoing	Demand Management	Permit requirement for extraction of groundwater for use off-parcel (Article 3.5, Chapter 13, Title 3 of the Siskiyou County Code of Ordinances).
Watermaster Program	Existing/ Ongoing	Demand Management	Watermaster services currently exist on Wildcat Creek and French Creek. Among other things, a watermaster provides enforcement of water leases under the authority of Scott River Water Trust and 1707 dedications and transfers.
Scott River Water Trust Leasing Program	Existing/ Ongoing	Supply Augmentation	Voluntary program leases water from active water diverters on priority stream reaches in exchange for financial compensation. Diverters include but are not limited to SVID, Farmers Ditch, and locations on French Creek, Sugar Creek, and Shackleford Creek.
Scott River Tailings Streamflow and Ecological Benefit Planning Restoration Projects	Existing/ Ongoing	Supply Augmentation	Improve instream connectivity in the tailings section of the Scott River, which connects the East Fork, South Fork, and Sugar Creek tributaries to the main stem Scott River.

Table 5.1: Project and Management Actions Summary. *(continued)*

Project Title	Status	Category	Project Description
South Fork Scott River Floodplain Connectivity Project Description:	Existing/ Ongoing	Supply augmentation, Habitat Improvement	This three-phase project reconnects historical floodplains in the South Fork of the Scott River that were disconnected as a result of historical mining activity. In addition to reconnecting floodplains, the project creates habitat improvements through engineered log jams and wood loading in a mile-long stretch of the South Fork of the Scott River.
Patterson Creek Wood Loading	Existing/ Ongoing	Habitat Improvement	Uses streamside trees that are felled into the channel to create cover, scour pools, increase slow water habitat and improve floodplain connectivity.
French Creek Wood & Gravel Enhancement	Existing/ Ongoing	Habitat Improvement	This project aims to improve coho salmon spawning and rearing conditions by adding large wood and spawning gravels.
Irrigation Improvements	Existing	Demand Management	Improvements in irrigation efficiency in Scott Valley (as detailed in Chapter 2.2.1.5).
Lower Scott River Side Channel Connectivity and Habitat Enhancement project	Existing / Ongoing	Habitat Improvement	As a continuation of the recently constructed off-channel pond (2020), SRCD will complete restoration efforts within the mainstem and oxbow side-channel area to improve channel function and enhance access to slow water habitat. This project will incorporate side channel activation, BDA (beaver dam analogs) and engineered log jams.

Table 5.1: Project and Management Actions Summary. *(continued)*

Project Title	Status	Category	Project Description
Scott River Groundwater Monitoring	Ongoing and in development	Supply augmentation, recharge	This project will provide monitoring services related to groundwater enhancement and recharge projects. During the 2020 drought, the SRCD will be involved with groundwater transactions in Reach 9 of the Scott River (between Highway 3 and the National Forest Land). This includes daily monitoring of the groundwater response to restrictions in irrigation in both Scott River and in adjacent fields through temporary wells and established wells.
Avoiding Significant Increase of Total Net Groundwater Use from the Basin	Conceptual Phase	Demand Management	Avoid significant future increase of total net groundwater use within the Basin through planning and coordination with land use zoning and well permitting agencies
Beaver Dam Analogues	Planning Phase	Habitat Improvements	Beaver dam analogues (BDAs) are instream structures that mimic beaver dams. BDAs can be used to increase beaver abundance and promote watershed restoration.
High Mountain Lakes	Conceptual Phase	Supply Augmentation	Use of dams at the outlets of high-altitude lakes in Scott Valley to increase streamflow.

Table 5.1: Project and Management Actions Summary. *(continued)*

Project Title	Status	Category	Project Description
Upslope Water Yield Projects	Planning Phase	Supply Augmentation	Building green infrastructure in the upper watershed, especially of the East Fork (e.g., former Hayden Ranch, now Beaver Valley Headwater Preserve) and French Creek to increase water yield. Green infrastructure includes fuel reduction, road improvements, canopy opening to manage snow shade and accumulation, and other large landscape projects that increase water storage within the upper watershed during wet periods and baseflow from the upper watershed during dry periods.
East Fork Scott Project	Implementation Phase	Habitat Improvements	To improve conditions within the E Fork Scott watershed. Potential activities include riparian areas, fuels reduction, mine reclamation, stand density reduction, and wildlife habitat improvements.
Irrigation Efficiency Improvements	Planning Phase	Demand Management	Increase irrigation efficiency (and in some cases, yields) through infrastructure or equipment improvements. Consider funding incentives through the NRCS EQIP program.
Stockwater diversion and delivery system Improvements	Conceptual Phase	Demand management	Assessment and implementation of options related to stockwater diversion and delivery to increase efficiency.
MAR & ILR - NFWF Scott Recharge Project	Active	Recharge	Evaluate use of groundwater recharge as to augment Scott River flows during critical periods (i.e., late summer and fall).

Table 5.1: Project and Management Actions Summary. *(continued)*

Project Title	Status	Category	Project Description
MAR & ILR	Planning Phase	Recharge	Managed aquifer recharge and - during the irrigation season - in lieu recharge on irrigated agricultural land to increase baseflow during the critical summer and fall low flow period.
Voluntary Managed Land Repurposing	Conceptual Phase	Demand Management	Reduce water use through voluntary managed land repurposing activities including term contracts, crop rotation, irrigated margin reduction, conservation easements, and other uses
Wel Inventory Program	Planning Phase	Demand Management	Development of an inventory and definition of active wells in the Basin.
Instream Habitat Improvement on the East Fork Scott River	Planning Phase	Habitat improvement	Improve stream flow, create scour pools, and increase habitat for spawning and over summering salmonids in the E Fork of the Scott River on the Beaver Valley Headwater Preserve.

Table 5.1: Project and Management Actions Summary. *(continued)*

Project Title	Status	Category	Project Description
Scott River Basin Stream Flow Monitoring	Planning Phase	Monitoring	Reinstate historic stream flow monitoring activated throughout the watershed to improve knowledge of stream flow response in relation to existing and modified conditions. The SRCD will reinstall instream monitoring devices and monitoring wells to measure water levels, temperature, and water quality across all tributaries to the Scott River. This network will assess surface water contributions to groundwater and will augment and inform the SVIHM (as laid out in Chapter 3, Section 3.3, lines 238-246). This network will also be used to inform agencies involved with protecting and conserving GDEs in the system.
Alternative, lower ET crops	Conceptual Phase	Demand Management	Pilot programs on introducing alternative crops with lower ET but sufficient economic value. Incentivize and provide extension on long-term shift to lower ET crops.
Floodplain Reconnection/ Expansion	Conceptual Phase	Supply Augmentation, Habitat Improvements	Expand access of the Scott River to old or new floodplain features to promote groundwater recharge, create habitat, provide more functional ecosystem, while also recharging groundwater, possibly as part of conservation easements
Reservoirs	Conceptual Phase	Supply Augmentation	Construct surface water reservoir (s) to capture and store runoff and excess stream flows to augment Scott River flows during critical periods

Table 5.1: Project and Management Actions Summary. *(continued)*

Project Title	Status	Category	Project Description
Sediment Removal and River Restoration	Scoping Phase	Habitat Improvement	Streambed alterations to remove sediment that has accumulated between Fort Jones and Scott River canyon to improve instream flow conditions on the Scott River downstream from Oro Fino Creek during the critical summer and fall baseflow period.
Strategic Groundwater Pumping Restriction	Conceptual Phase	Demand Management	Strategic timing of groundwater pumping restrictions. This management action would only be developed if Tier I and Tier II PMAs are insufficient. It would be an alternative tool for the GSA in support of the groundwater level SMC.
Watermaster Program	Conceptual Phase	Demand Management	Water master services on tributaries other than Wildcat Creek and French Creek and on the Scott River. Among other things, a water master provides enforcement of water leases and 1707 dedications and transfers.

Appendix A - Groundwater Level Hydrographs

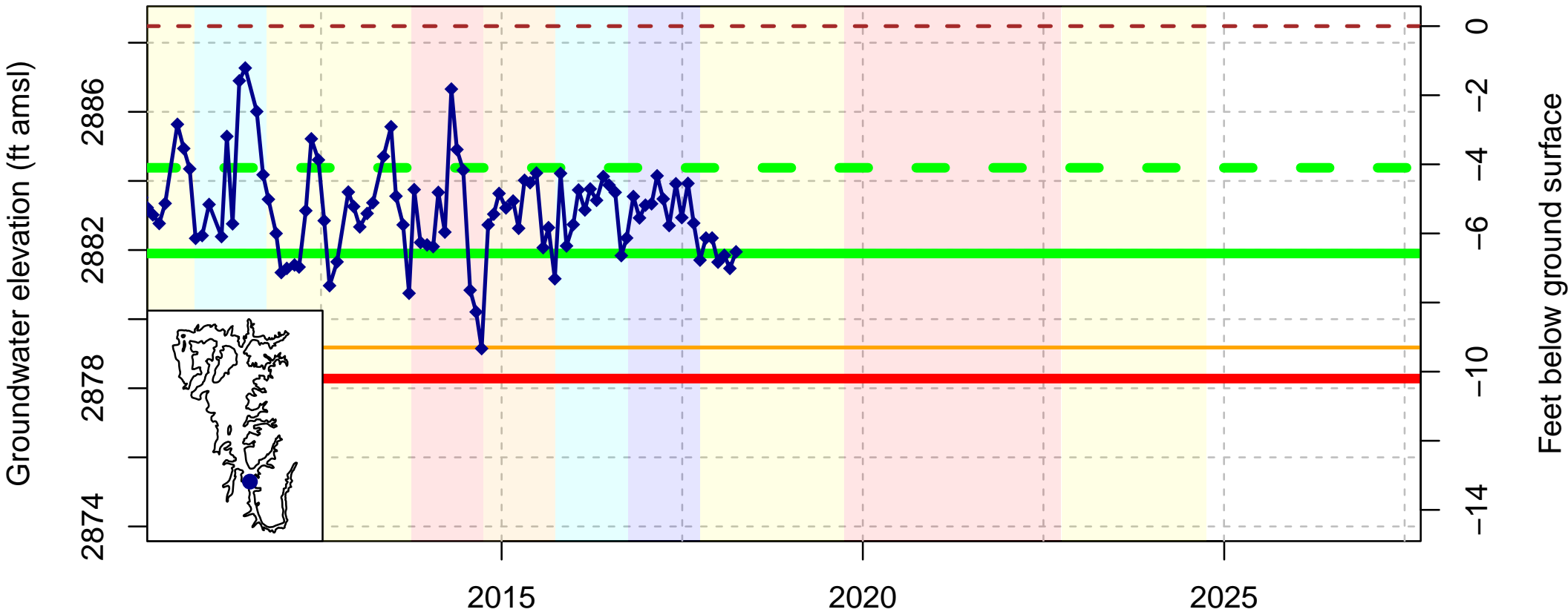
The hydrographs used to set the minimum thresholds (MT) and measurable objectives (MO) for each representative monitoring point are shown in the following figures (Appendix A.1). Data points used to calculate the MTs and MOs are marked with a red dot. The groundwater level data used in the regression to calculate minimum thresholds have gone through a quality assurance and quality control (QAQC) process that removes data from the analysis for the following reasons:

- Oil or other foreign substances were floating at the groundwater surface inside the well and the data had high uncertainty as a result.
- The well was pumped recently.
- During the minimum threshold process and generation of a regression equation, a data point was deemed an outlier, which may result from the interference of drawdown from nearby wells.

Appendix A.2 shows general hydrographs for the larger GSP monitoring network, including wells for which SMCs were not defined. Water Year Types from WY 2019–2024 have been updated in hydrographs below. Note that these are preliminary results calculated based on SGMA Water Year Type Dataset Development Report. The results will be finalized once DWR updates the water year type dataset for these years.

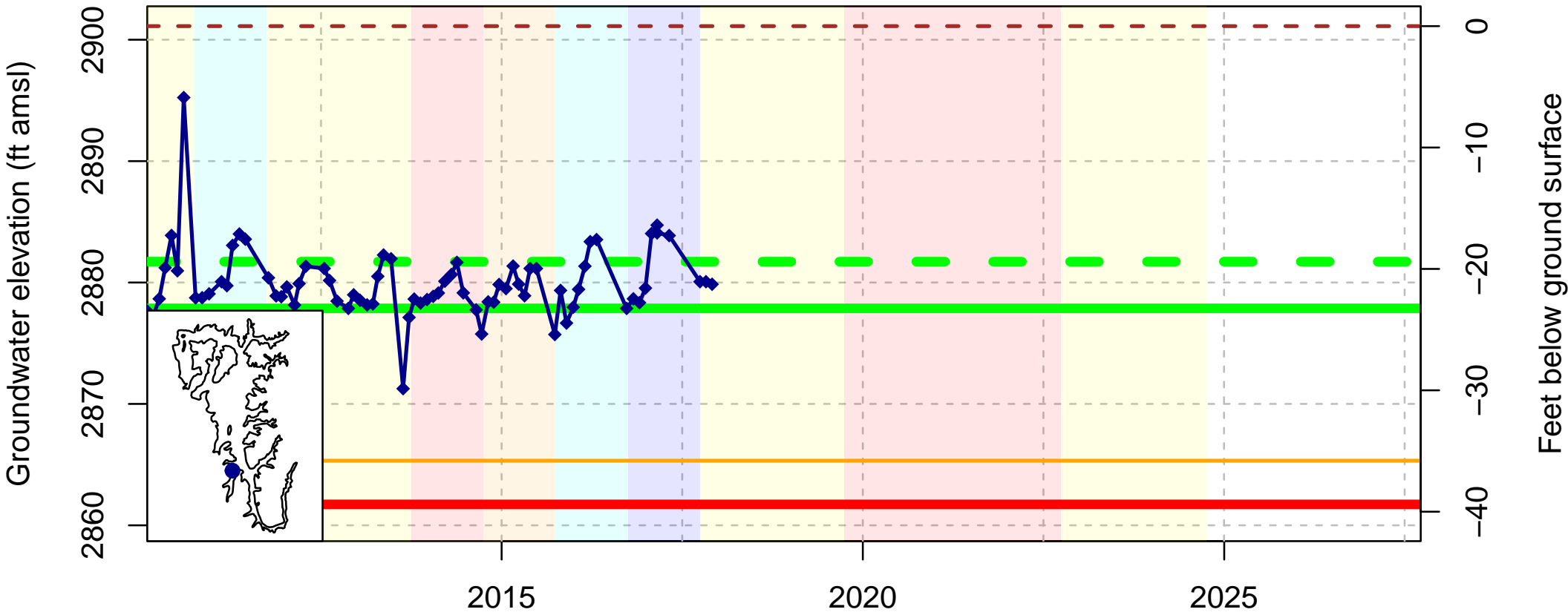
Appendix A.1 - Groundwater Elevation Hydrographs for the RMP Network.

DWR Stn_ID: NA; well_code: E3; well_name: E3; well_swn: NA



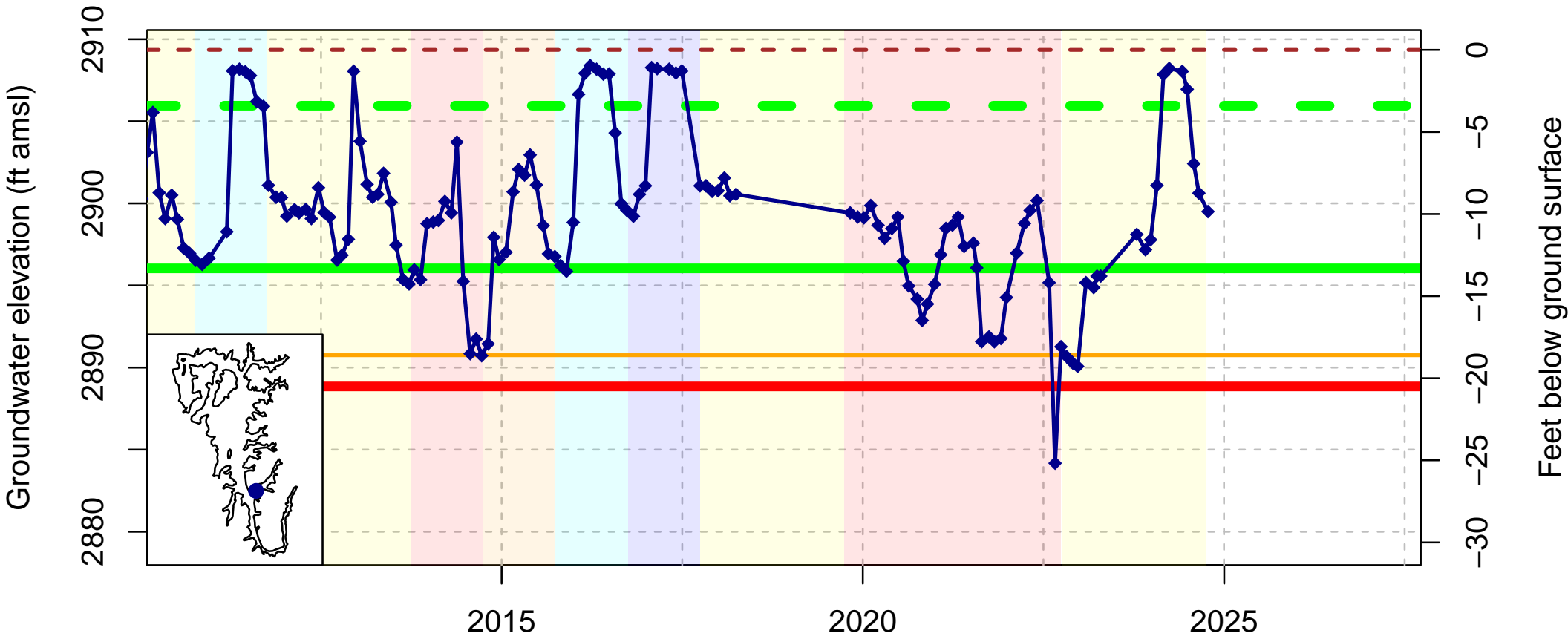
Water Year Types from WY 2019–2024 are preliminary results calculated based on SGMA Water Year Type Dataset Development Report. The results will be finalized once DWR updates the water year type dataset for these years.

DWR Stn_ID: NA; well_code: N17; well_name: N17; well_swn: NA



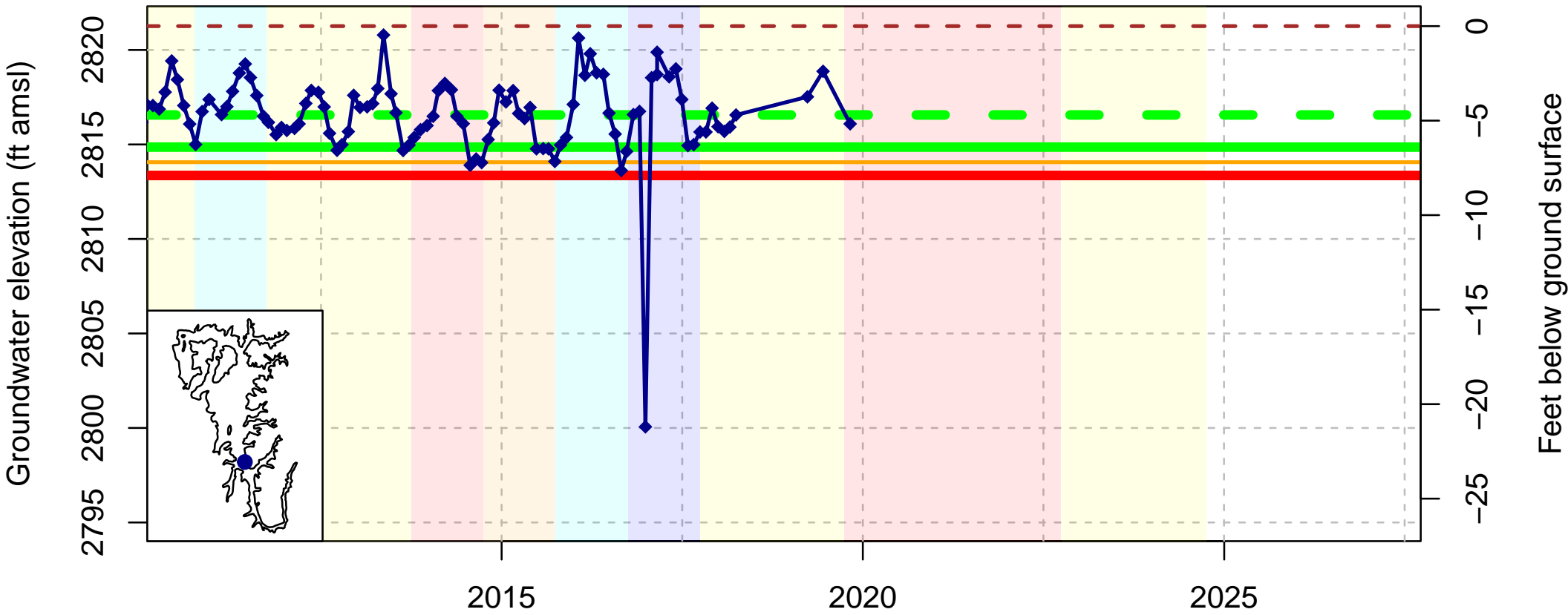
Water Year Types from WY 2019–2024 are preliminary results calculated based on SGMA Water Year Type Dataset Development Report. The results will be finalized once DWR updates the water year type dataset for these years.

DWR Stn_ID: NA; well_code: P43; well_name: P43; well_swn: NA



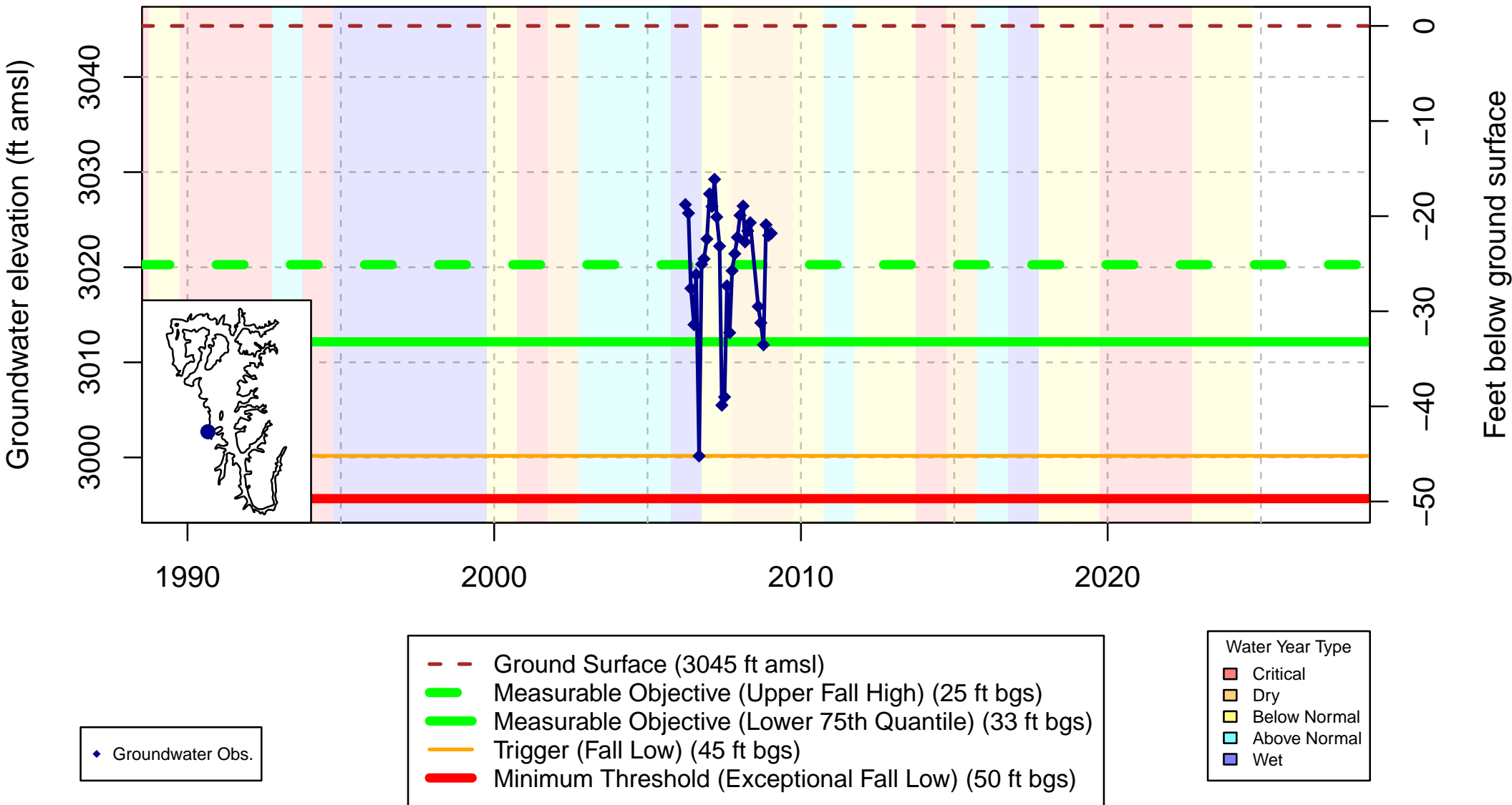
Water Year Types from WY 2019–2024 are preliminary results calculated based on SGMA Water Year Type Dataset Development Report. The results will be finalized once DWR updates the water year type dataset for these years.

DWR Stn_ID: NA; well_code: M10; well_name: M10; well_swn: NA



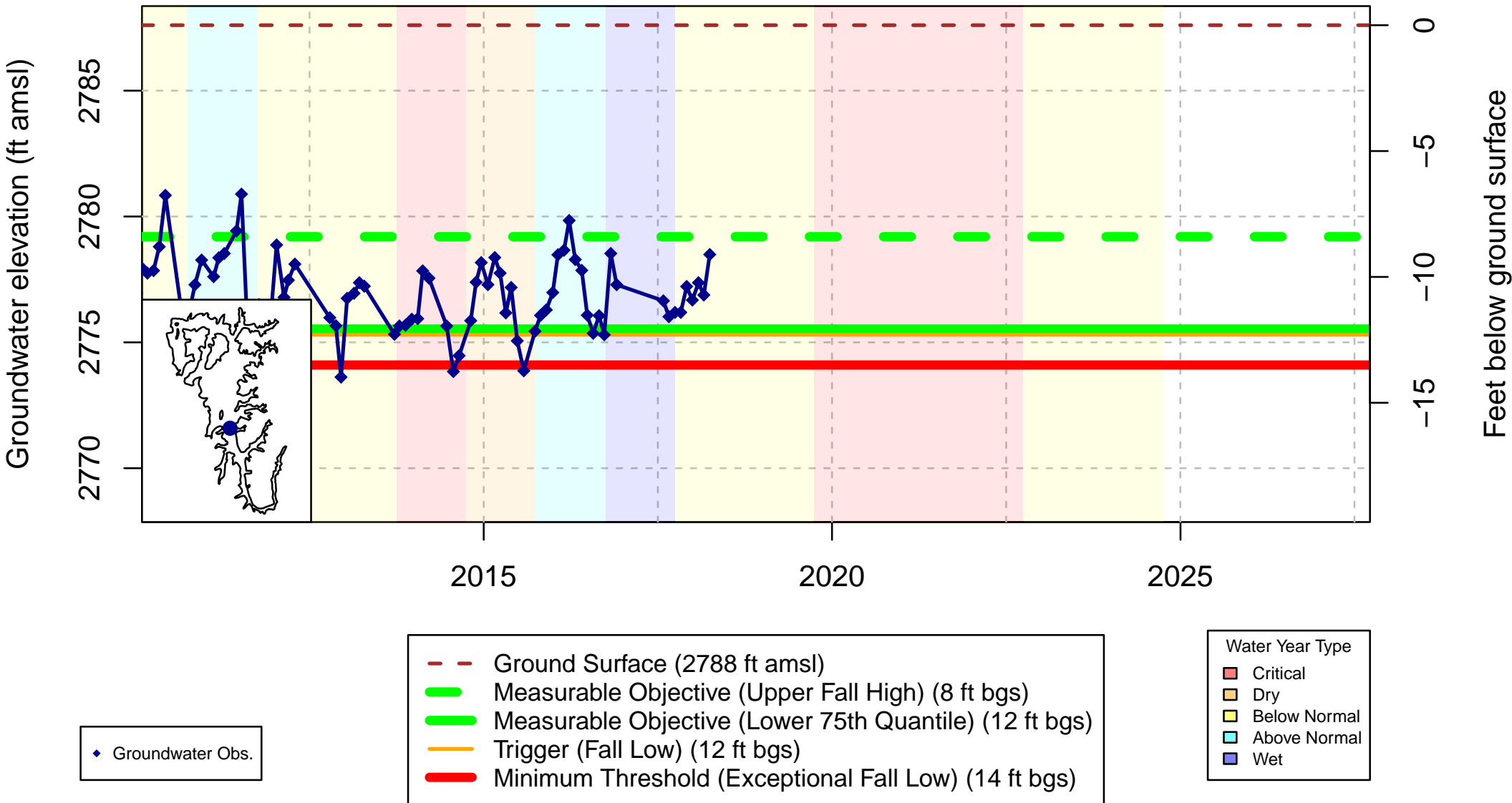
Water Year Types from WY 2019–2024 are preliminary results calculated based on SGMA Water Year Type Dataset Development Report. The results will be finalized once DWR updates the water year type dataset for these years.

DWR Stn_ID: NA; well_code: Z36; well_name: Z36; well_swn: NA



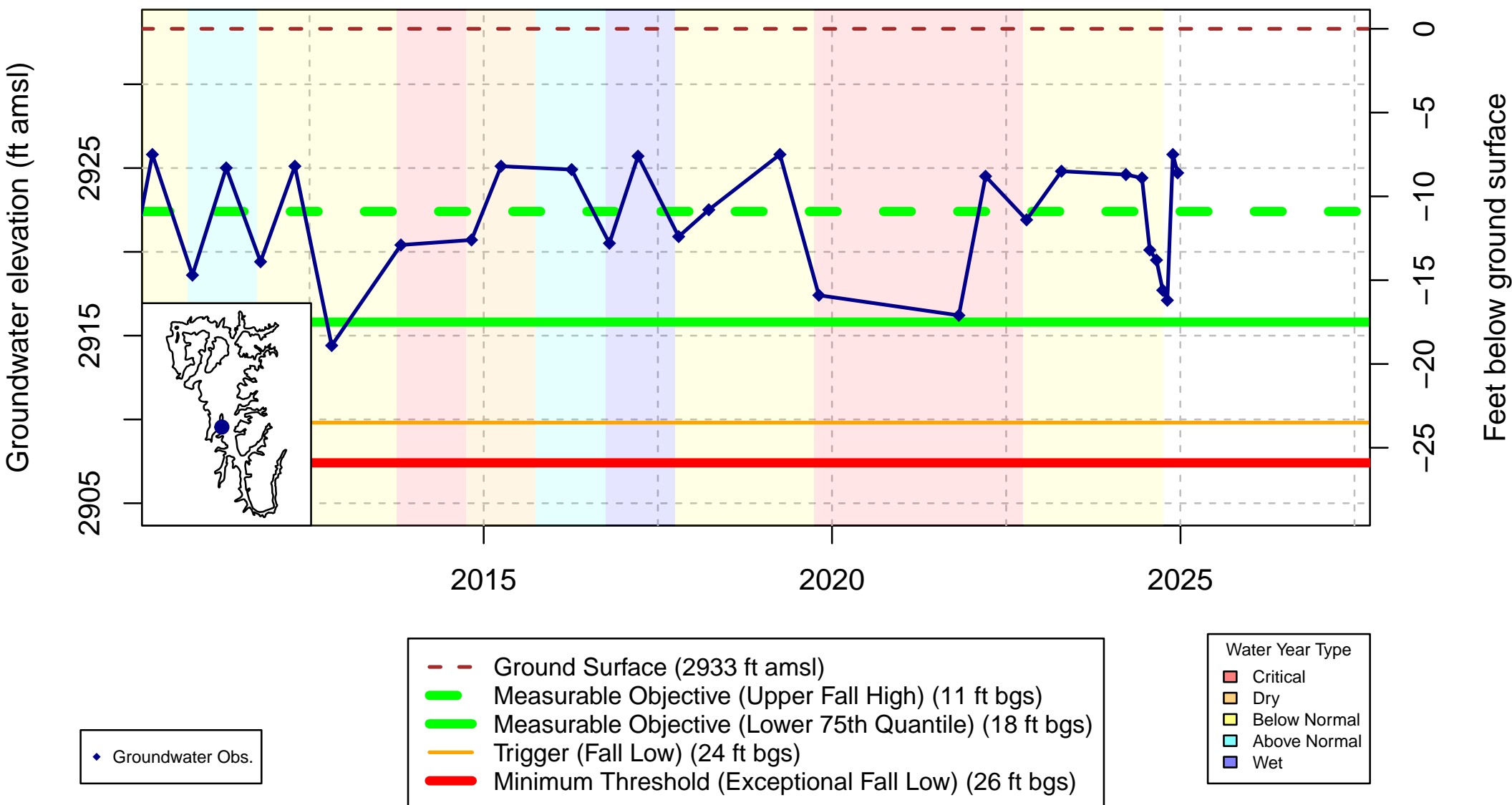
Water Year Types from WY 2019–2024 are preliminary results calculated based on SGMA Water Year Type Dataset Development Report. The results will be finalized once DWR updates the water year type dataset for these years.

DWR Stn_ID: NA; well_code: M12; well_name: M12; well_swn: NA



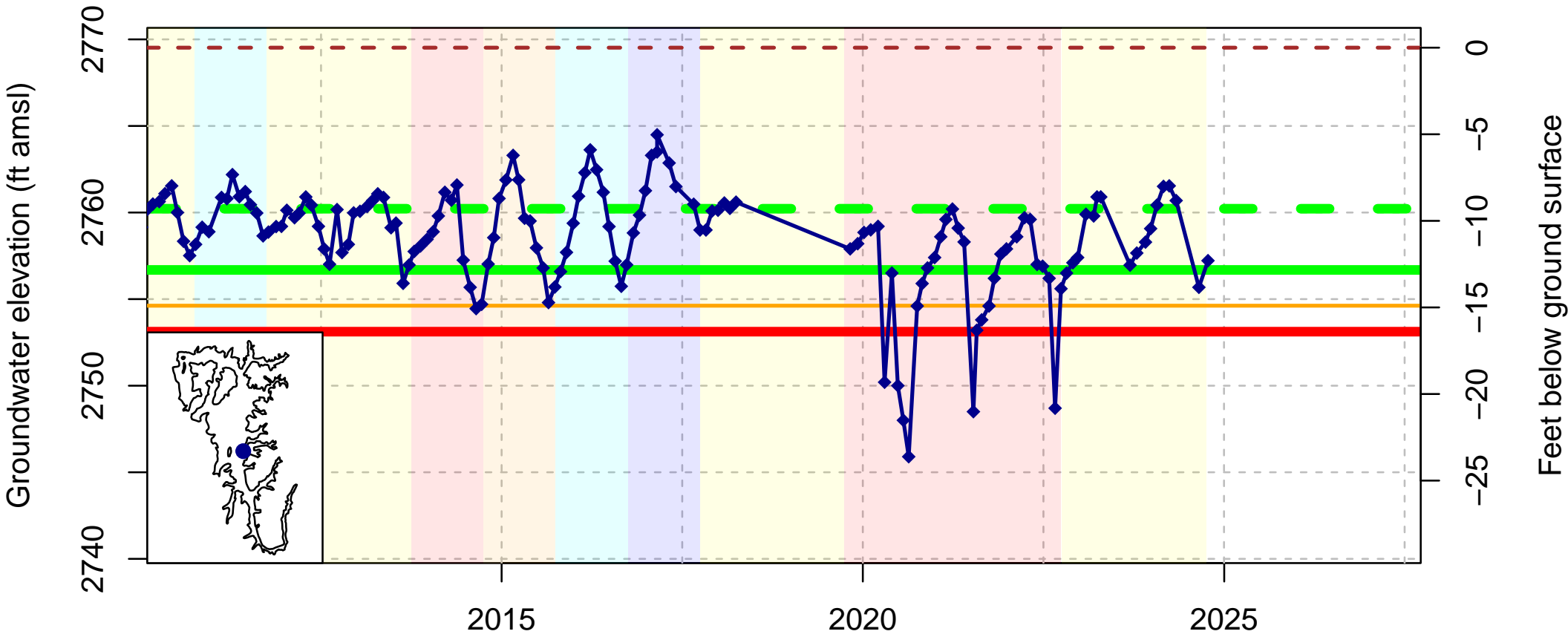
Water Year Types from WY 2019–2024 are preliminary results calculated based on SGMA Water Year Type Dataset Development Report. The results will be finalized once DWR updates the water year type dataset for these years.

DWR Stn_ID: NA; well_code: 414555N1228745W001; well_name: 42N09W27N002M; well_swn: 42N09W27N002M



Water Year Types from WY 2019–2024 are preliminary results calculated based on SGMA Water Year Type Dataset Development Report. The results will be finalized once DWR updates the water year type dataset for these years.

DWR Stn_ID: NA; well_code: R24; well_name: R24; well_swn: NA



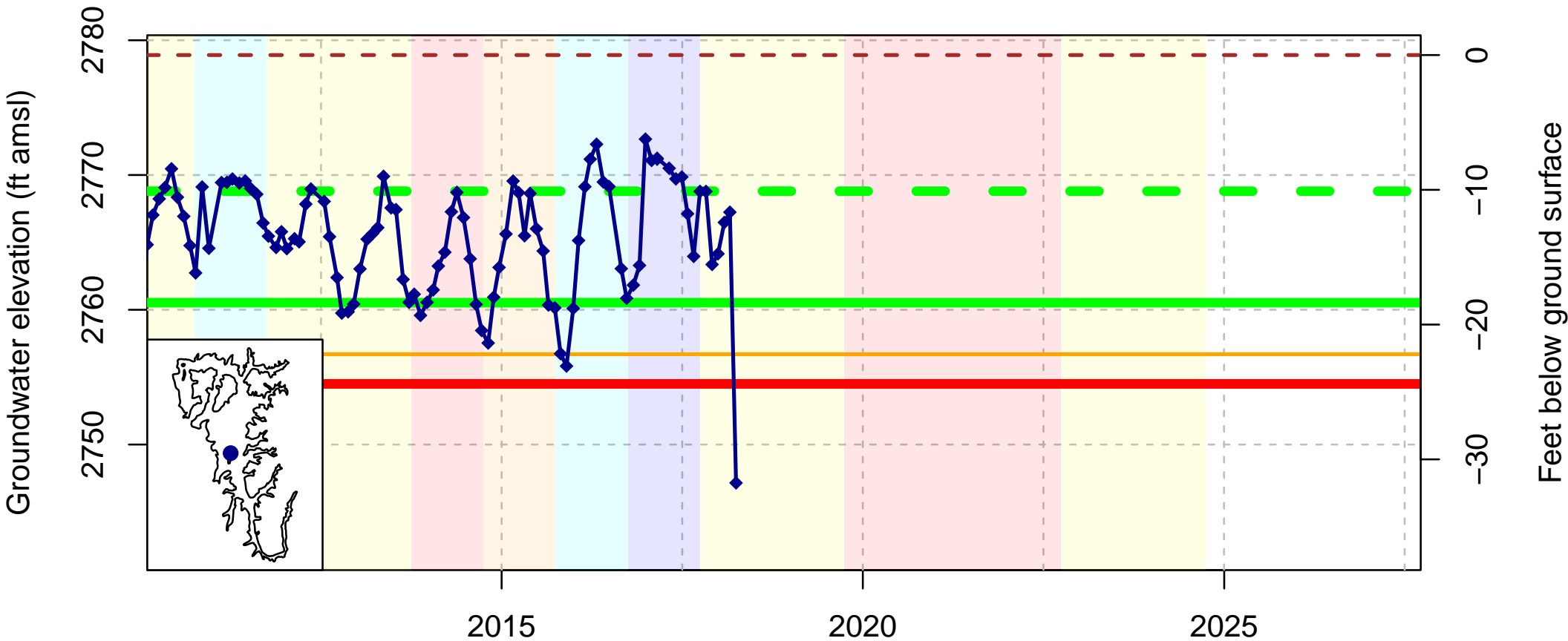
◆ Groundwater Obs.

- Ground Surface (2770 ft amsl)
- Measurable Objective (Upper Fall High) (9 ft bgs)
- Measurable Objective (Lower 75th Quantile) (13 ft bgs)
- Trigger (Fall Low) (15 ft bgs)
- Minimum Threshold (Exceptional Fall Low) (16 ft bgs)

- Water Year Type
- Critical
 - Dry
 - Below Normal
 - Above Normal
 - Wet

Water Year Types from WY 2019–2024 are preliminary results calculated based on SGMA Water Year Type Dataset Development Report. The results will be finalized once DWR updates the water year type dataset for these years.

DWR Stn_ID: NA; well_code: L31; well_name: L31; well_swn: NA



◆ Groundwater Obs.

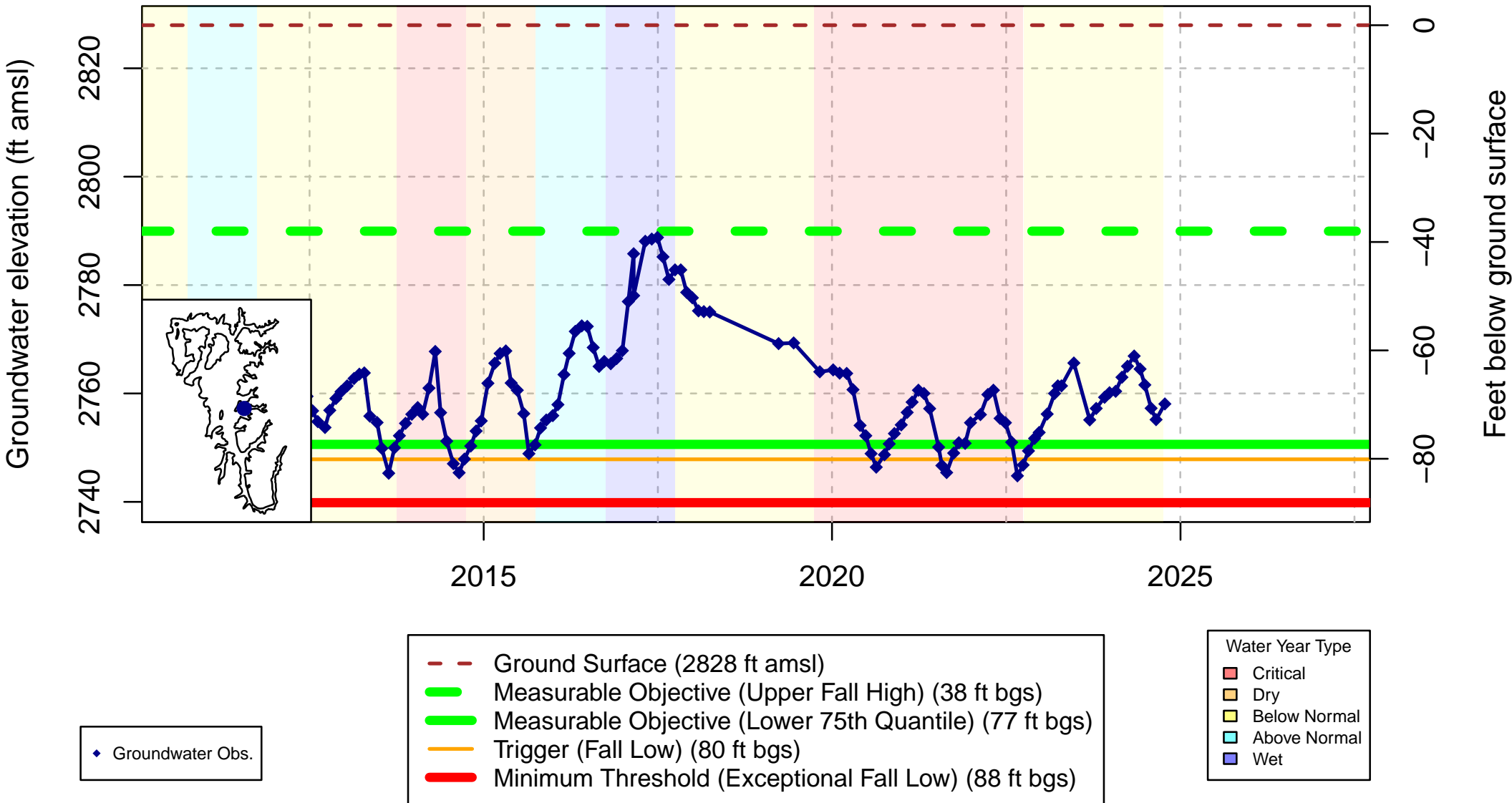
- Ground Surface (2779 ft amsl)
- Measurable Objective (Upper Fall High) (10 ft bgs)
- Measurable Objective (Lower 75th Quantile) (18 ft bgs)
- Trigger (Fall Low) (22 ft bgs)
- Minimum Threshold (Exceptional Fall Low) (24 ft bgs)

Water Year Type

- Critical
- Dry
- Below Normal
- Above Normal
- Wet

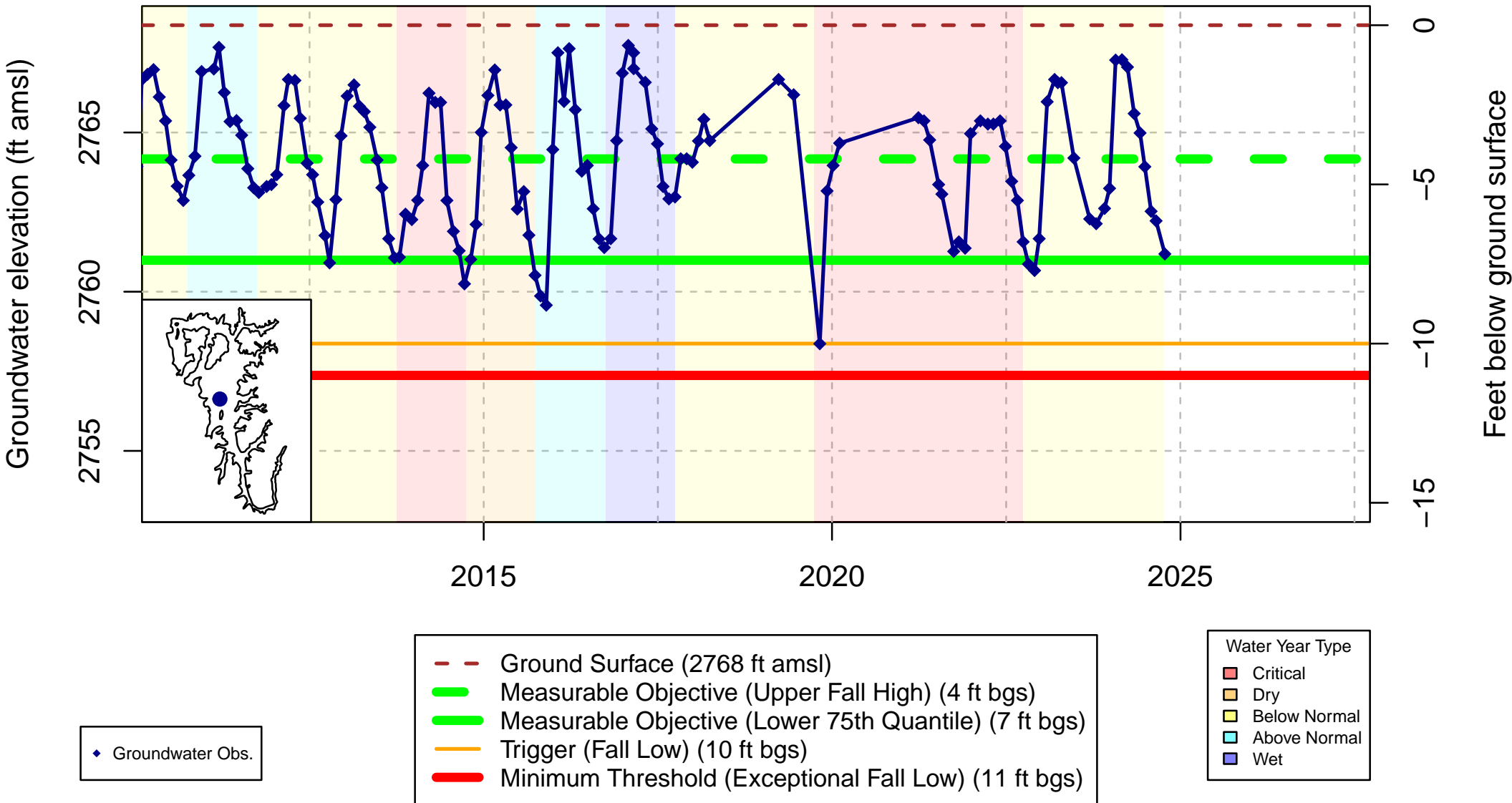
Water Year Types from WY 2019–2024 are preliminary results calculated based on SGMA Water Year Type Dataset Development Report. The results will be finalized once DWR updates the water year type dataset for these years.

DWR Stn_ID: NA; well_code: G31; well_name: G31; well_swn: NA



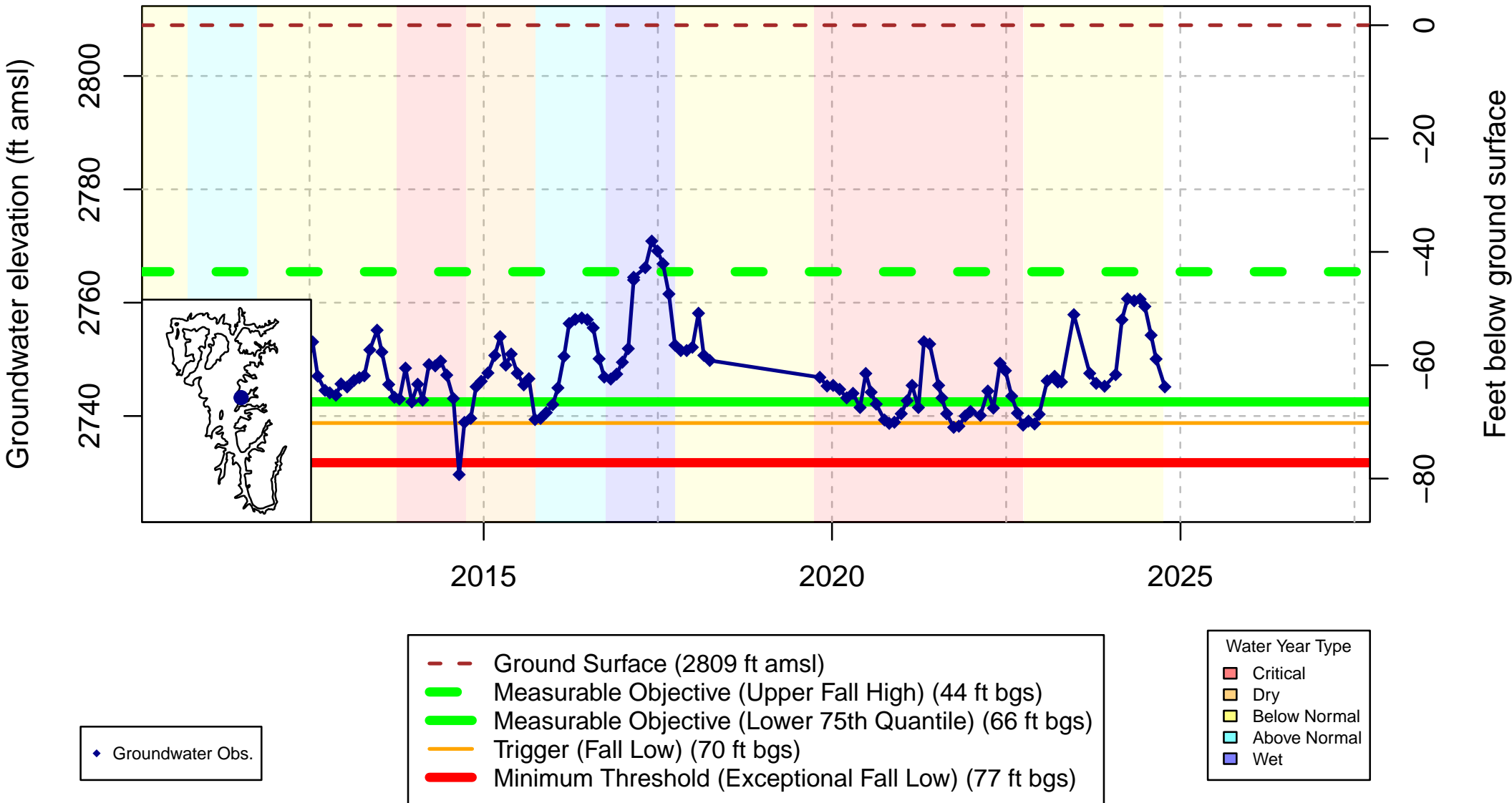
Water Year Types from WY 2019–2024 are preliminary results calculated based on SGMA Water Year Type Dataset Development Report. The results will be finalized once DWR updates the water year type dataset for these years.

DWR Stn_ID: NA; well_code: D31; well_name: D31; well_swn: NA



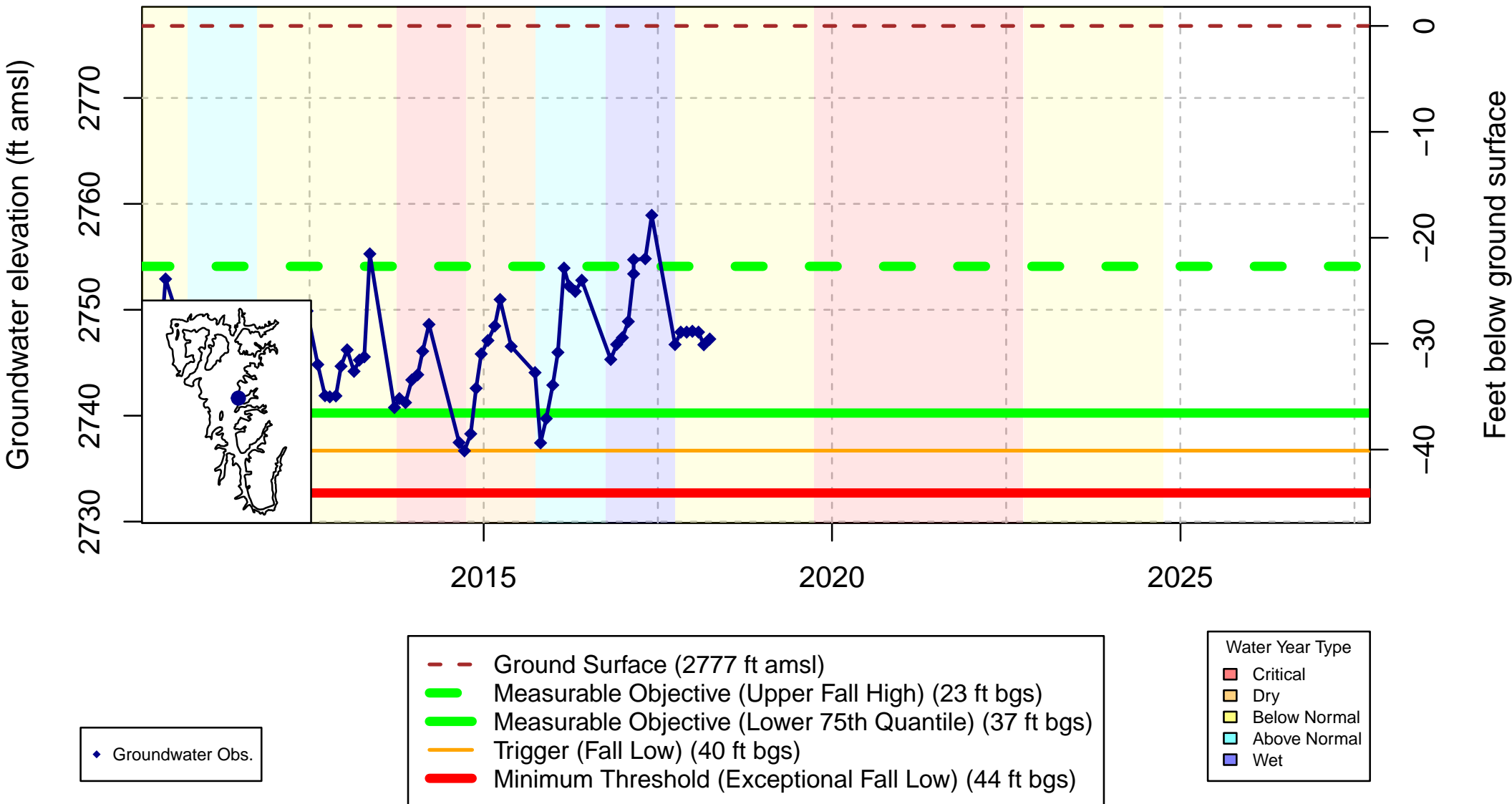
Water Year Types from WY 2019–2024 are preliminary results calculated based on SGMA Water Year Type Dataset Development Report. The results will be finalized once DWR updates the water year type dataset for these years.

DWR Stn_ID: NA; well_code: L18; well_name: L18; well_swn: NA



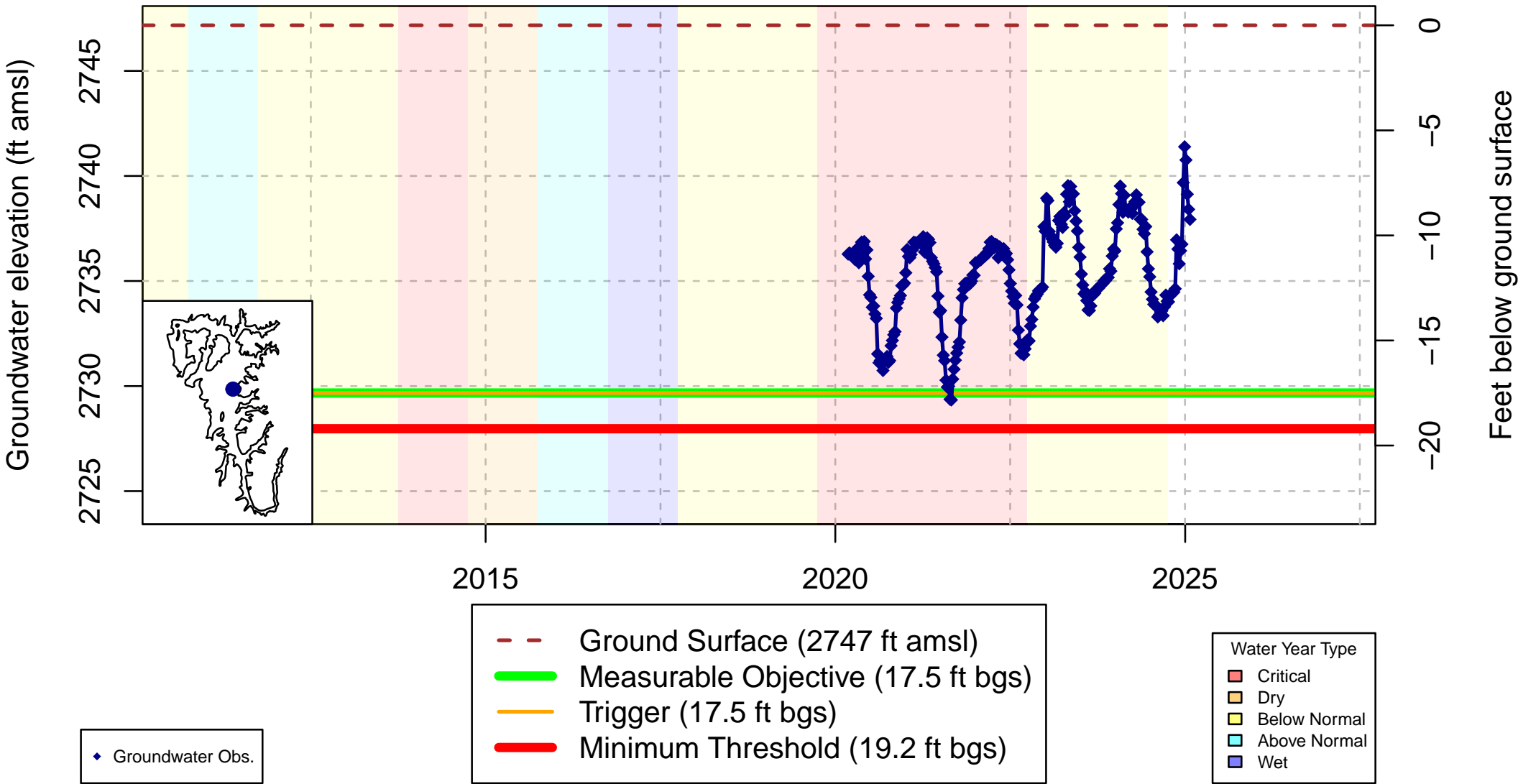
Water Year Types from WY 2019–2024 are preliminary results calculated based on SGMA Water Year Type Dataset Development Report. The results will be finalized once DWR updates the water year type dataset for these years.

DWR Stn_ID: NA; well_code: K9; well_name: K9; well_swn: NA



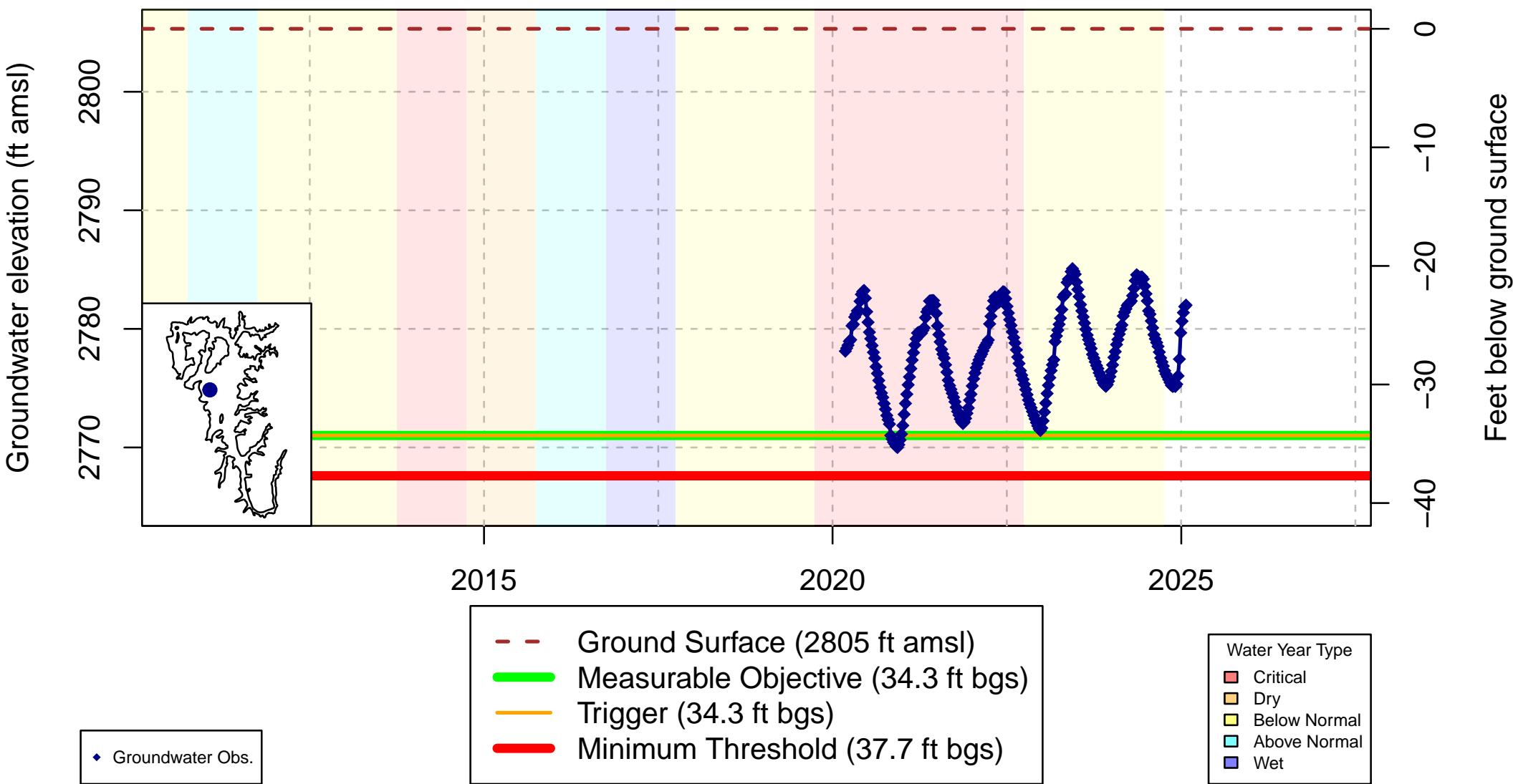
Water Year Types from WY 2019–2024 are preliminary results calculated based on SGMA Water Year Type Dataset Development Report. The results will be finalized once DWR updates the water year type dataset for these years.

DWR Stn_ID: NA; well_code: SCT_183; well_name: NA; well_swn: NA



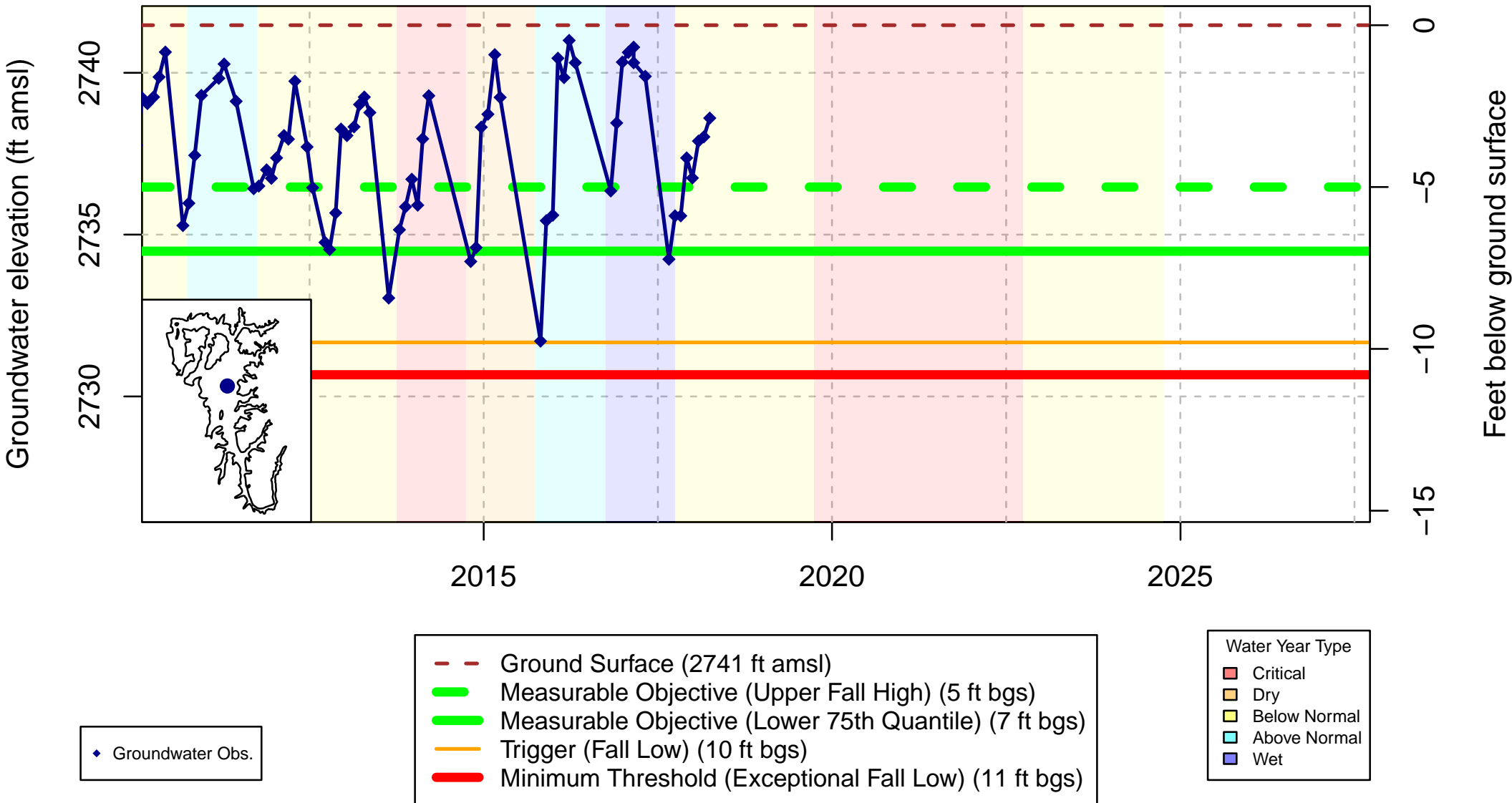
Water Year Types from WY 2019–2024 are preliminary results calculated based on SGMA Water Year Type Dataset Development Report. The results will be finalized once DWR updates the water year type dataset for these years.

DWR Stn_ID: NA; well_code: SCT_186; well_name: NA; well_swn: NA



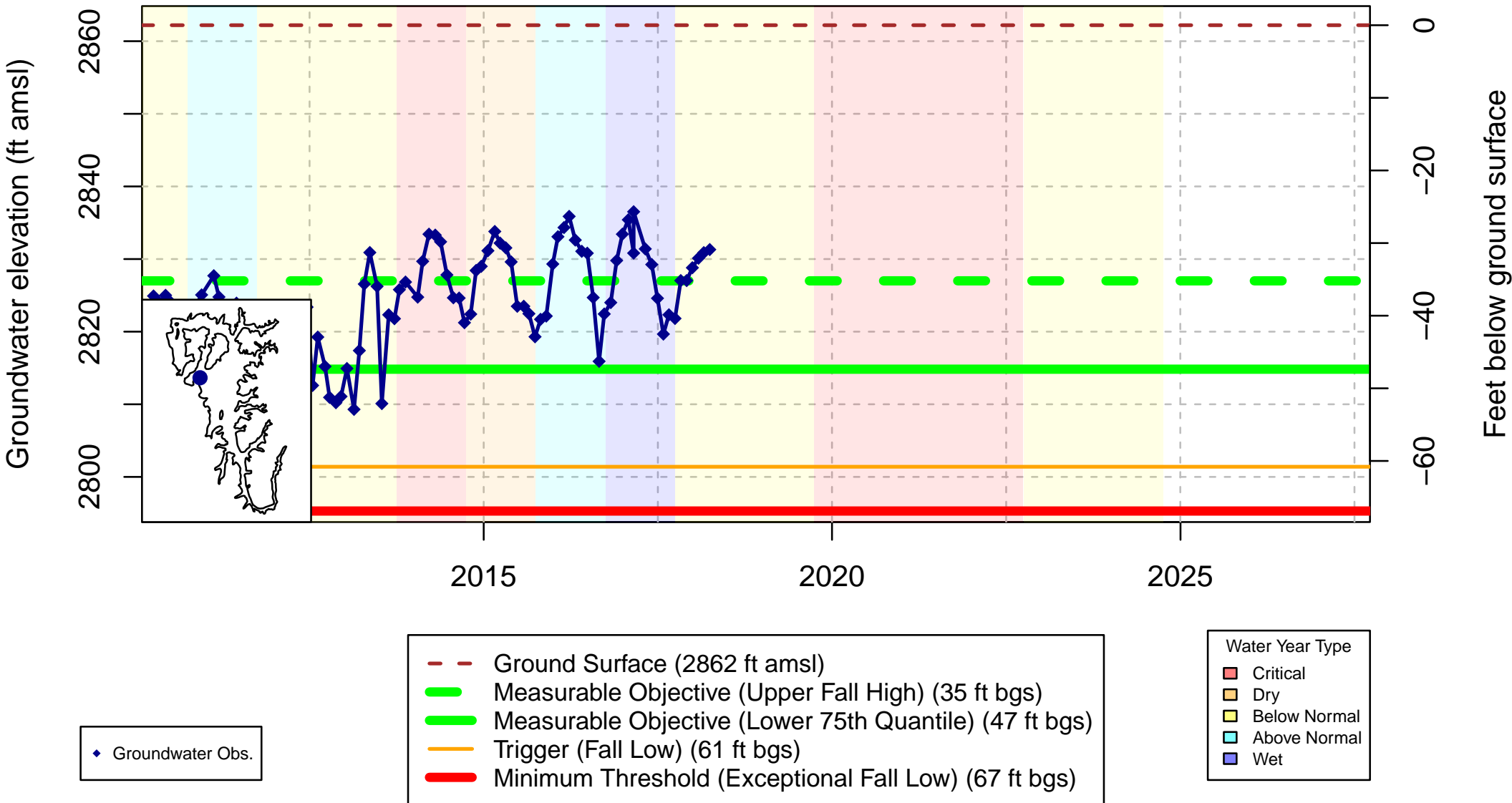
Water Year Types from WY 2019–2024 are preliminary results calculated based on SGMA Water Year Type Dataset Development Report. The results will be finalized once DWR updates the water year type dataset for these years.

DWR Stn_ID: NA; well_code: H6; well_name: H6; well_swn: NA



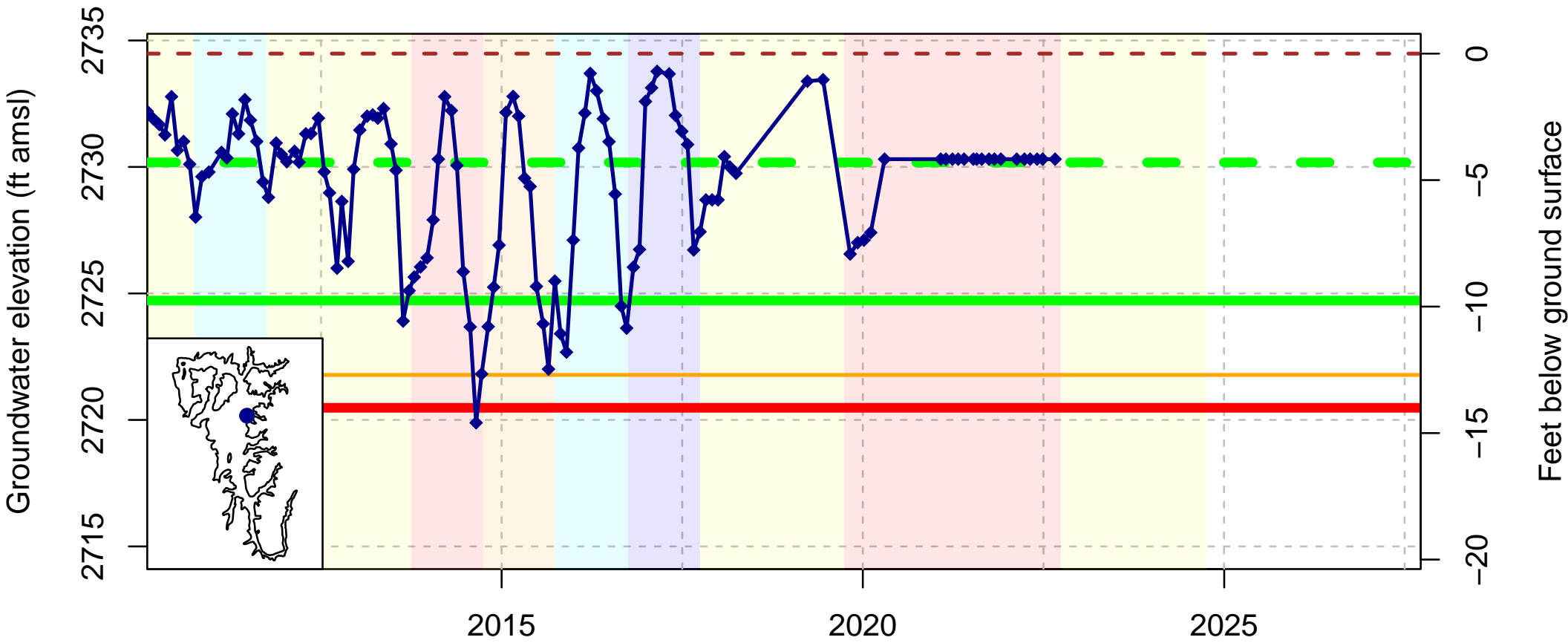
Water Year Types from WY 2019–2024 are preliminary results calculated based on SGMA Water Year Type Dataset Development Report. The results will be finalized once DWR updates the water year type dataset for these years.

DWR Stn_ID: NA; well_code: L32; well_name: L32; well_swn: NA



Water Year Types from WY 2019–2024 are preliminary results calculated based on SGMA Water Year Type Dataset Development Report. The results will be finalized once DWR updates the water year type dataset for these years.

DWR Stn_ID: NA; well_code: Q32; well_name: Q32; well_swn: NA



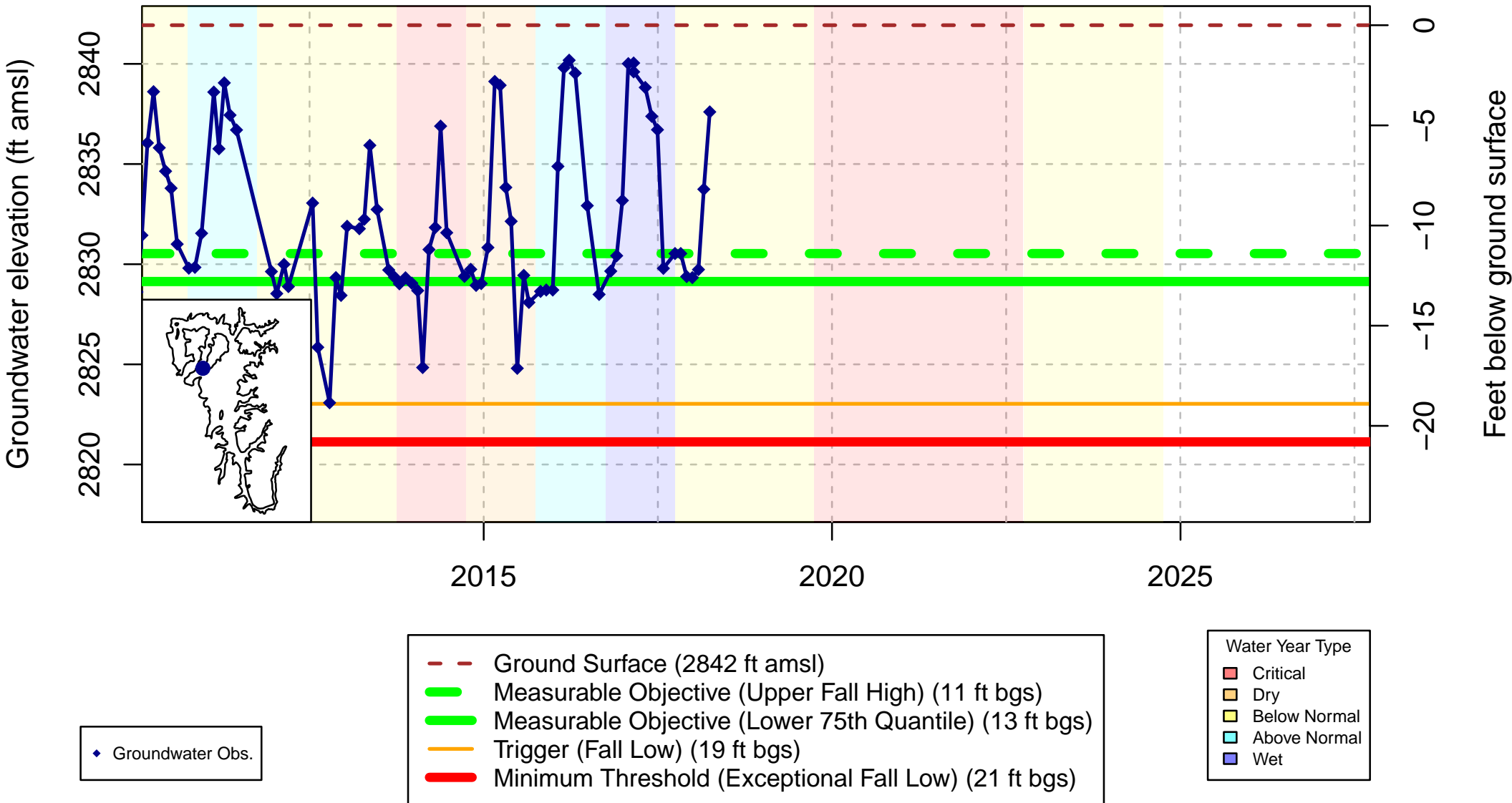
◆ Groundwater Obs.

- Ground Surface (2734 ft amsl)
- Measurable Objective (Upper Fall High) (4 ft bgs)
- Measurable Objective (Lower 75th Quantile) (10 ft bgs)
- Trigger (Fall Low) (13 ft bgs)
- Minimum Threshold (Exceptional Fall Low) (14 ft bgs)

- Water Year Type
- Critical
 - Dry
 - Below Normal
 - Above Normal
 - Wet

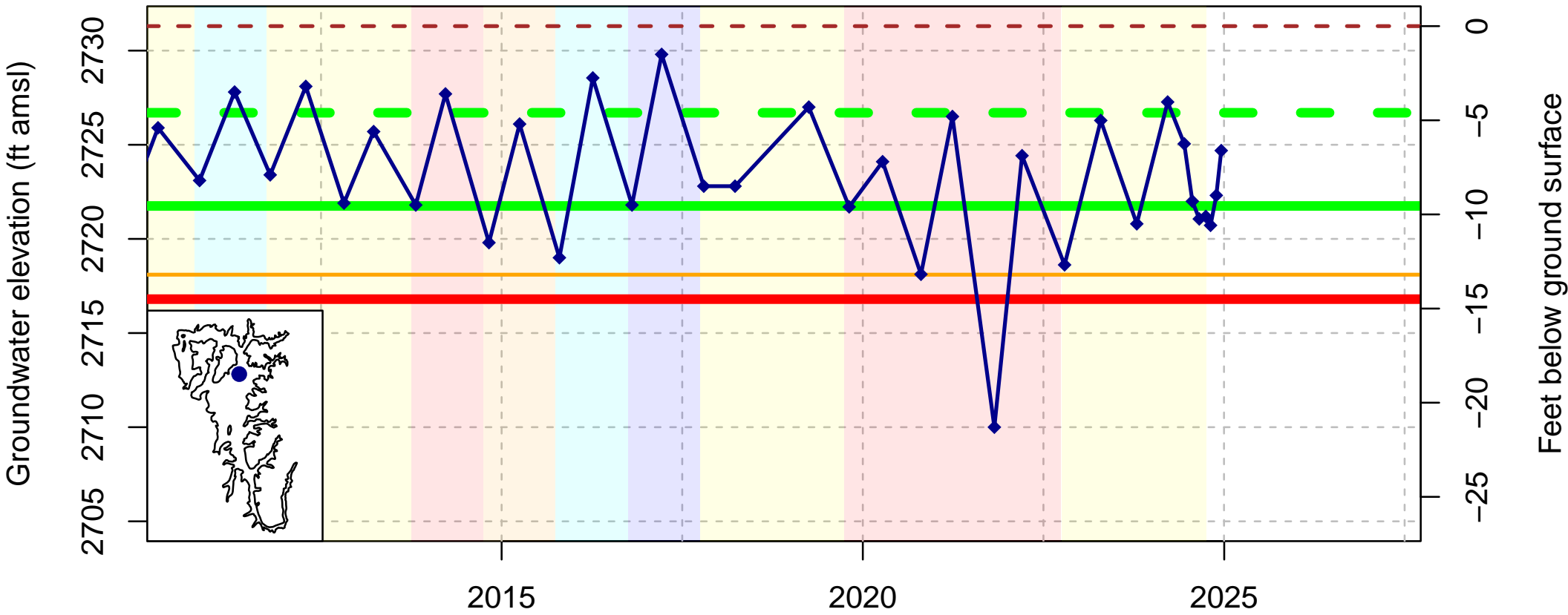
Water Year Types from WY 2019–2024 are preliminary results calculated based on SGMA Water Year Type Dataset Development Report. The results will be finalized once DWR updates the water year type dataset for these years.

DWR Stn_ID: NA; well_code: C26; well_name: C26; well_swn: NA



Water Year Types from WY 2019–2024 are preliminary results calculated based on SGMA Water Year Type Dataset Development Report. The results will be finalized once DWR updates the water year type dataset for these years.

DWR Stn_ID: NA; well_code: 415644N1228541W001; well_name: 43N09W23F001M; well_swn: 43N09W23F001M



◆ Groundwater Obs.
□ Groundwater Obs. (Questionable)

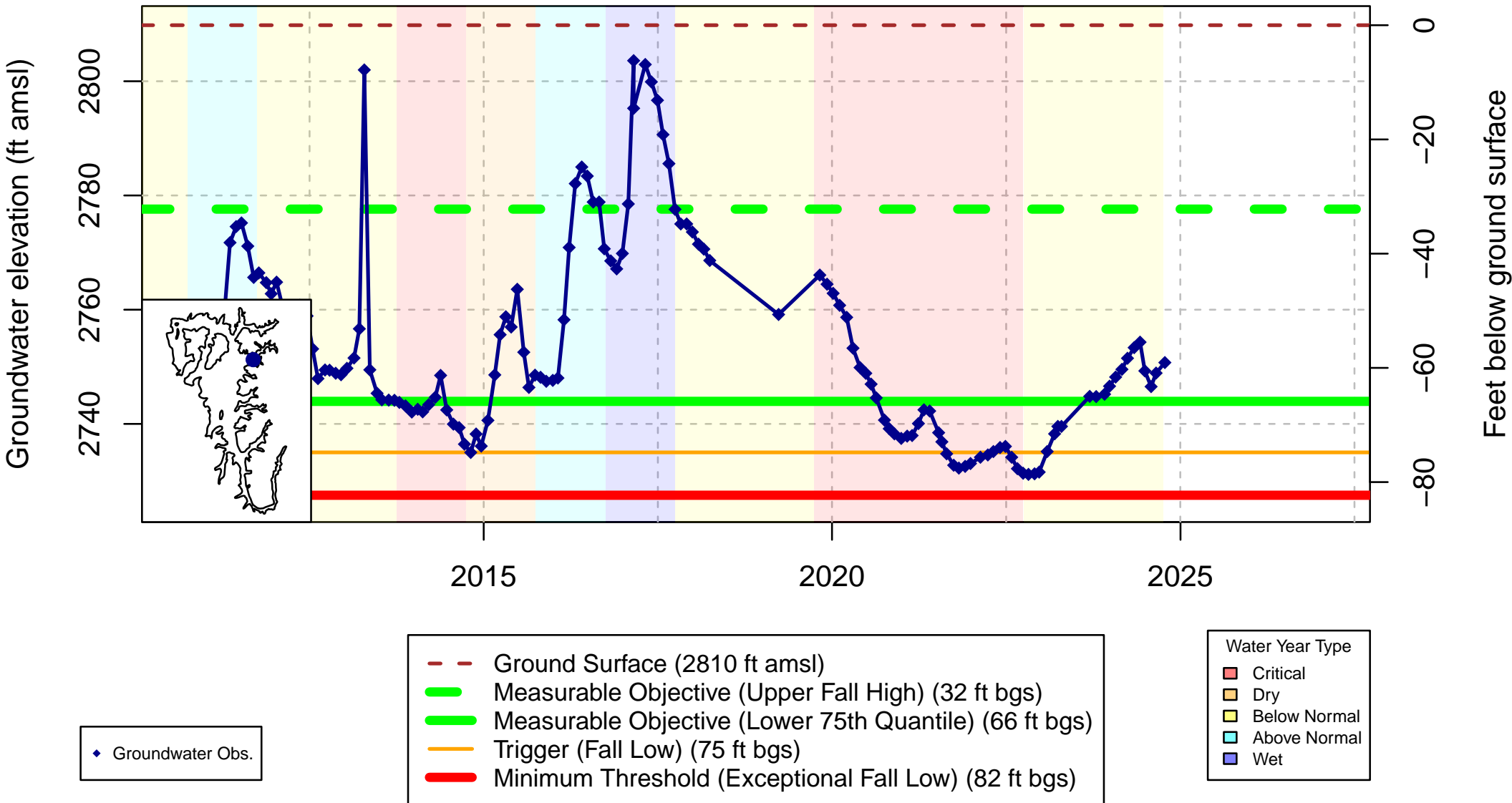
--- Ground Surface (2731 ft amsl)
--- Measurable Objective (Upper Fall High) (5 ft bgs)
--- Measurable Objective (Lower 75th Quantile) (10 ft bgs)
--- Trigger (Fall Low) (13 ft bgs)
--- Minimum Threshold (Exceptional Fall Low) (14 ft bgs)

Water Year Type

■ Critical
■ Dry
■ Below Normal
■ Above Normal
■ Wet

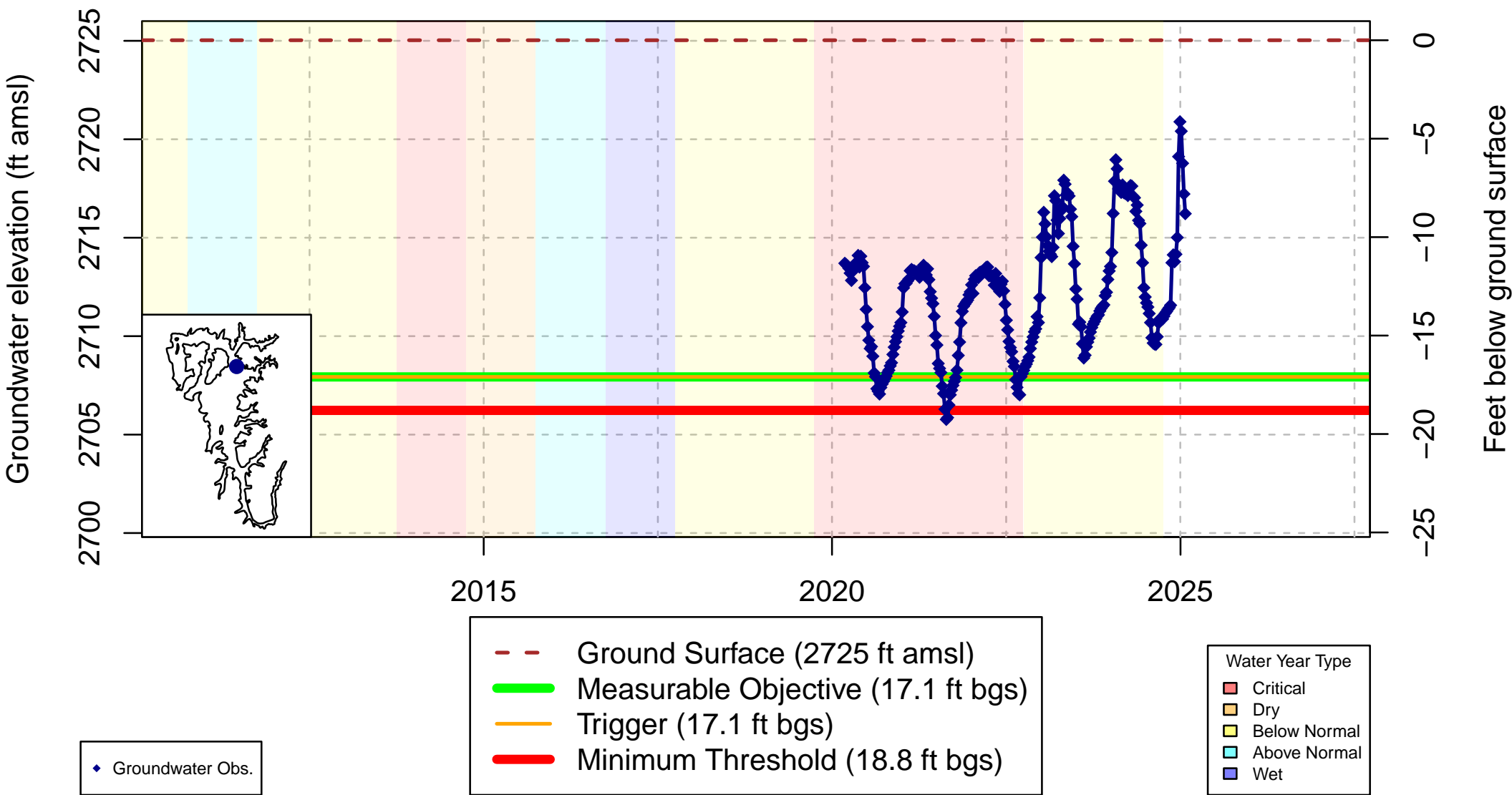
Water Year Types from WY 2019–2024 are preliminary results calculated based on SGMA Water Year Type Dataset Development Report. The results will be finalized once DWR updates the water year type dataset for these years.

DWR Stn_ID: NA; well_code: M2; well_name: M2; well_swn: NA



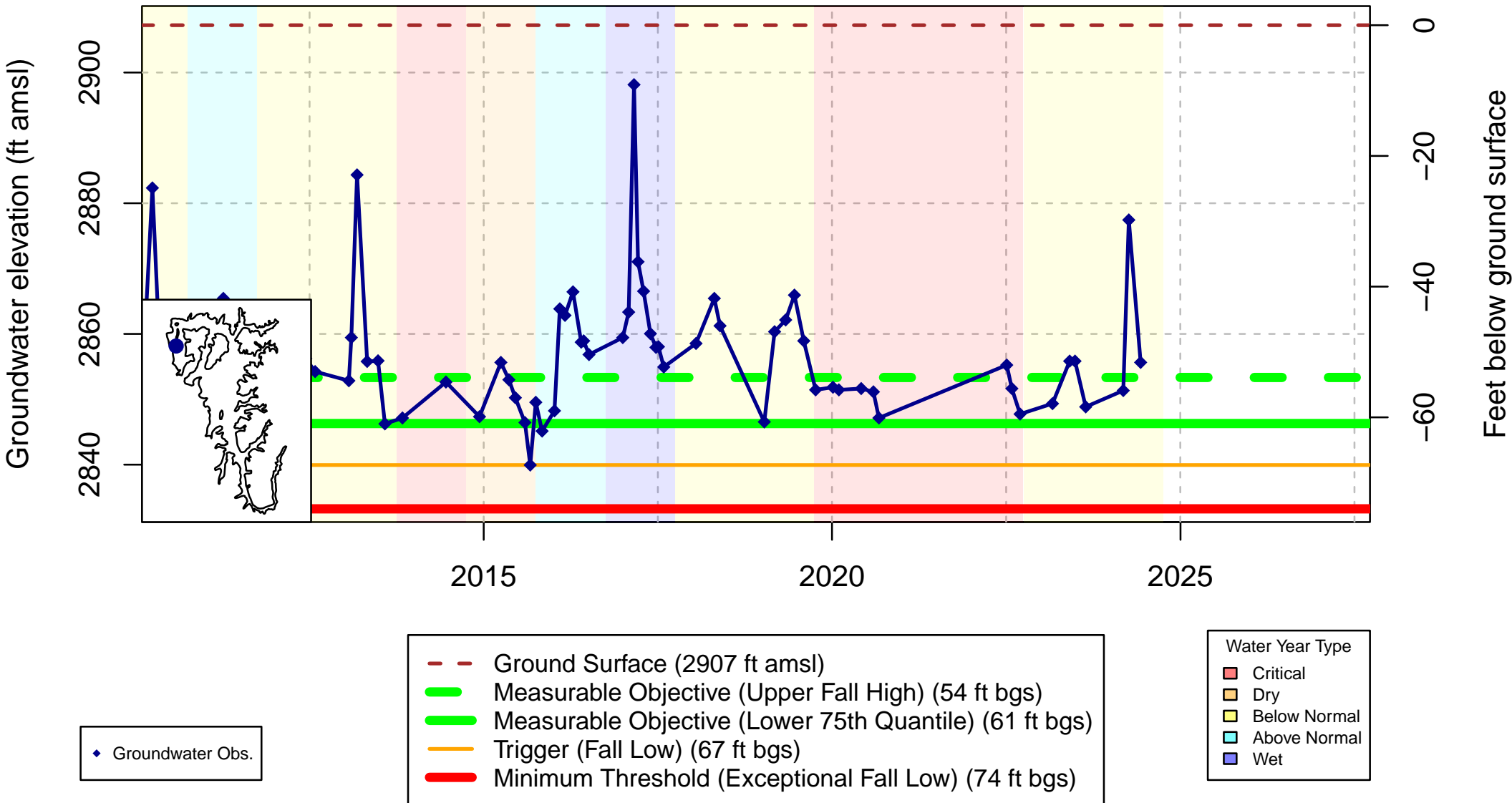
Water Year Types from WY 2019–2024 are preliminary results calculated based on SGMA Water Year Type Dataset Development Report. The results will be finalized once DWR updates the water year type dataset for these years.

DWR Stn_ID: NA; well_code: SCT_173; well_name: NA; well_swn: NA



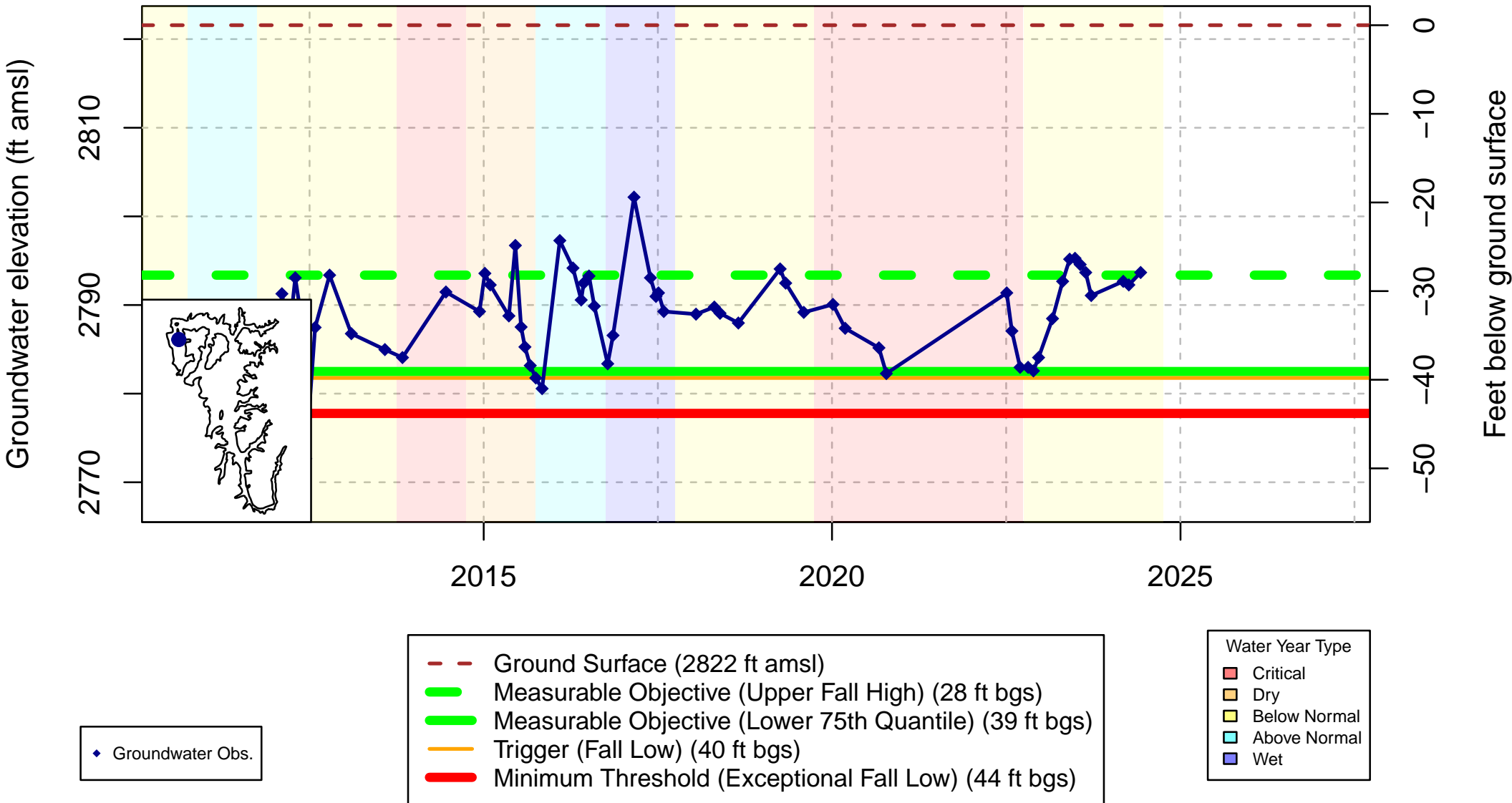
Water Year Types from WY 2019–2024 are preliminary results calculated based on SGMA Water Year Type Dataset Development Report. The results will be finalized once DWR updates the water year type dataset for these years.

DWR Stn_ID: NA; well_code: QV18; well_name: 12912_Yamitch; well_swn: NA



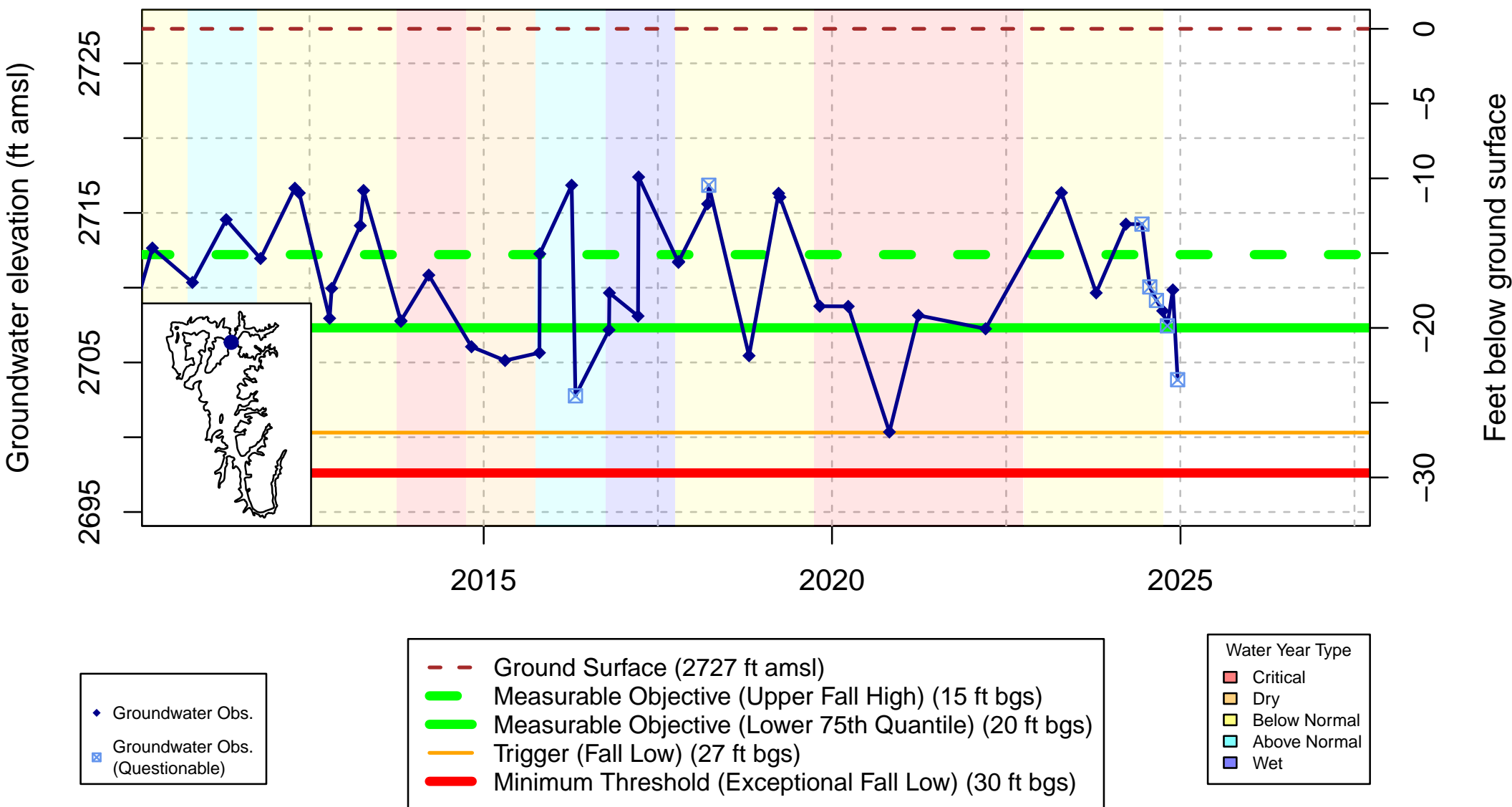
Water Year Types from WY 2019–2024 are preliminary results calculated based on SGMA Water Year Type Dataset Development Report. The results will be finalized once DWR updates the water year type dataset for these years.

DWR Stn_ID: NA; well_code: QV09; well_name: 13616_QuartzValleyRd; well_swn: NA



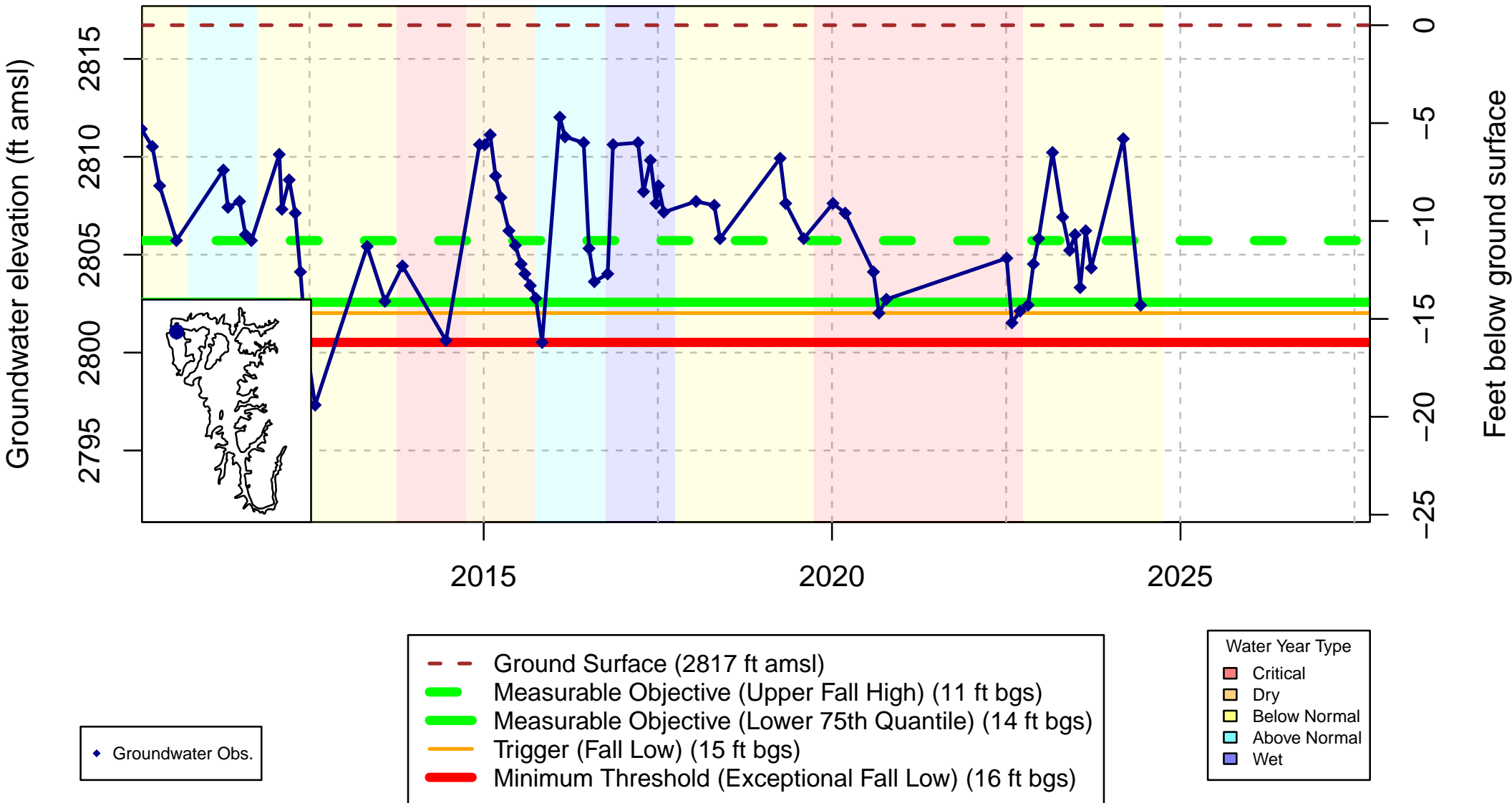
Water Year Types from WY 2019–2024 are preliminary results calculated based on SGMA Water Year Type Dataset Development Report. The results will be finalized once DWR updates the water year type dataset for these years.

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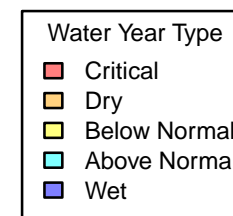
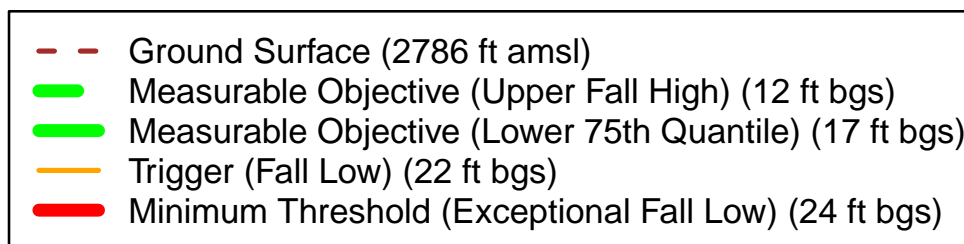
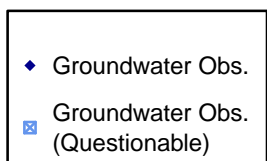
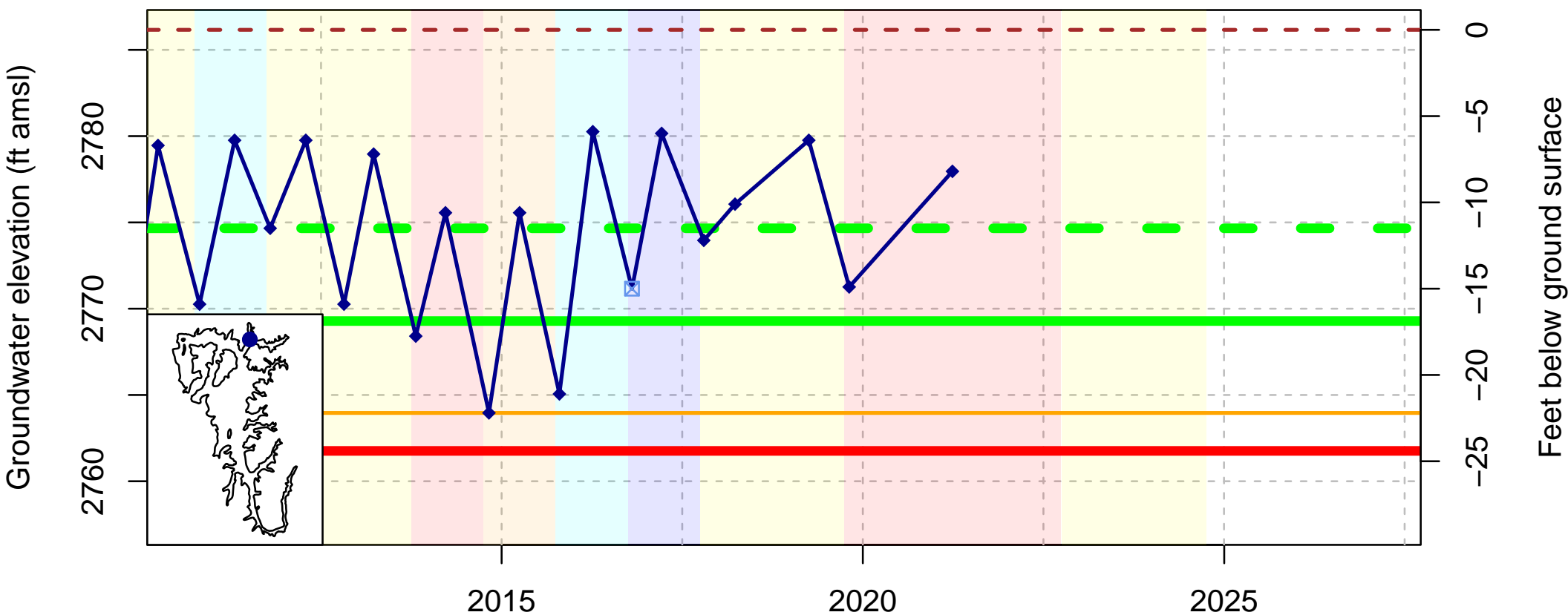
Water Year Types from WY 2019–2024 are preliminary results calculated based on SGMA Water Year Type Dataset Development Report. The results will be finalized once DWR updates the water year type dataset for these years.

DWR Stn_ID: NA; well_code: QV01; well_name: 9009_BigMeadows; well_swn: NA



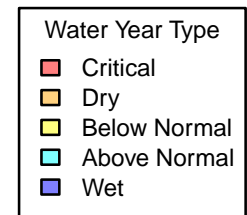
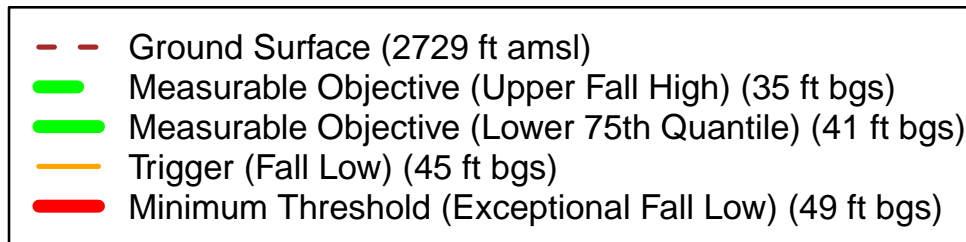
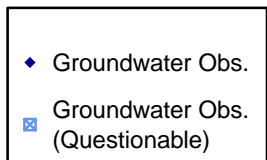
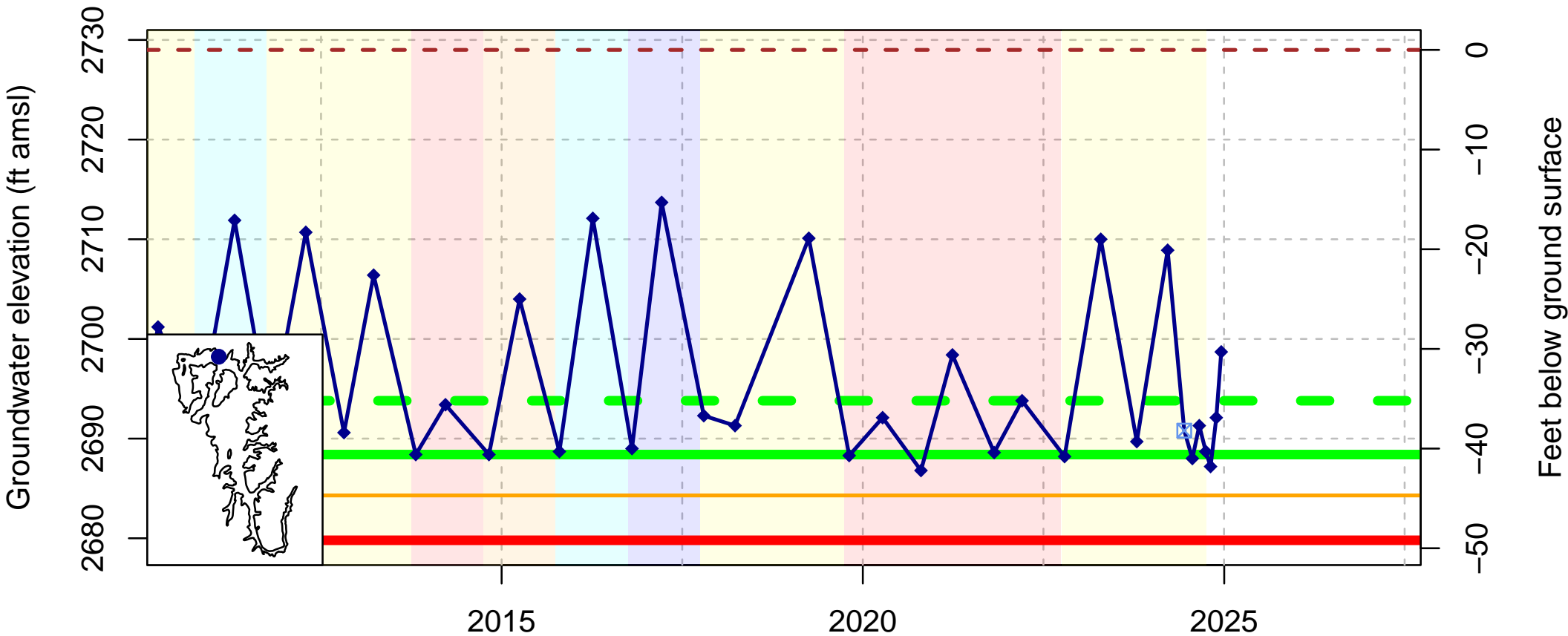
Water Year Types from WY 2019–2024 are preliminary results calculated based on SGMA Water Year Type Dataset Development Report. The results will be finalized once DWR updates the water year type dataset for these years.

DWR Stn_ID: NA; well_code: 416288N1228303W001; well_name: 44N09W25R001M; well_swn: 44N09W25R001M



Water Year Types from WY 2019–2024 are preliminary results calculated based on SGMA Water Year Type Dataset Development Report. The results will be finalized once DWR updates the water year type dataset for these years.

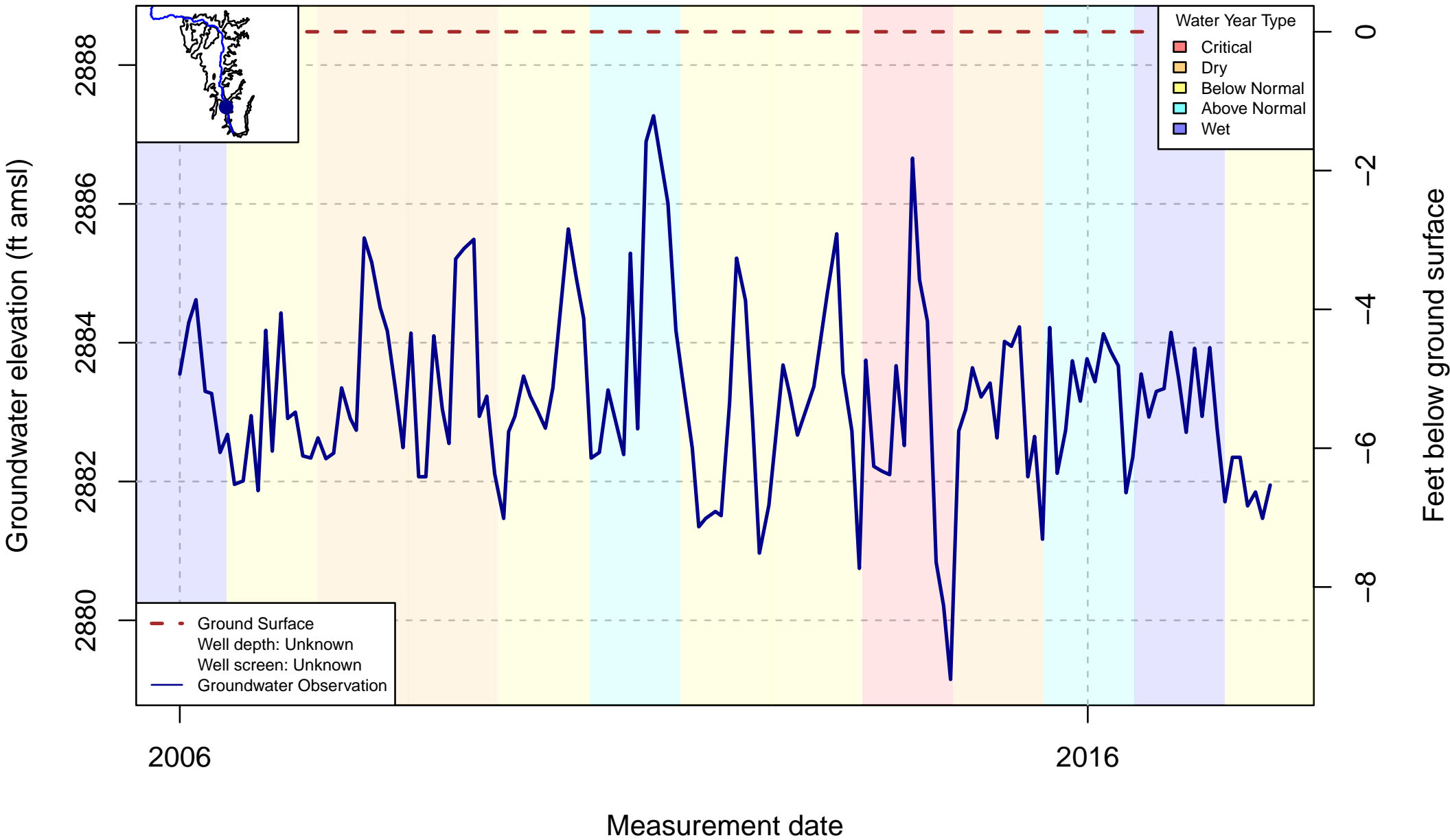
DWR Stn_ID: NA; well_code: 416335N1228997W001; well_name: 44N09W29J001M; well_swn: 44N09W29J001M



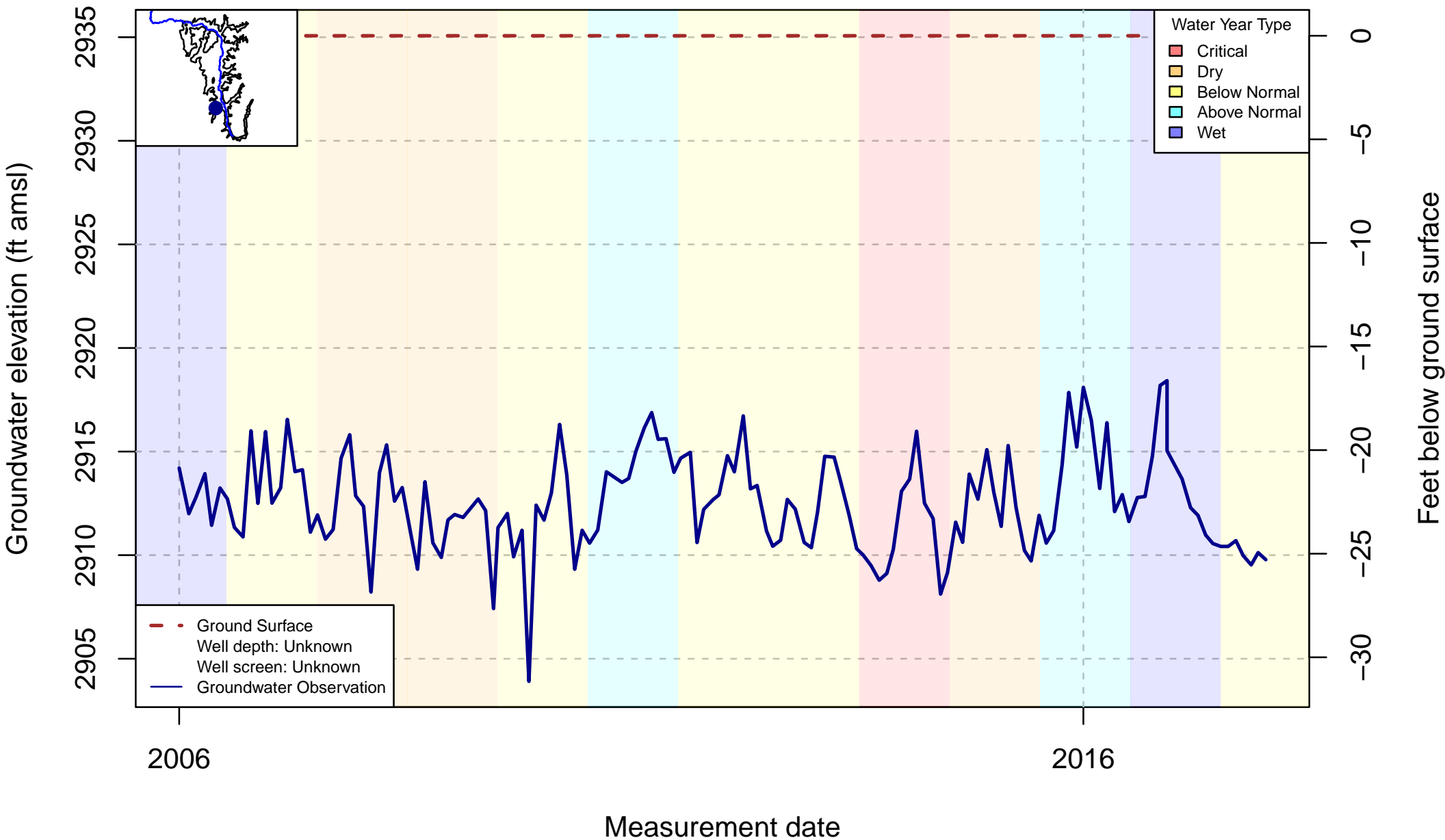
Water Year Types from WY 2019–2024 are preliminary results calculated based on SGMA Water Year Type Dataset Development Report. The results will be finalized once DWR updates the water year type dataset for these years.

Appendix A.2 - Additional Groundwater Elevation Hydrographs

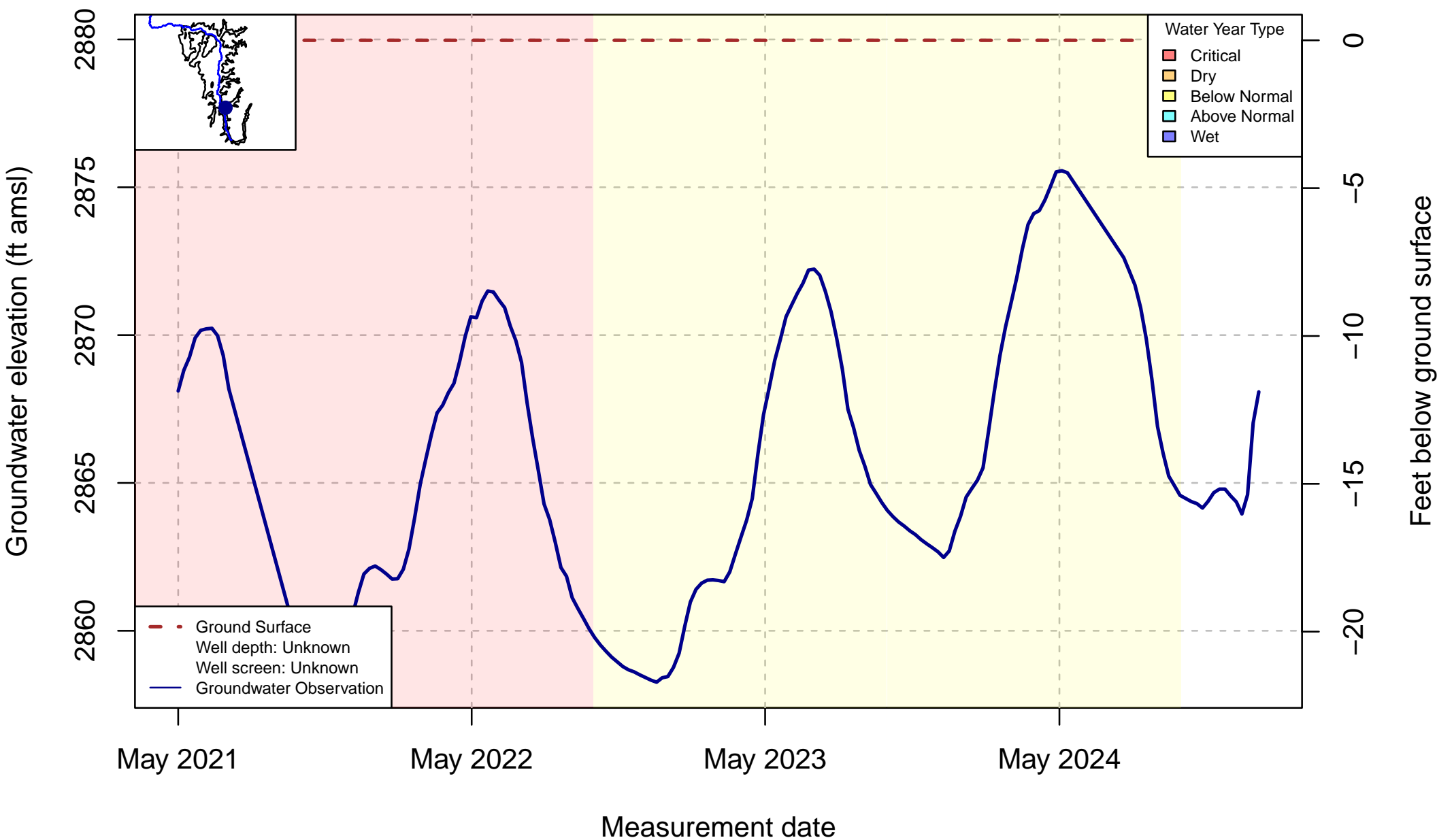
Well Code: E3; SWN: NA



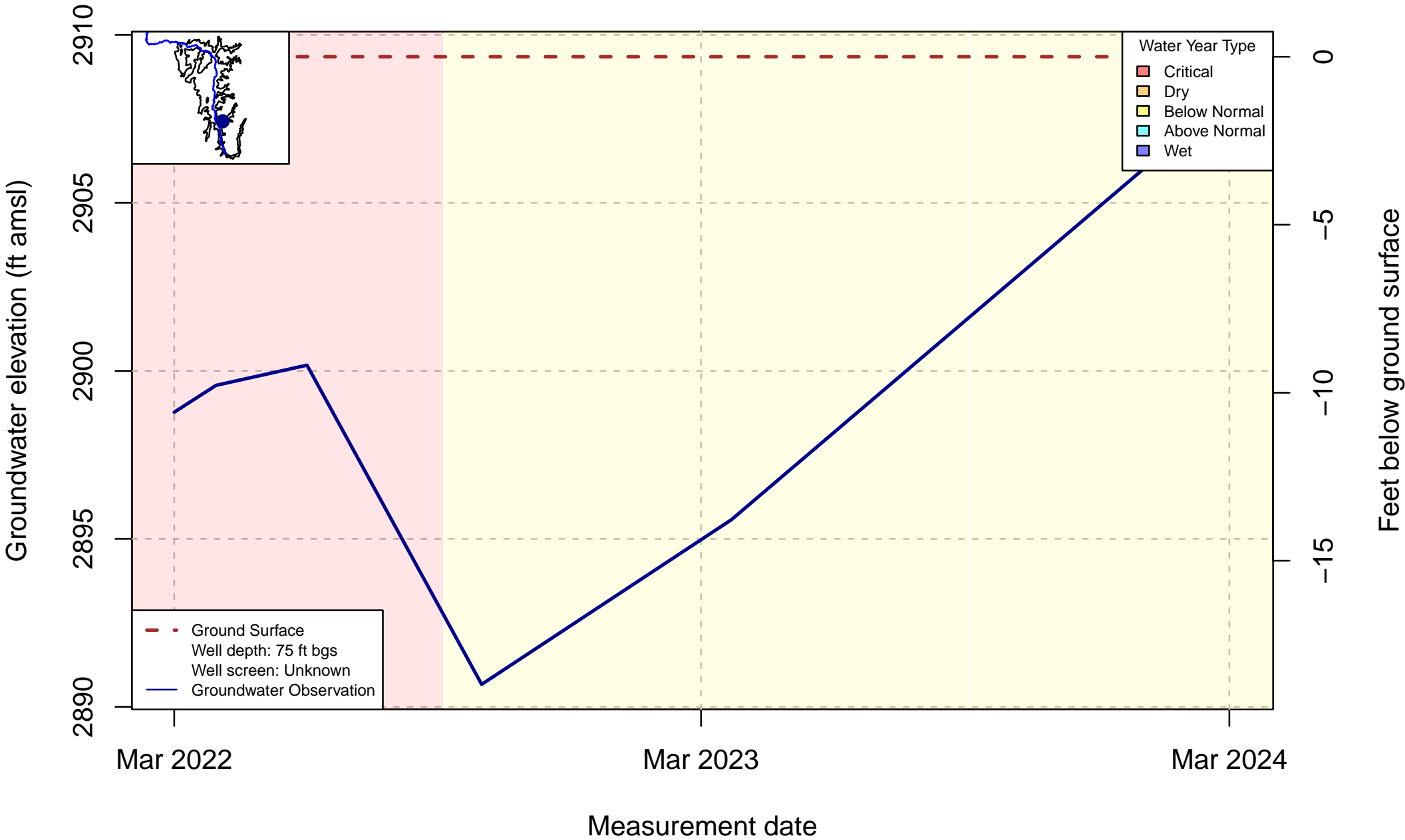
Well Code: W10; SWN: NA



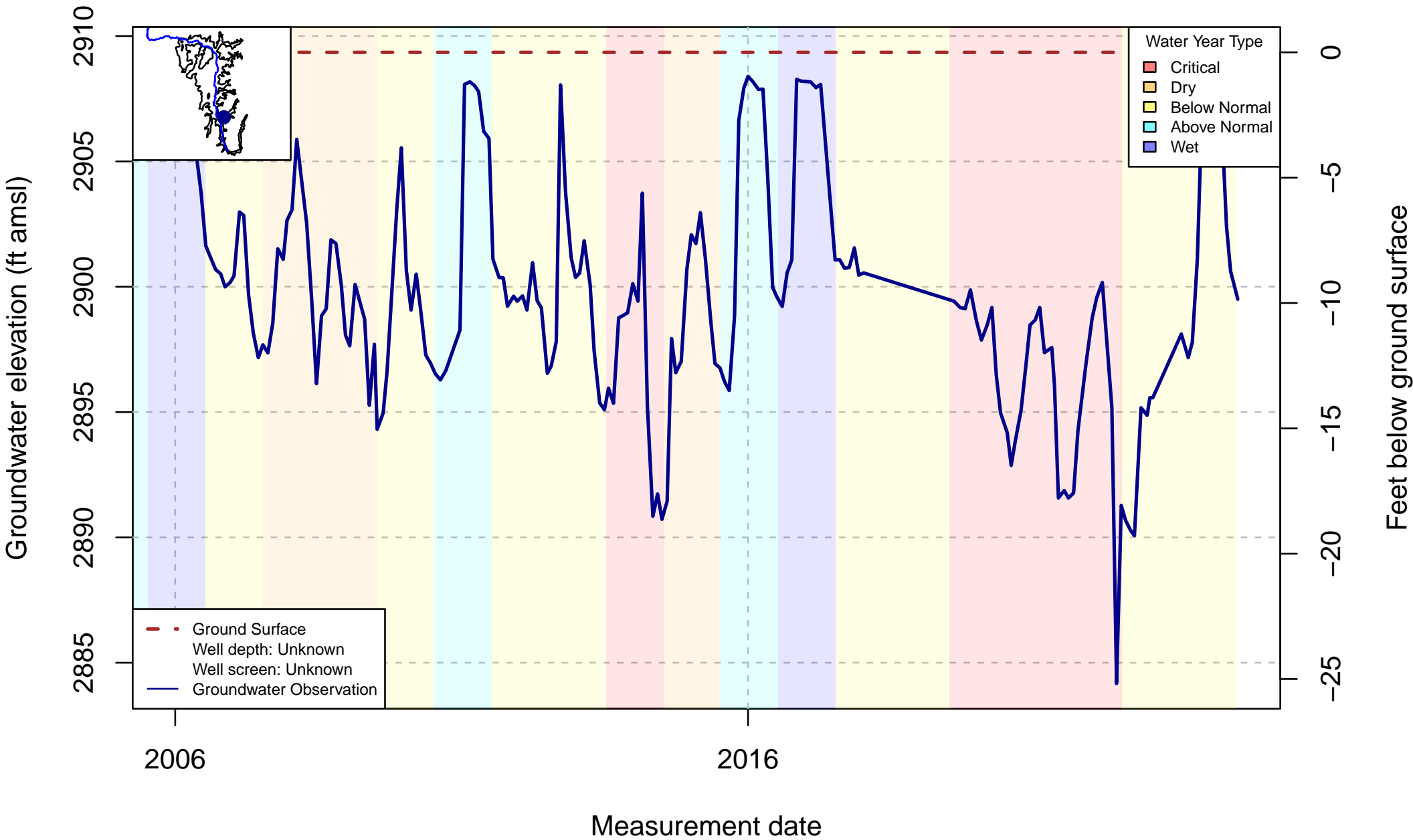
Well Code: SCT_198; SWN: NA



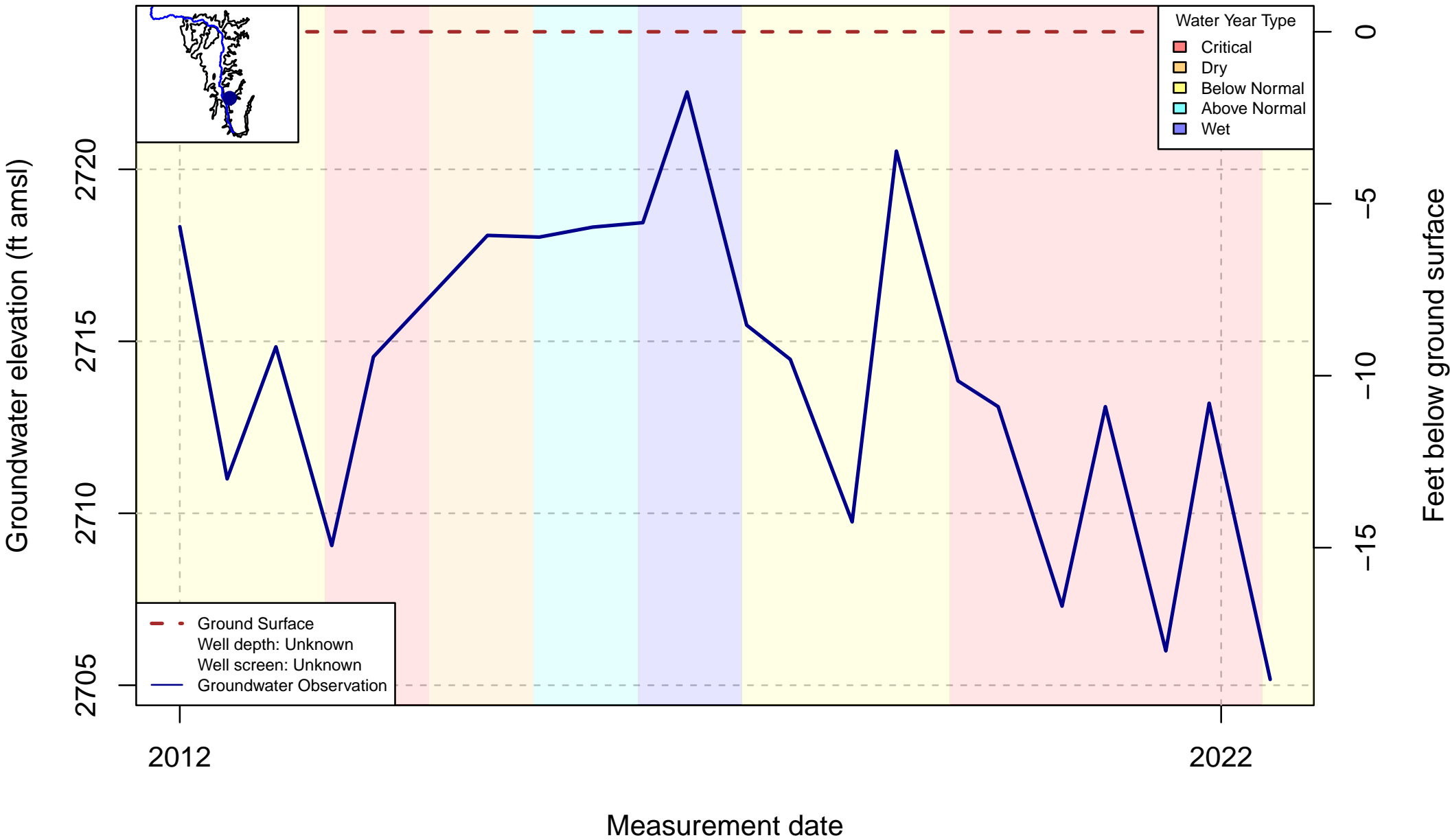
Well Code: 414087N1228164W004; SWN: NA



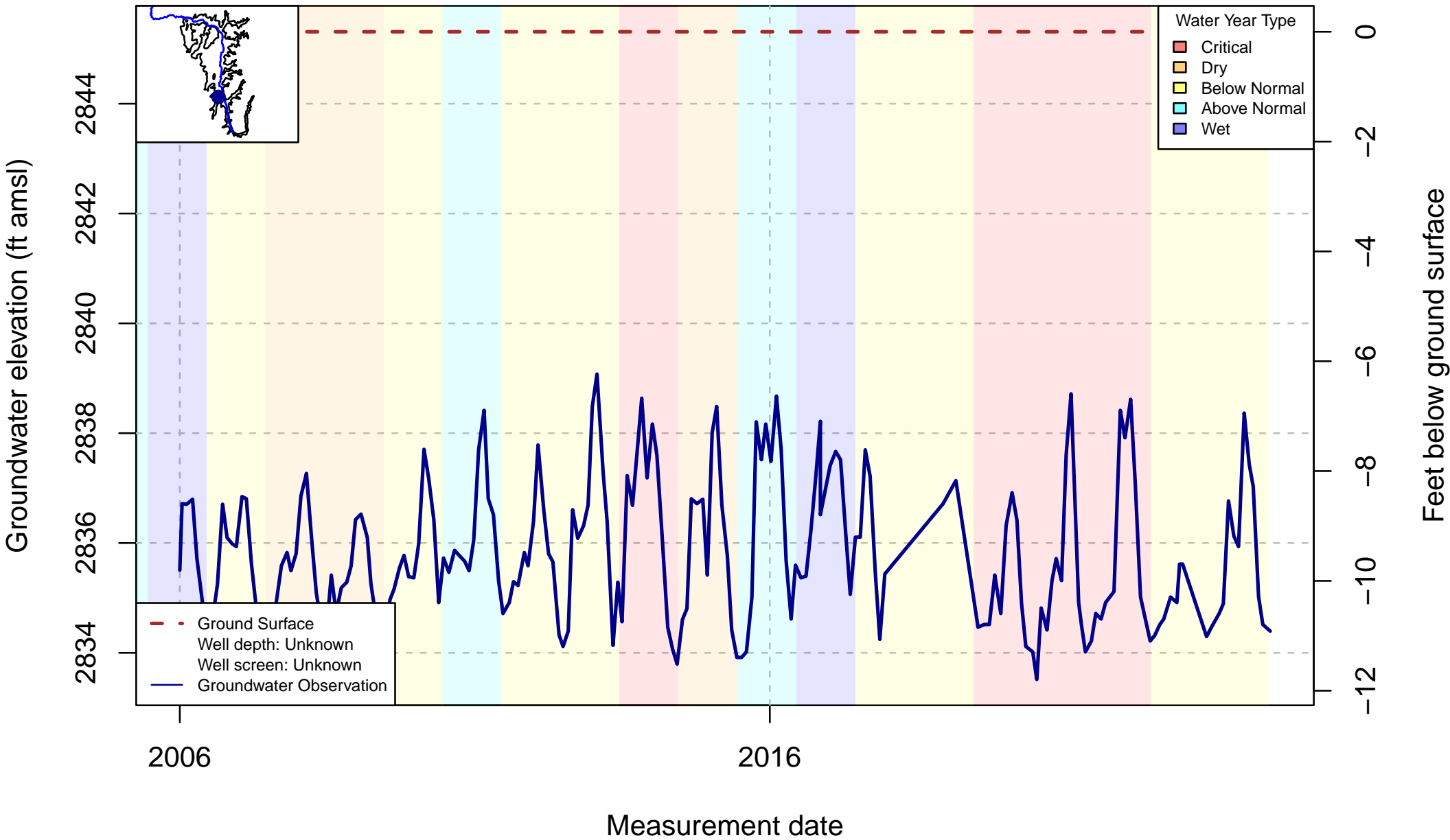
Well Code: P43; SWN: NA



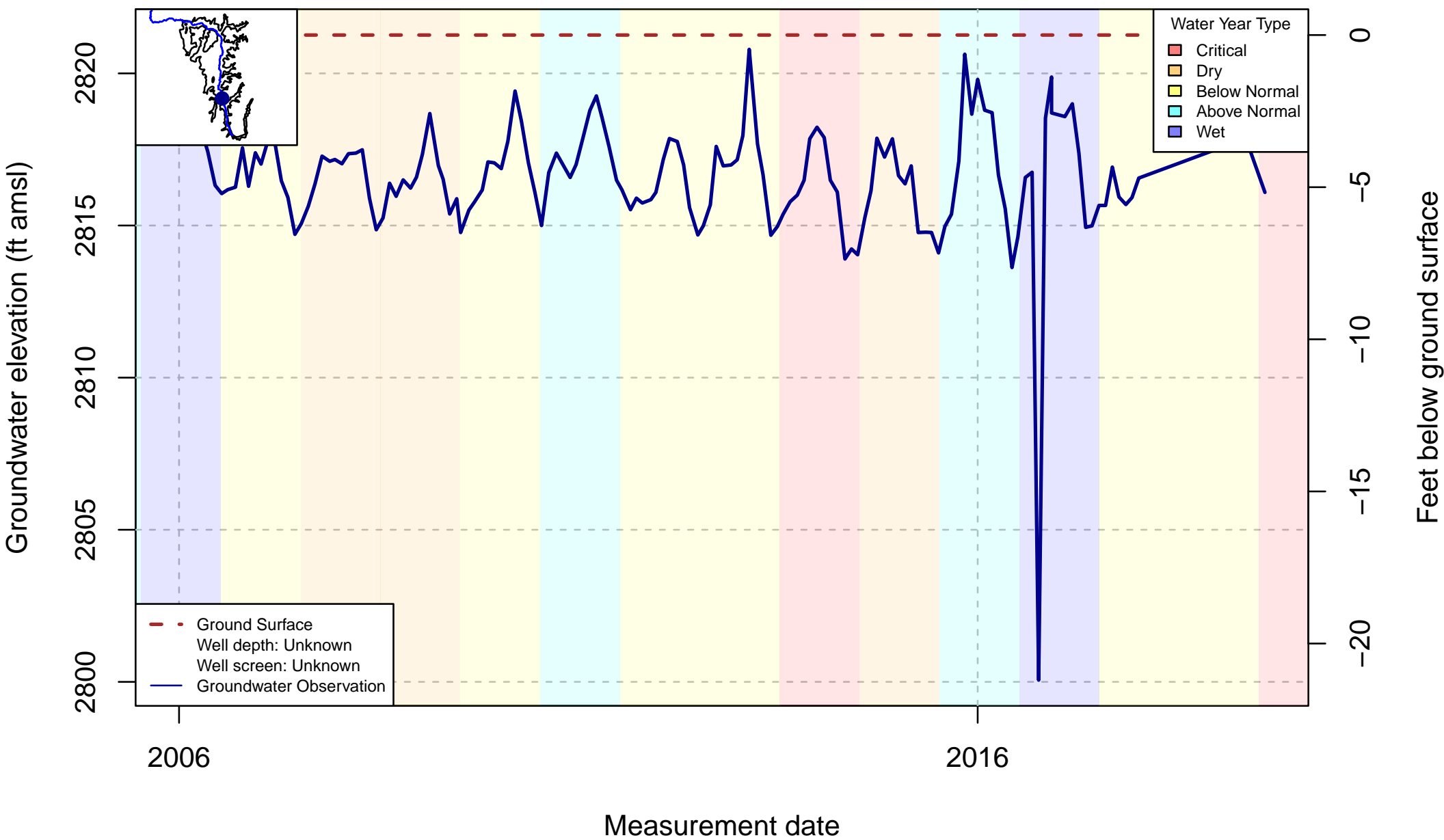
Well Code: 412455N1224899W001; SWN: NA



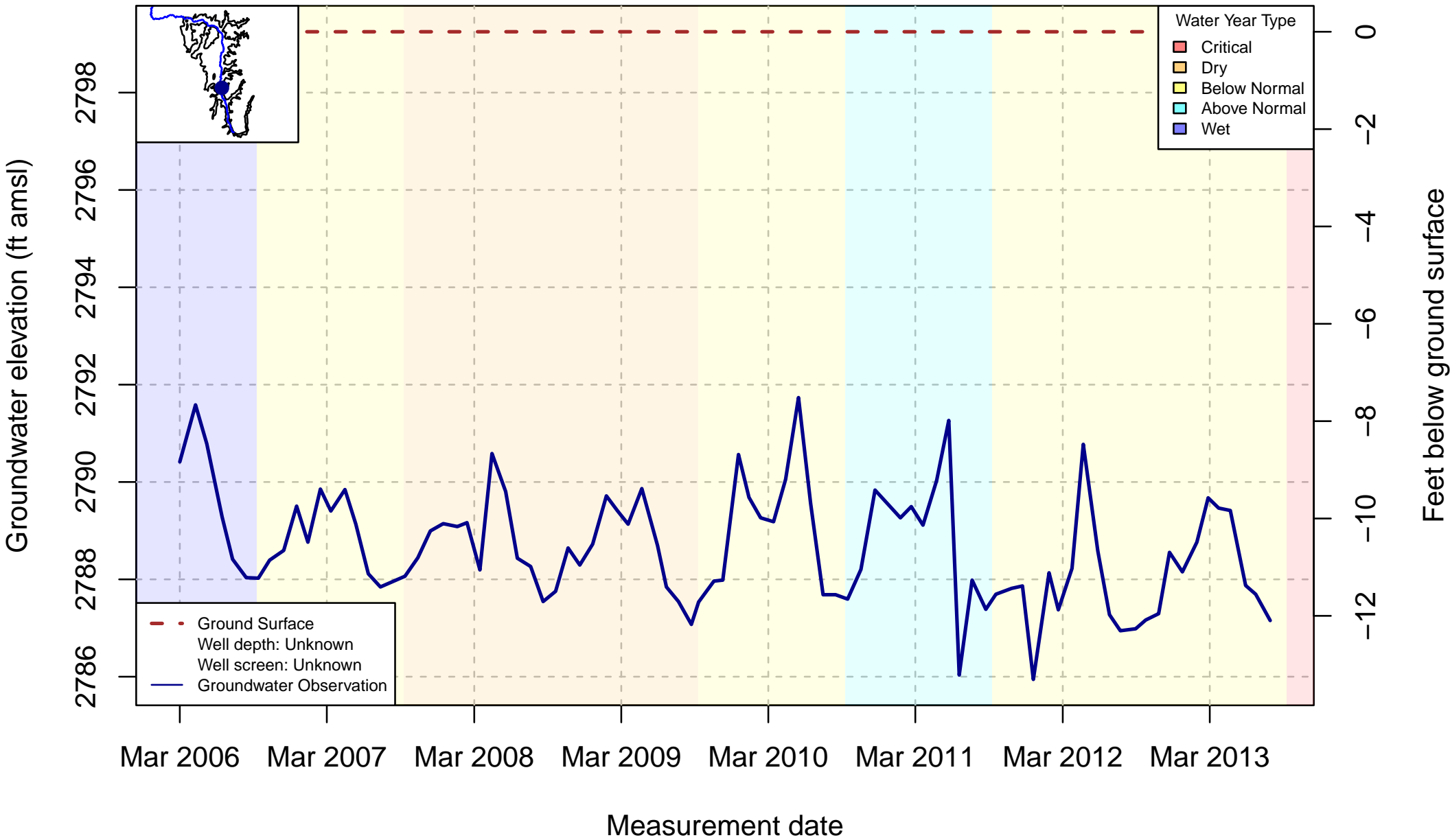
Well Code: D40; SWN: NA



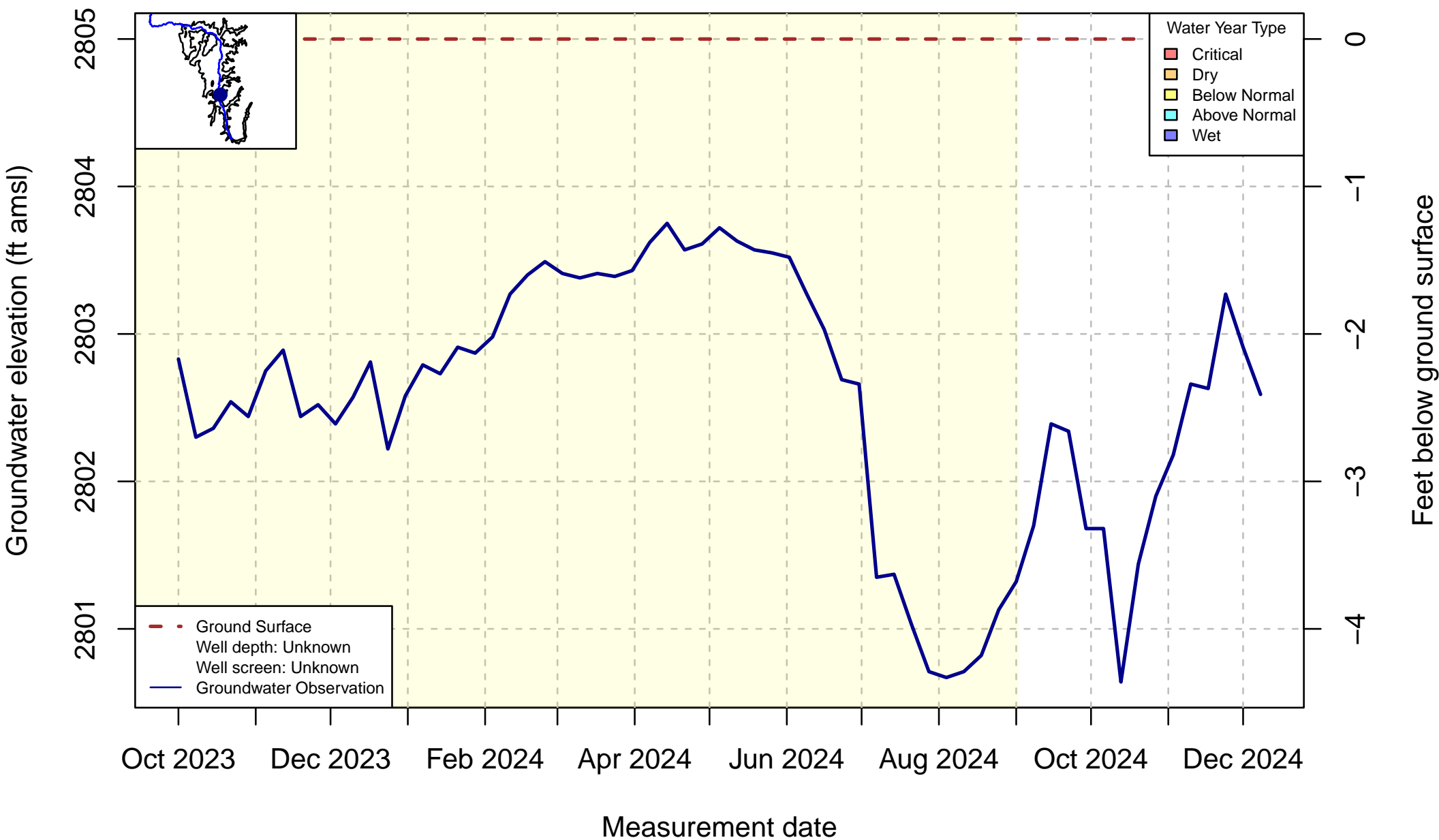
Well Code: M10; SWN: NA



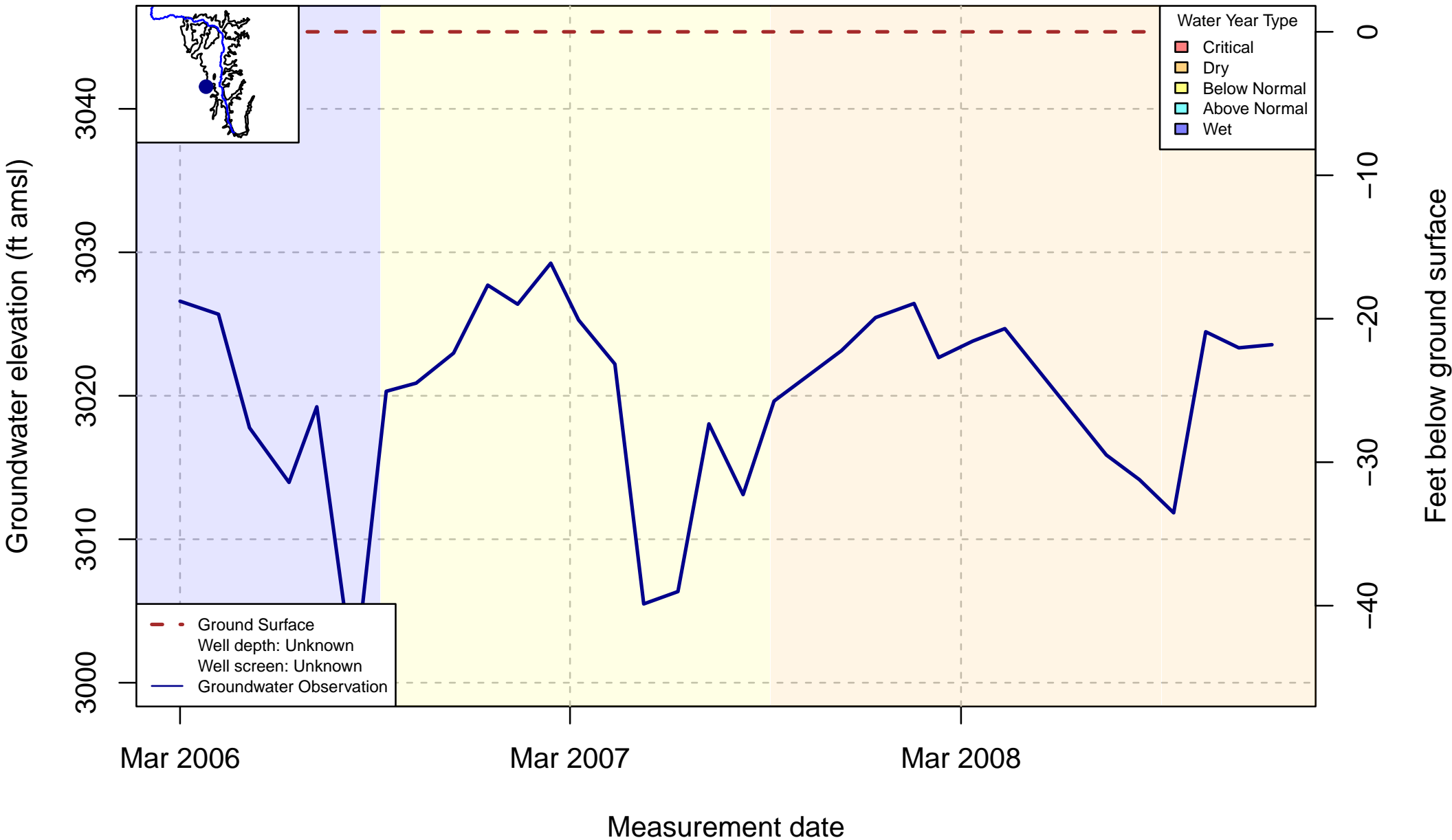
Well Code: K22; SWN: NA



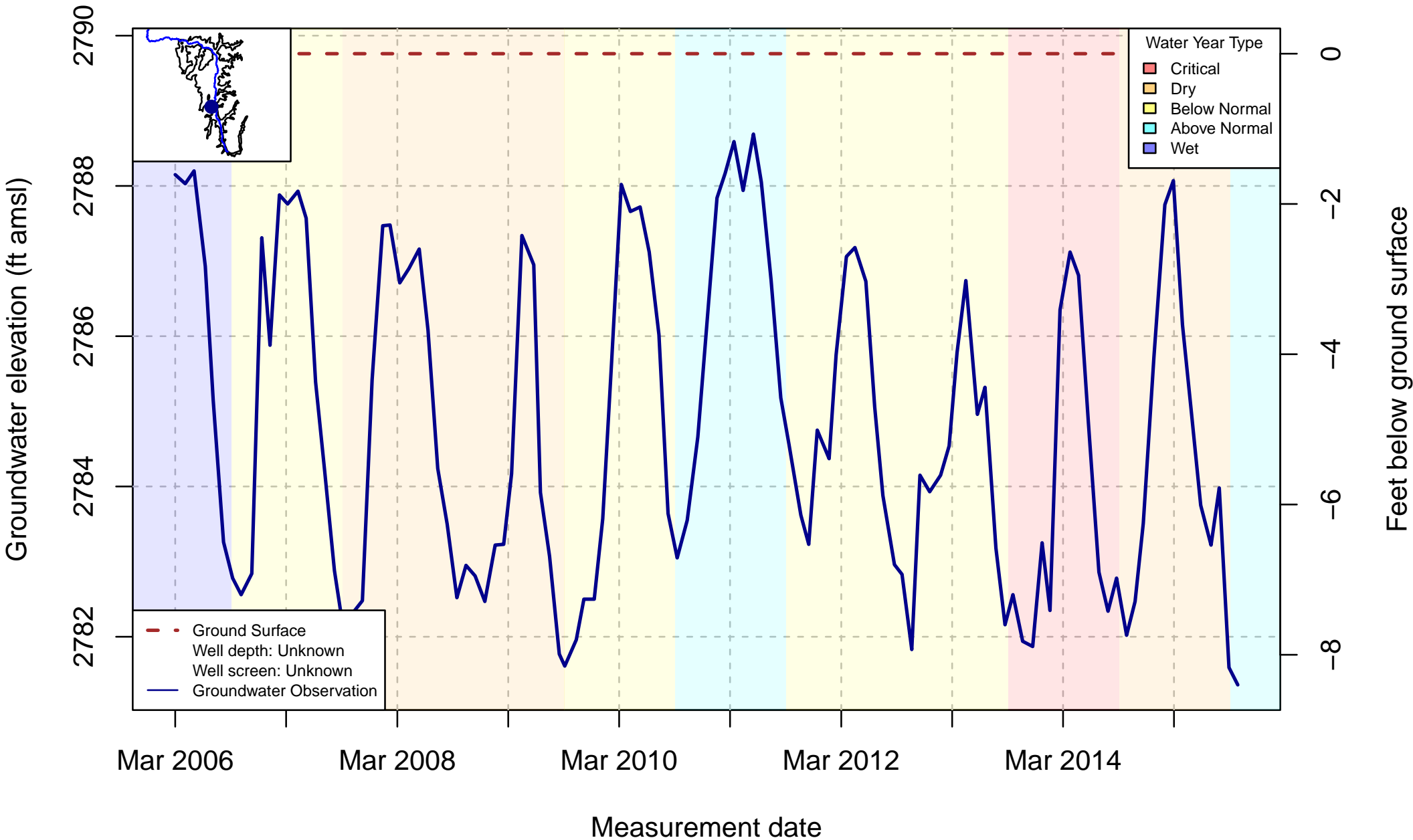
Well Code: SCT_625; SWN: NA



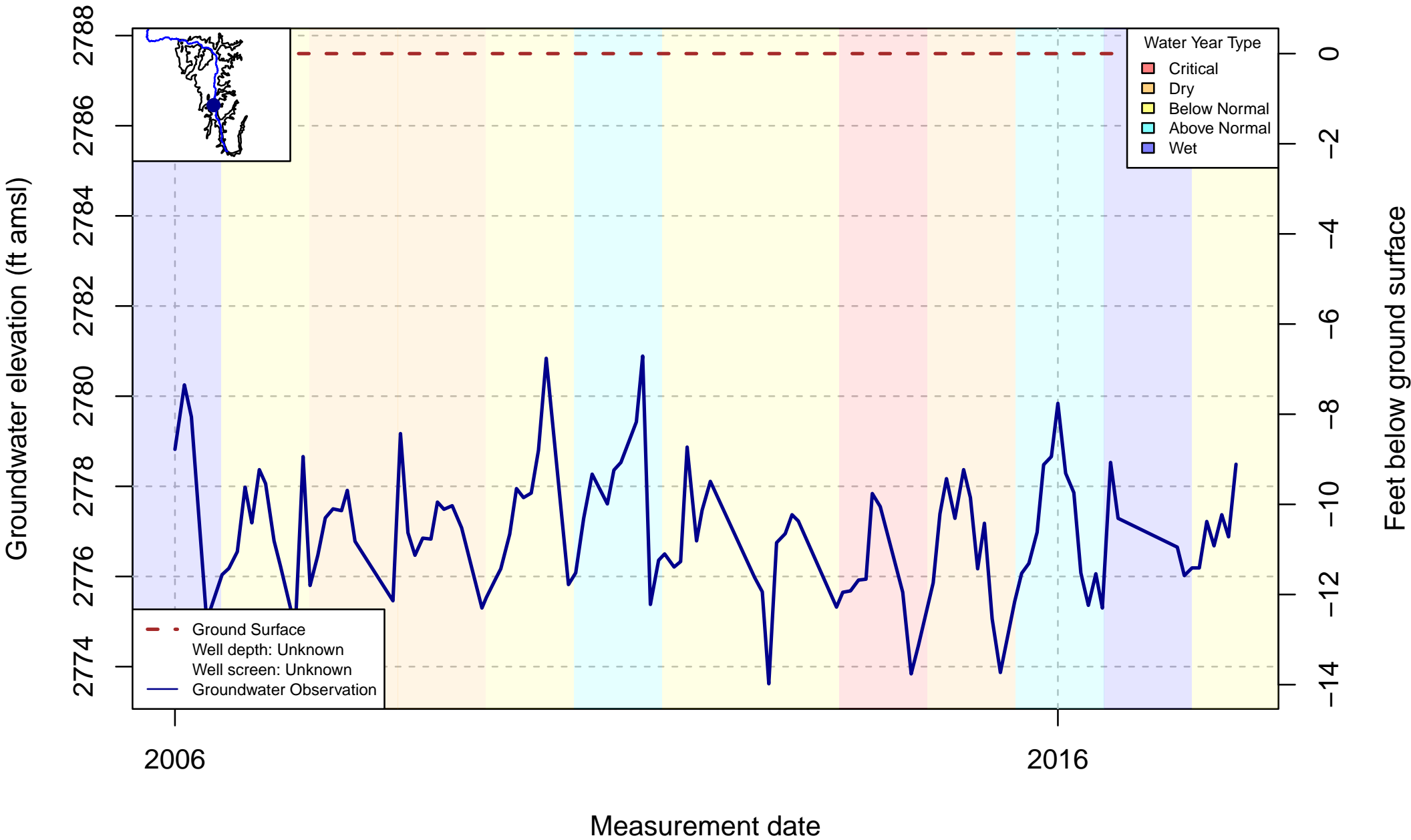
Well Code: Z36; SWN: NA



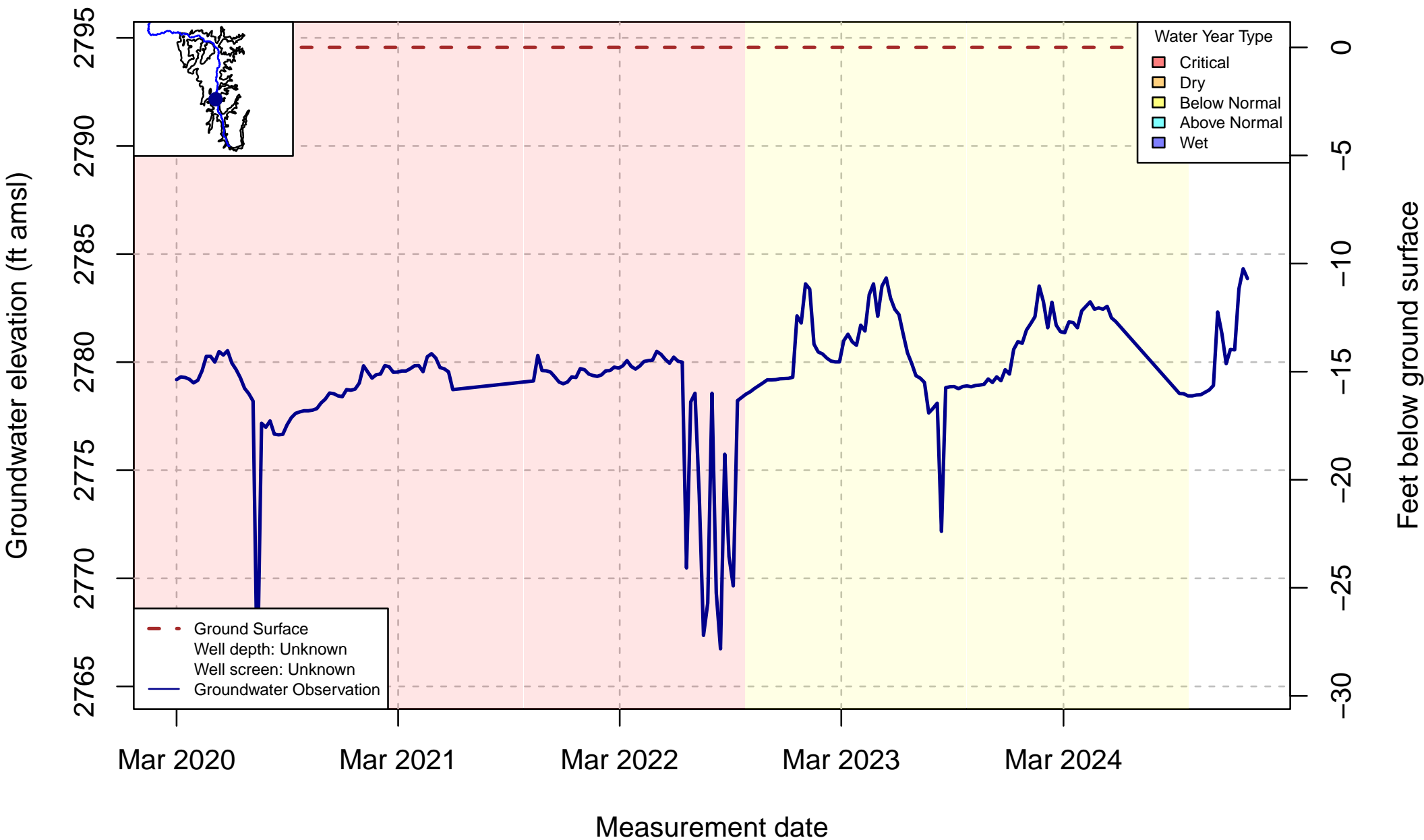
Well Code: S21; SWN: NA



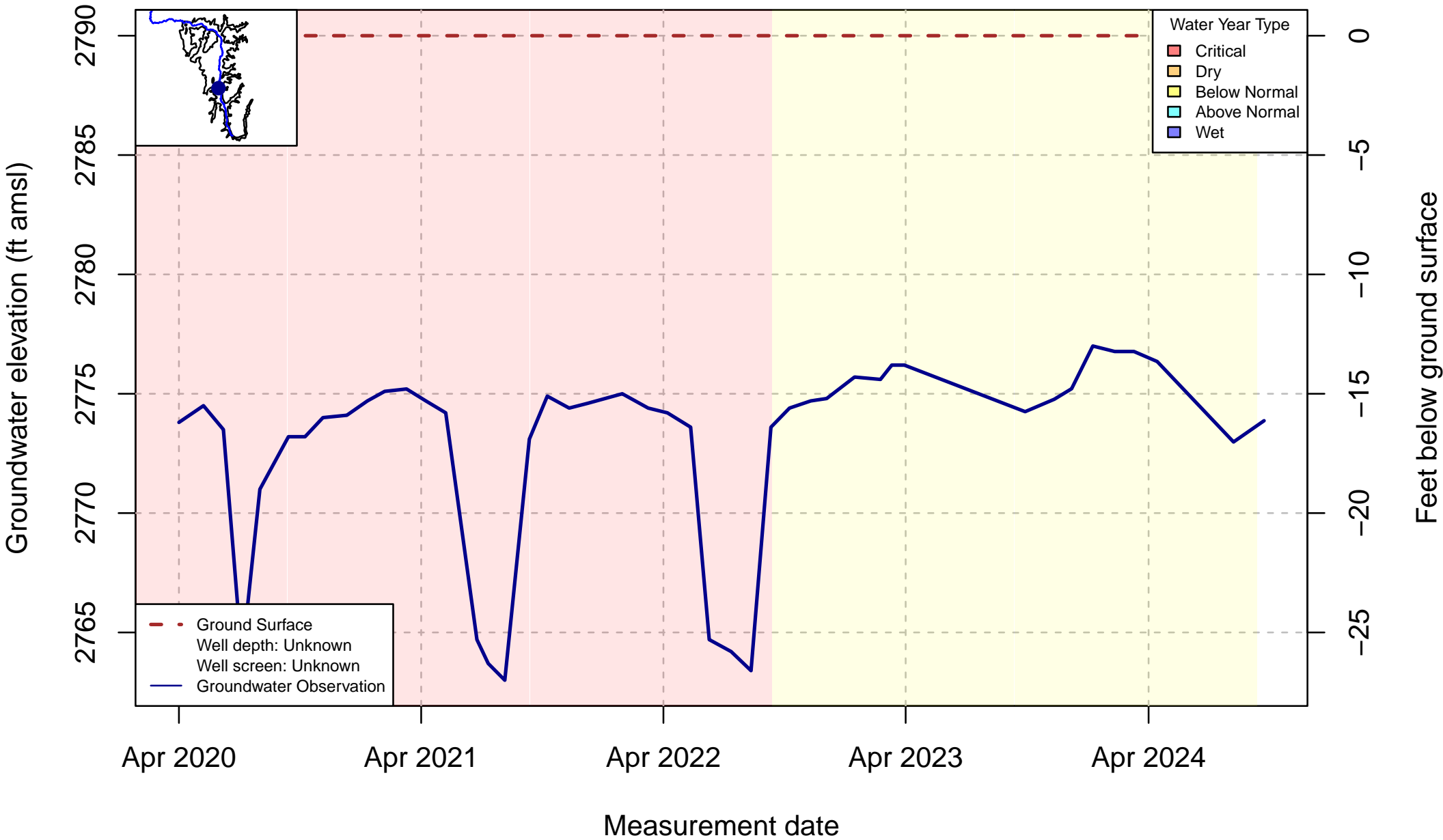
Well Code: M12; SWN: NA



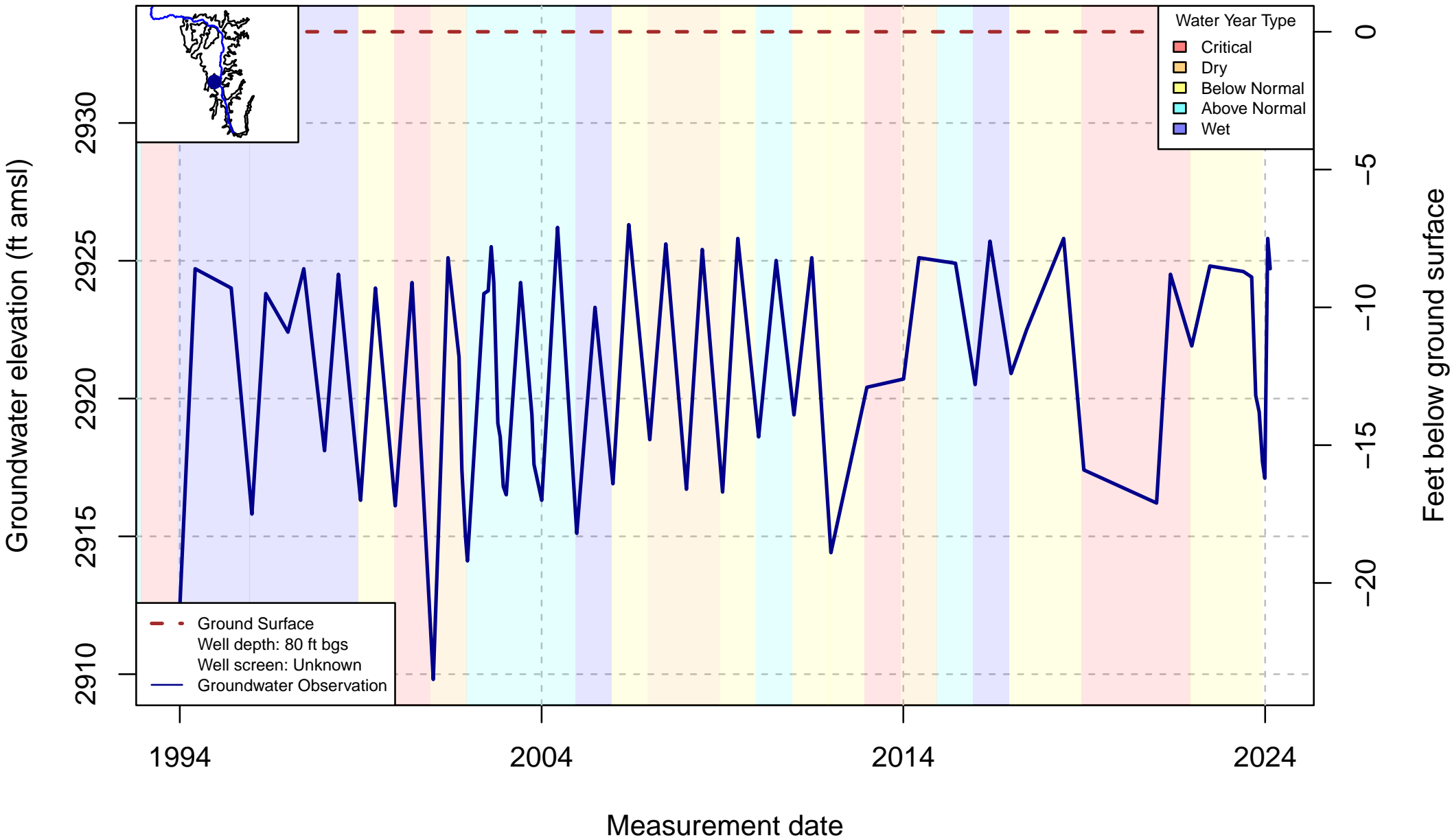
Well Code: SCT_192; SWN: NA



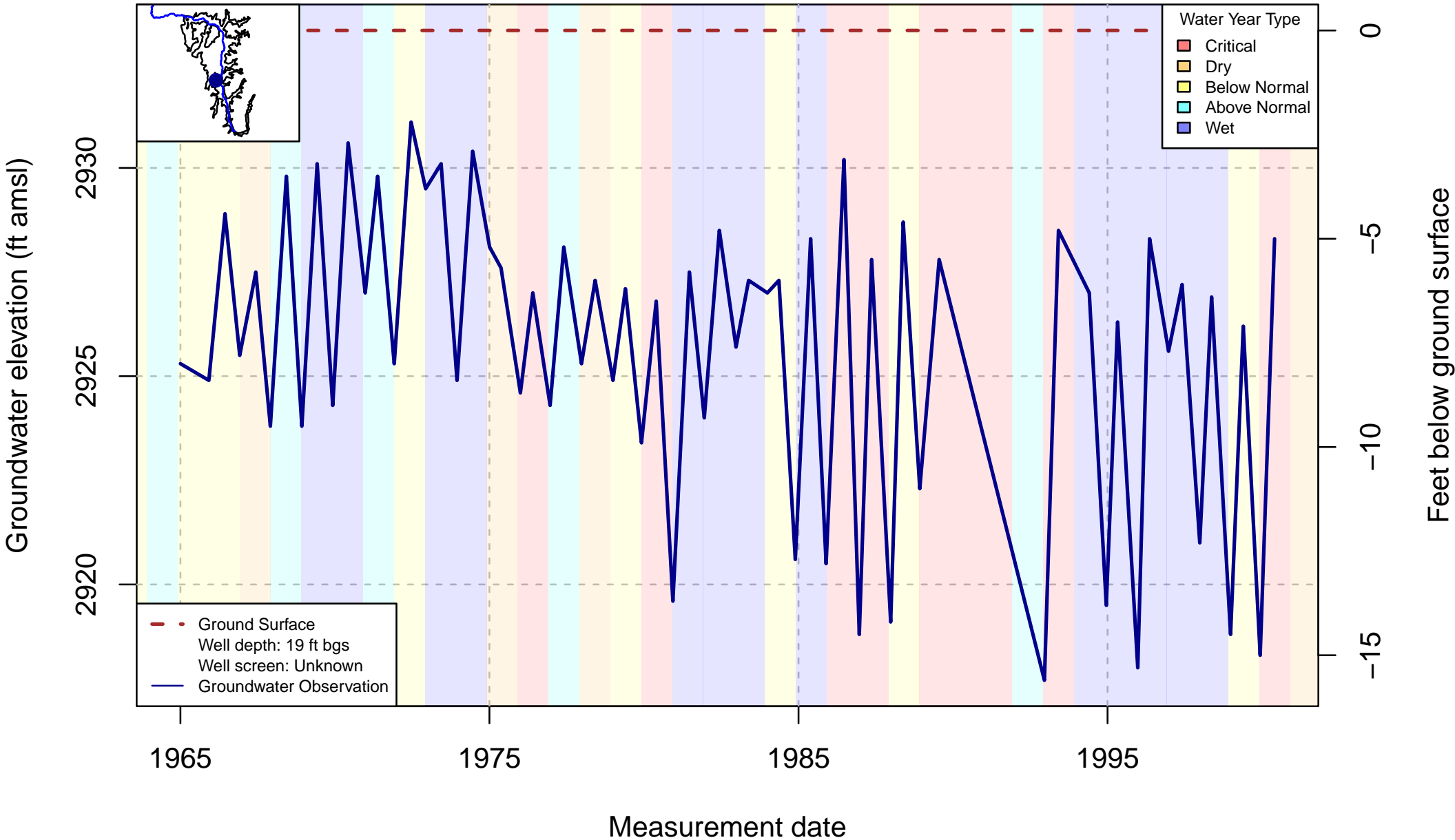
Well Code: W31; SWN: NA



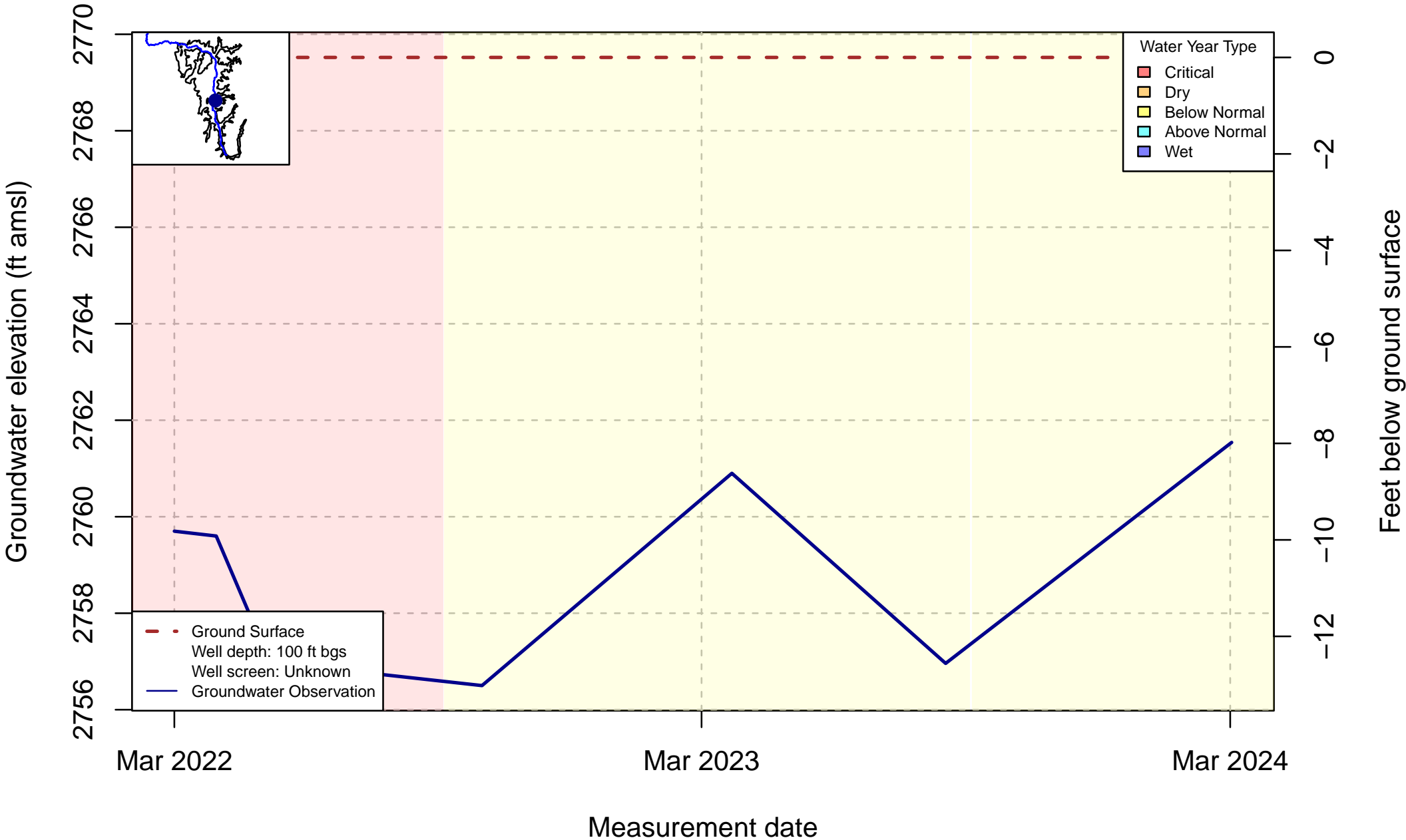
Well Code: 414555N1228745W001; SWN: 42N09W27N002M



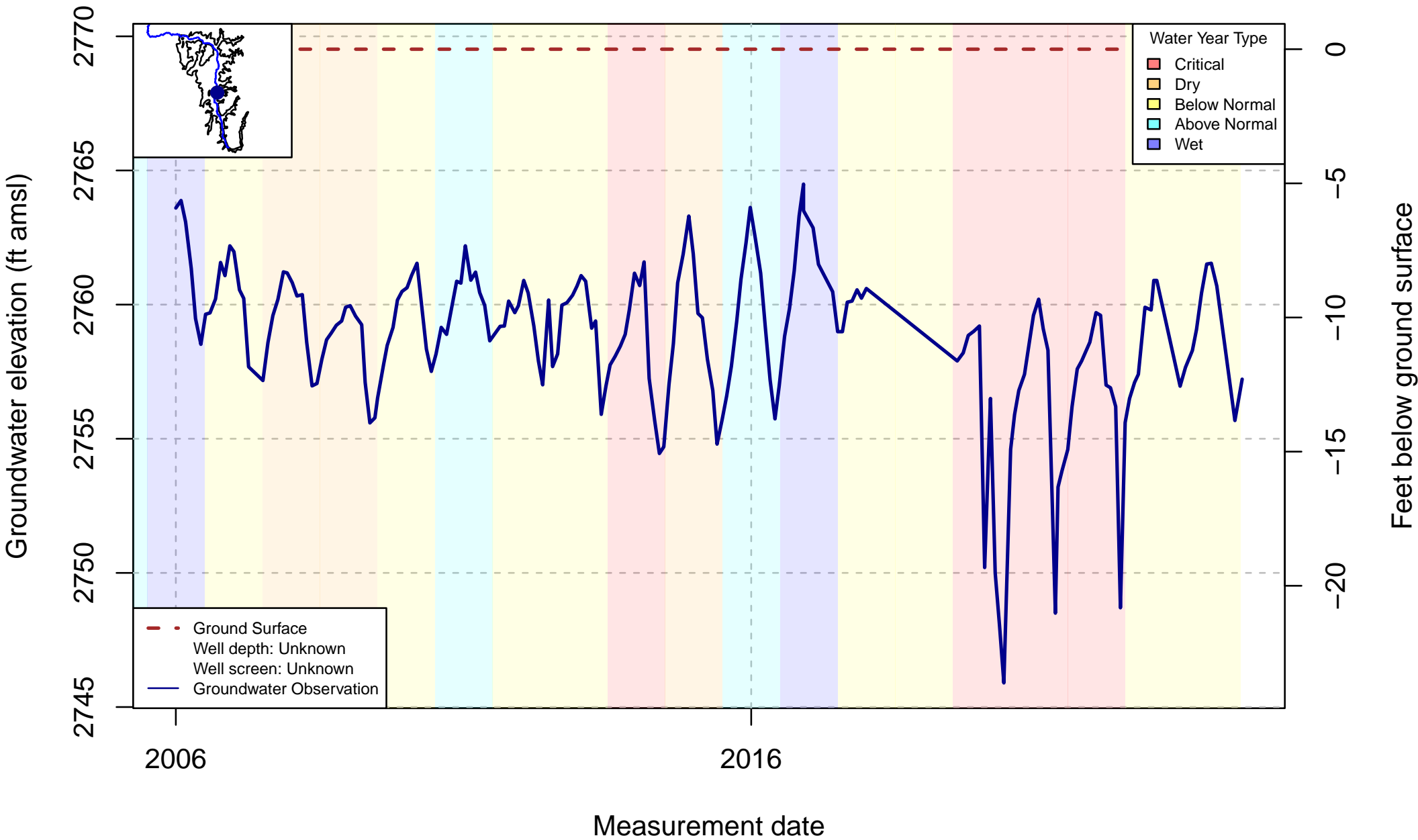
Well Code: 414569N1228715W001; SWN: 42N09W27N001M



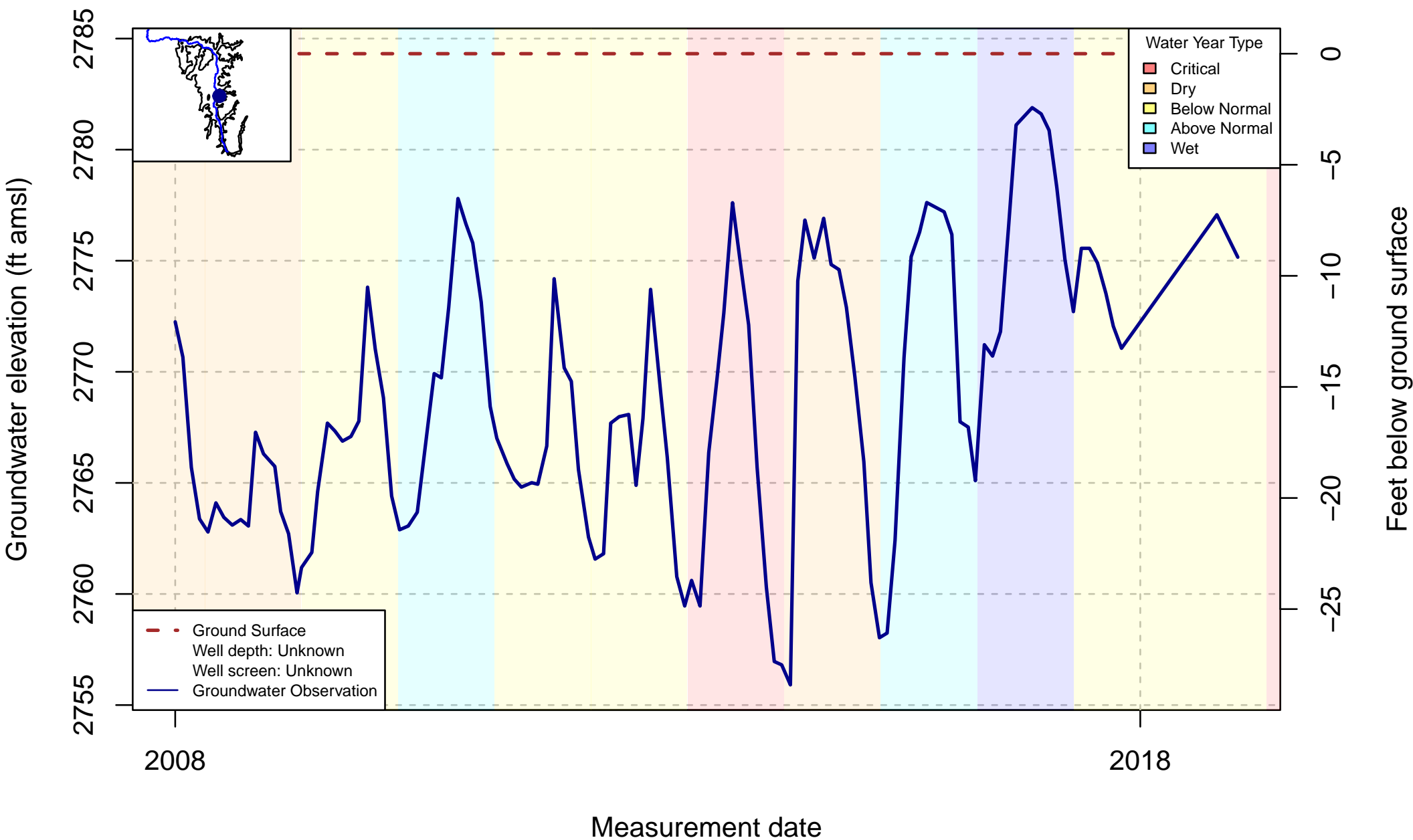
Well Code: 414718N1228450W004; SWN: NA



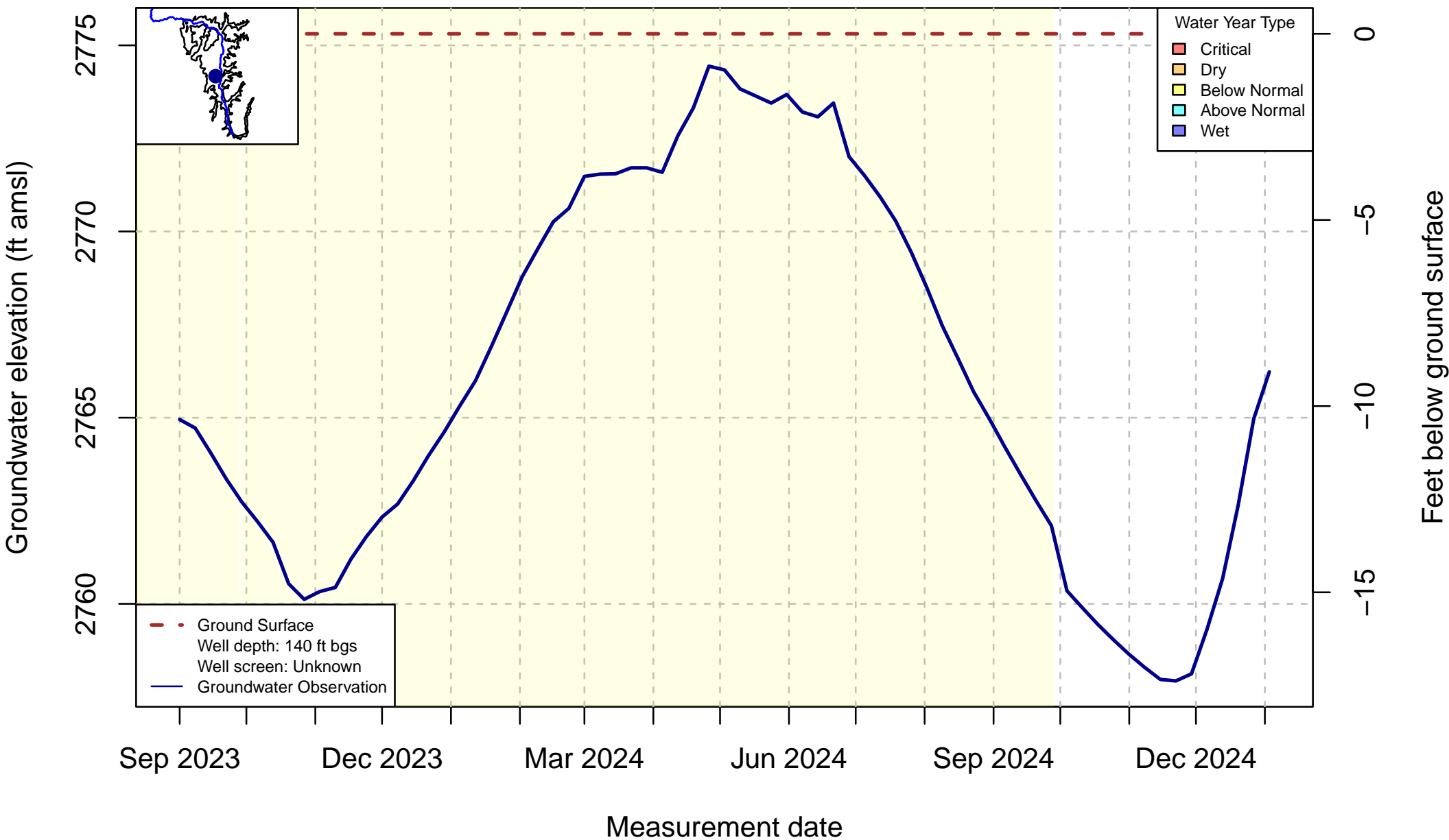
Well Code: R24; SWN: NA



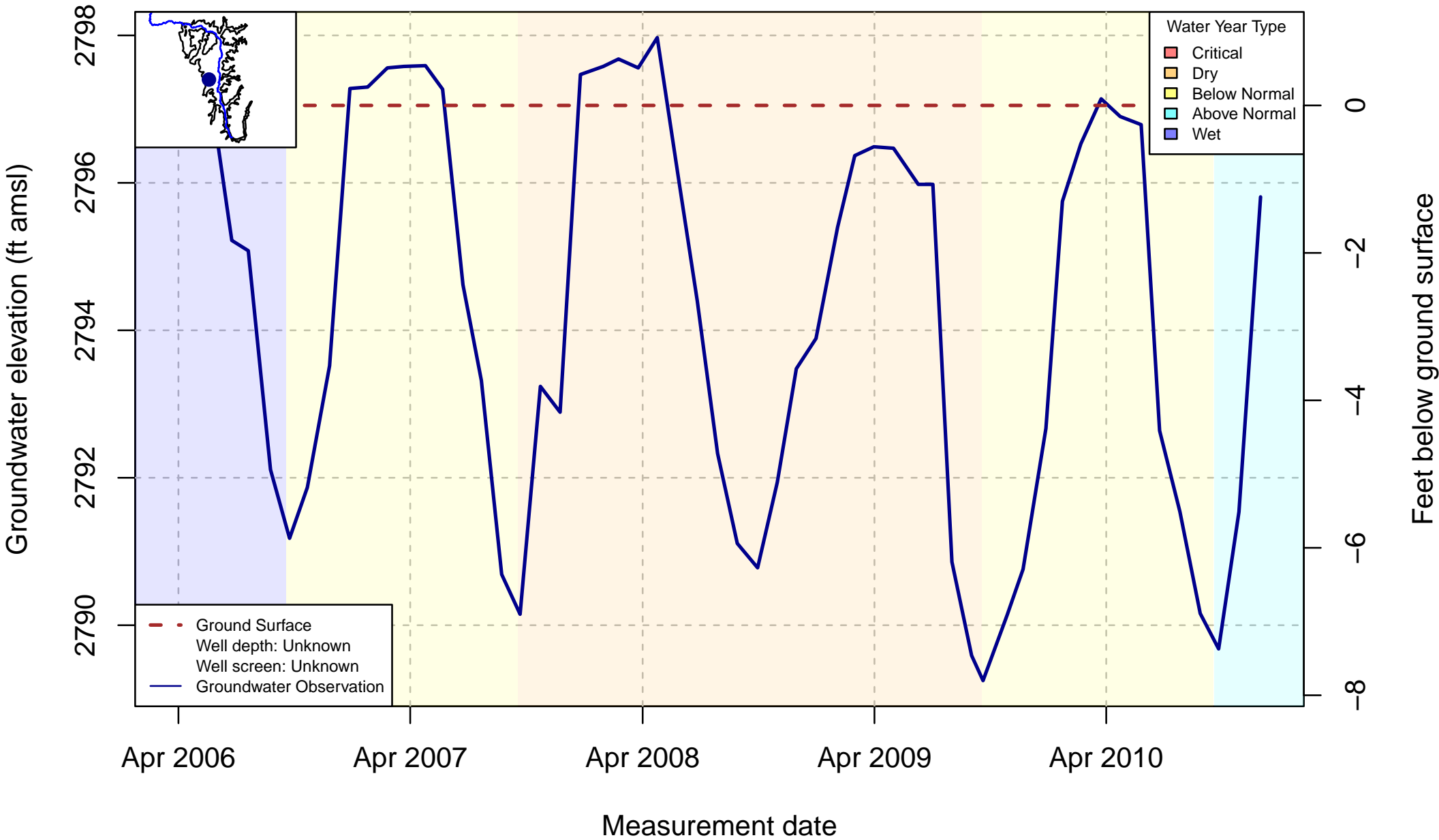
Well Code: A2; SWN: NA



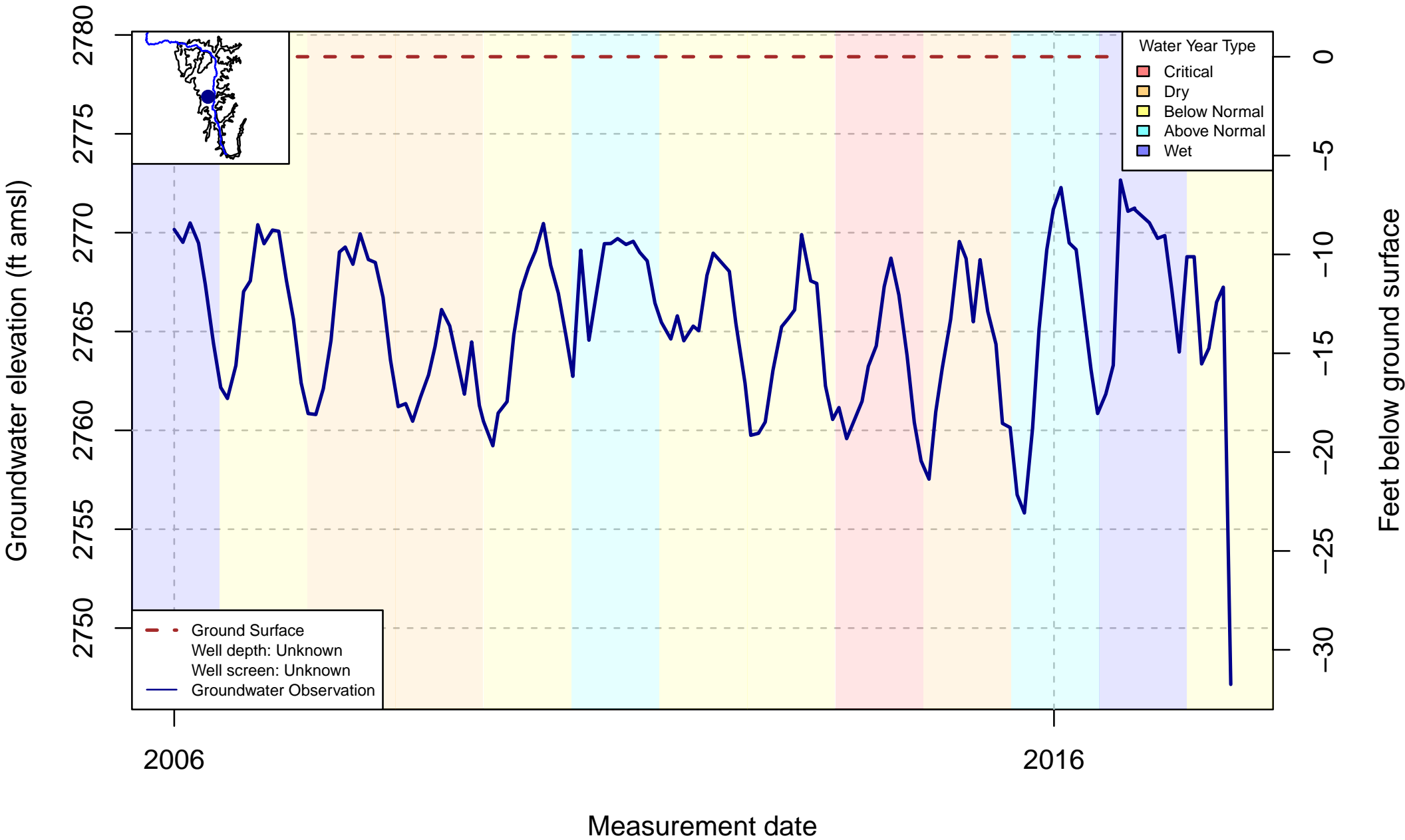
Well Code: SCT_687; SWN: NA



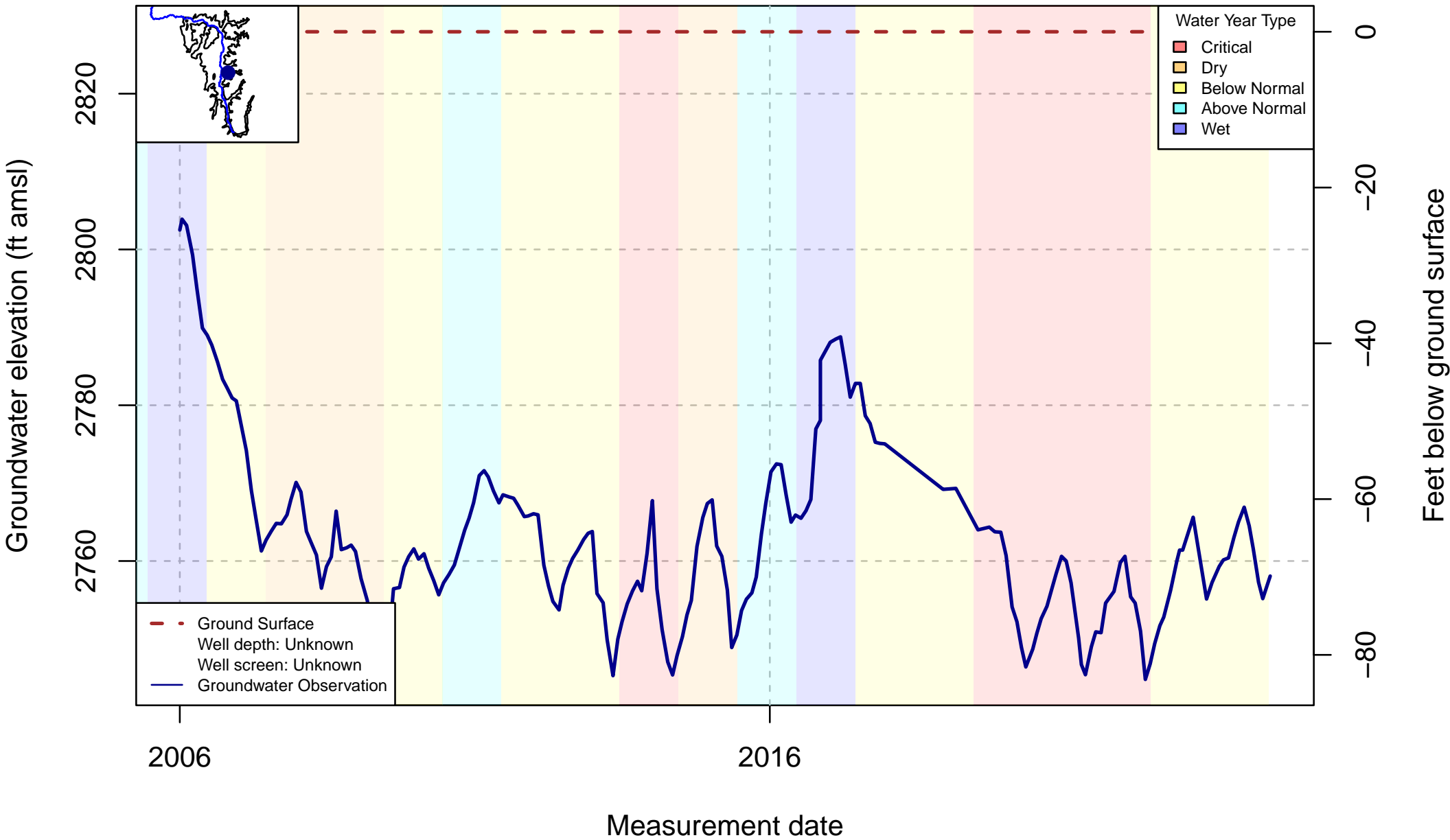
Well Code: R18; SWN: NA



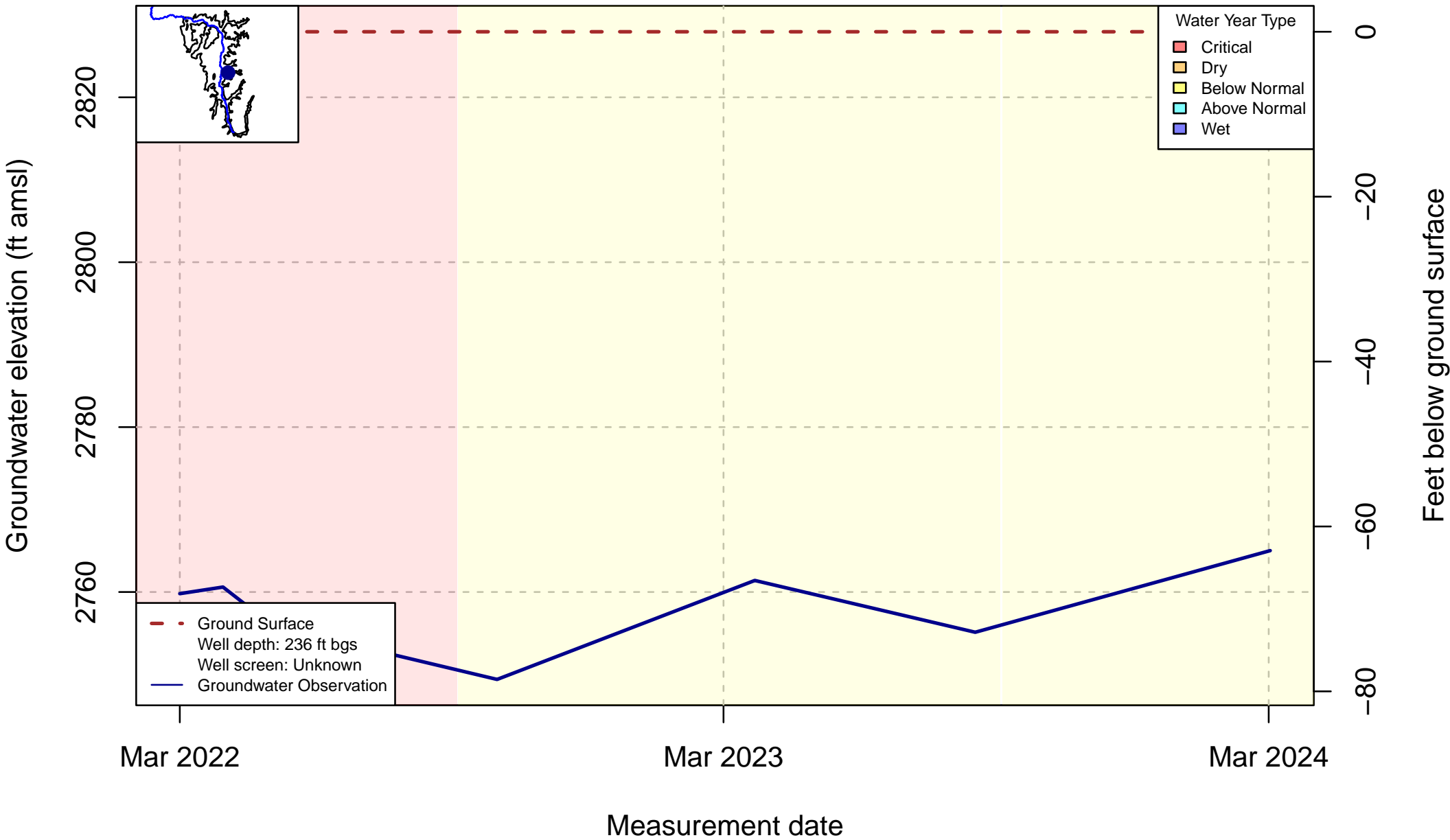
Well Code: L31; SWN: NA



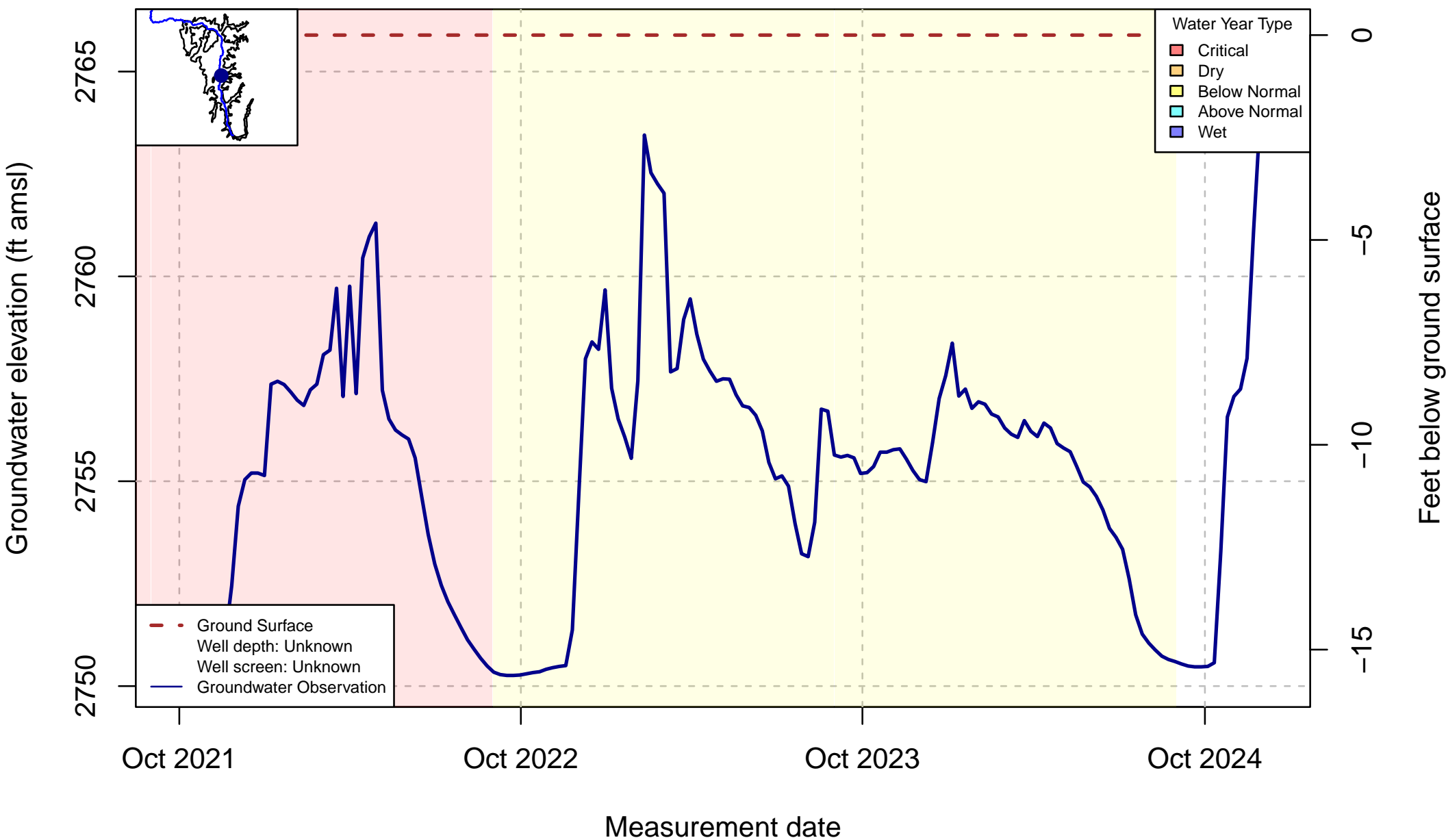
Well Code: G31; SWN: NA



Well Code: 414816N1228226W001; SWN: NA



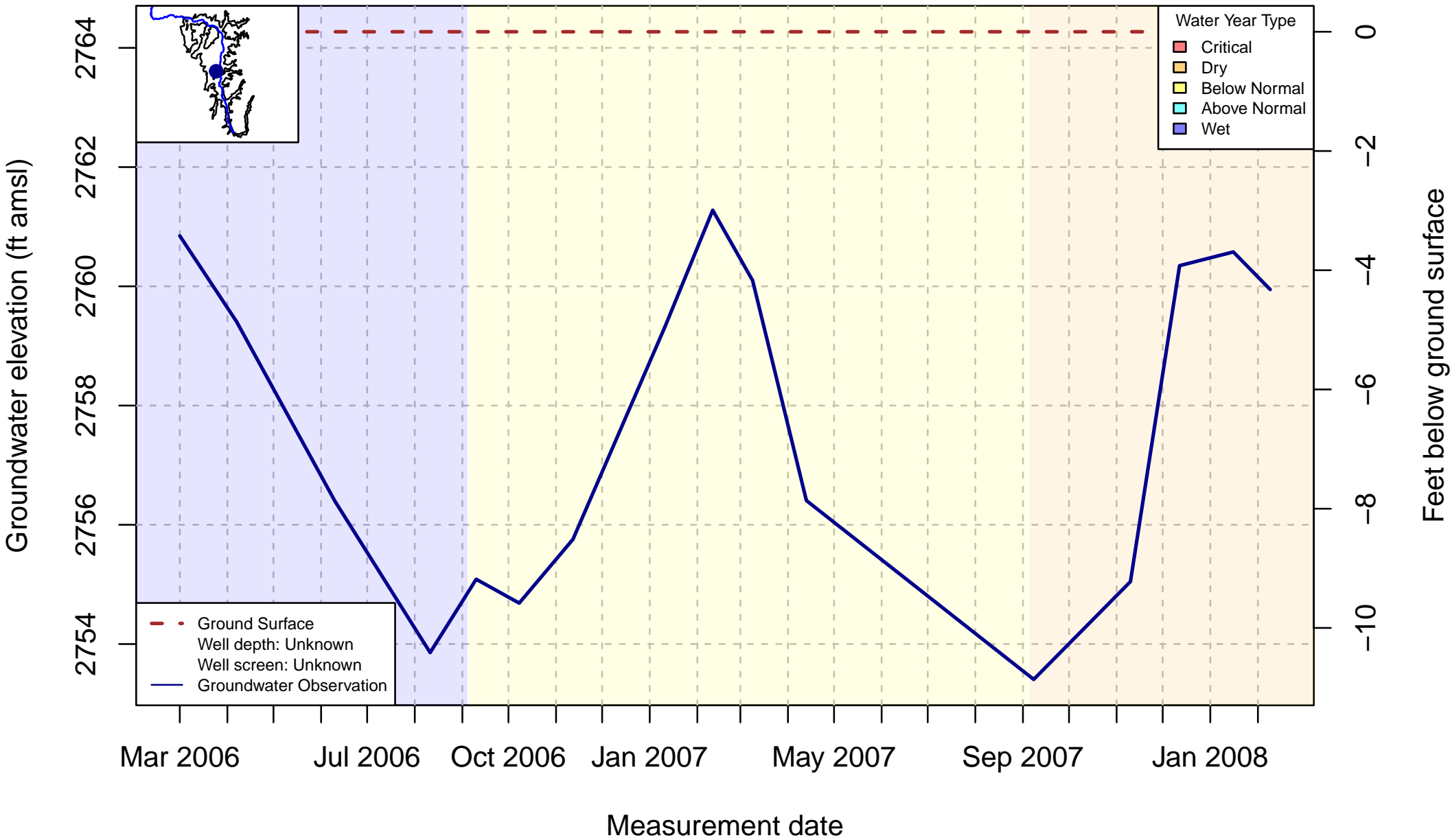
Well Code: SCT_790; SWN: NA



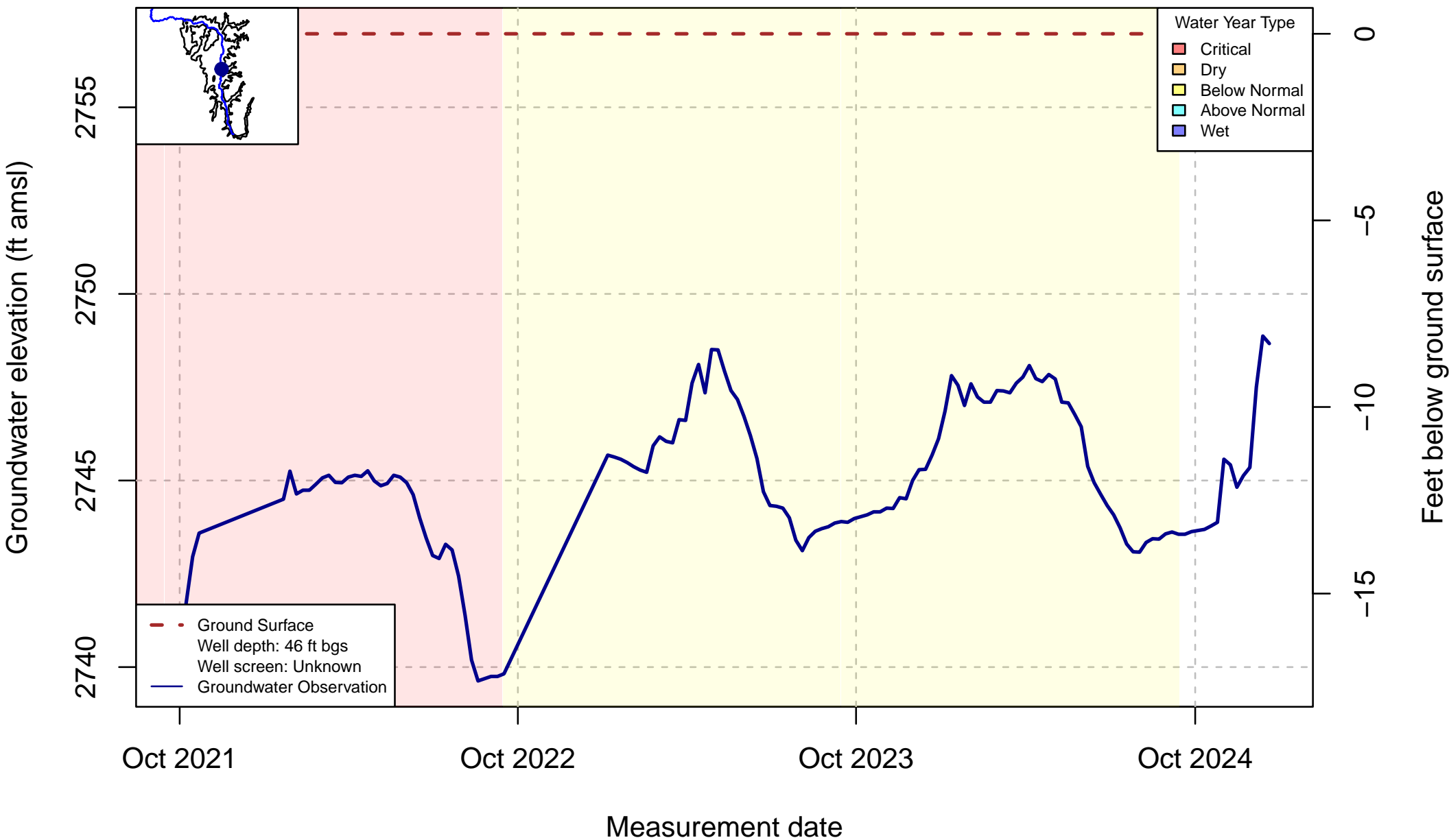
Well Code: D16; SWN: NA



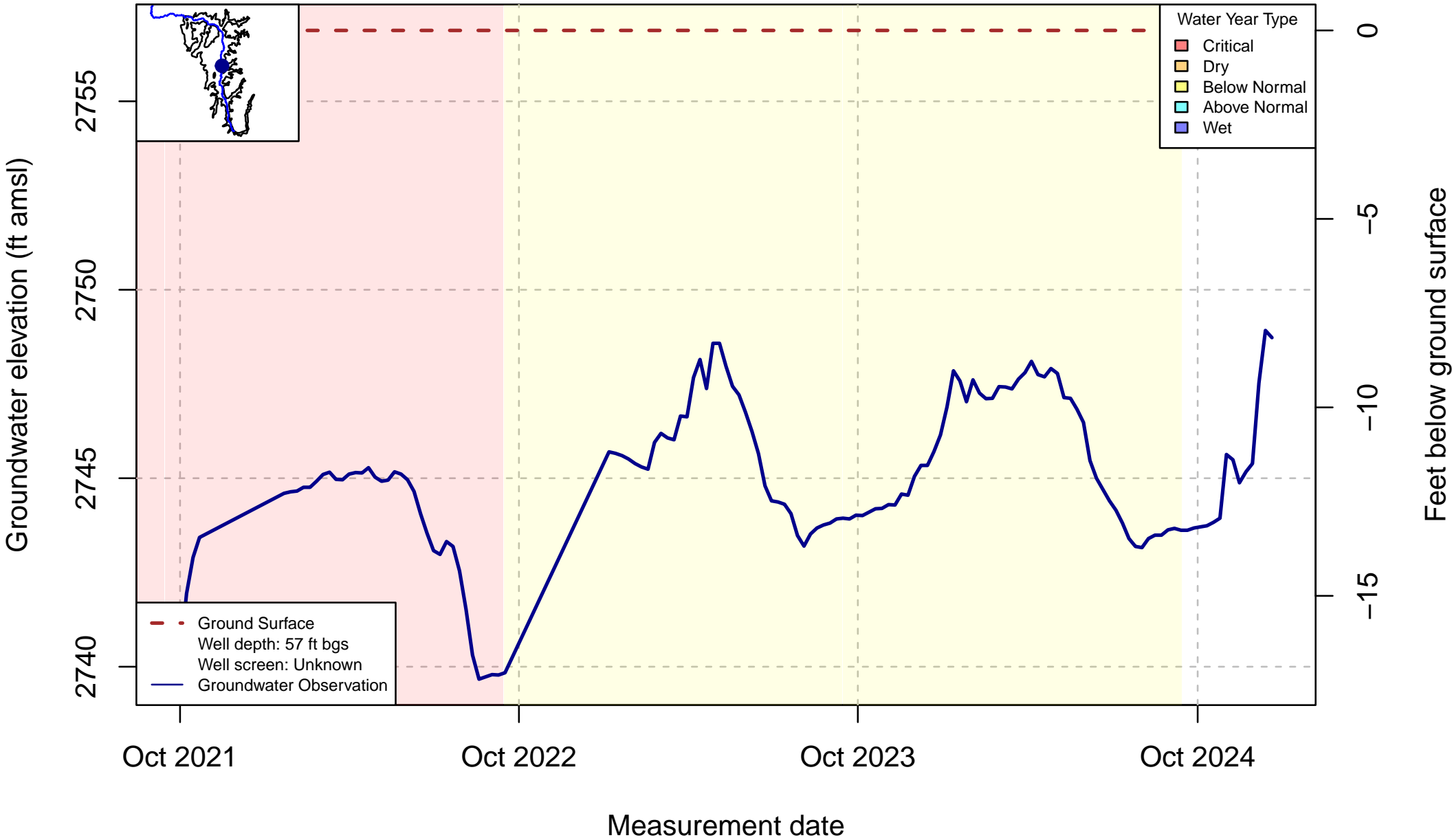
Well Code: K11; SWN: NA



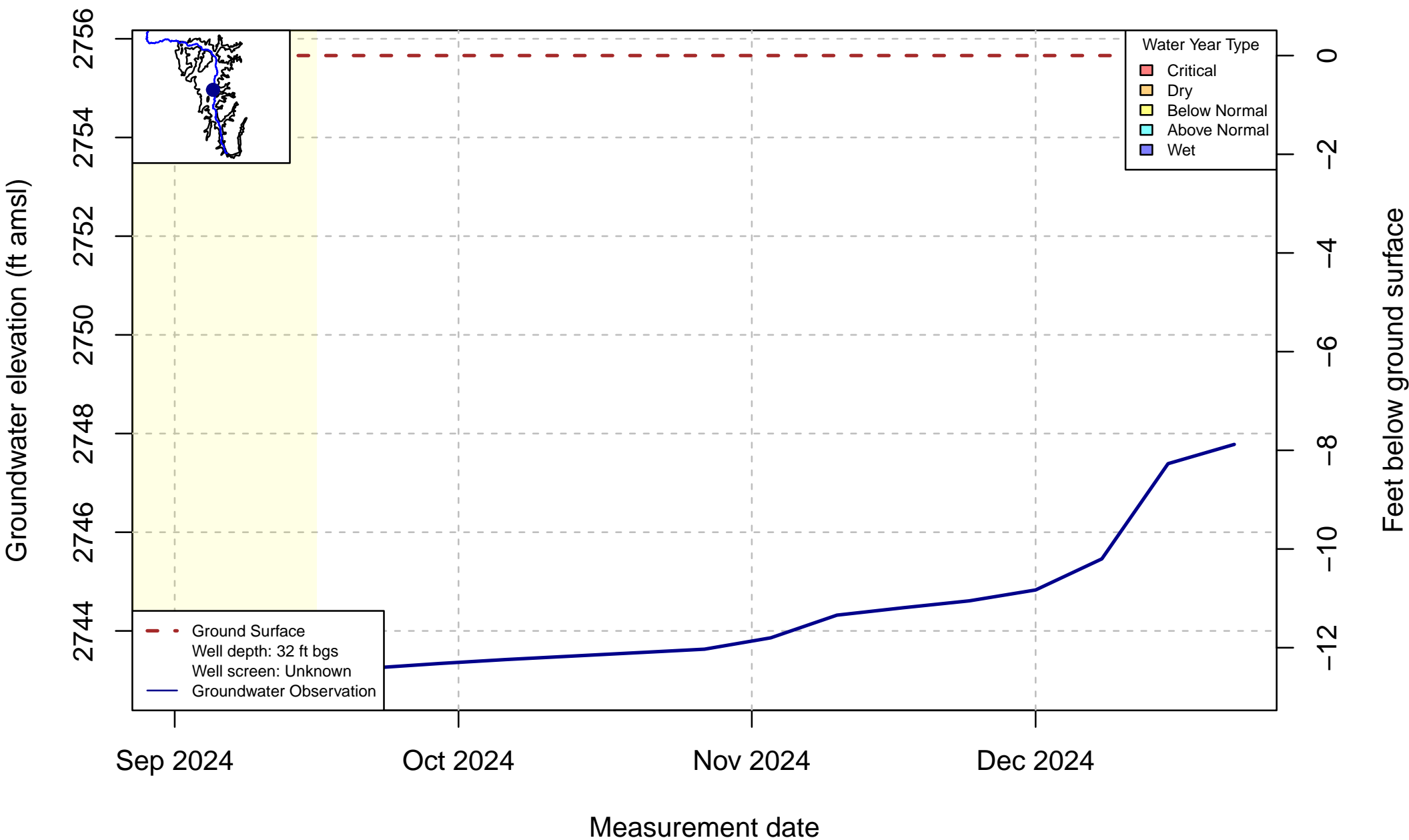
Well Code: SCT_201; SWN: NA



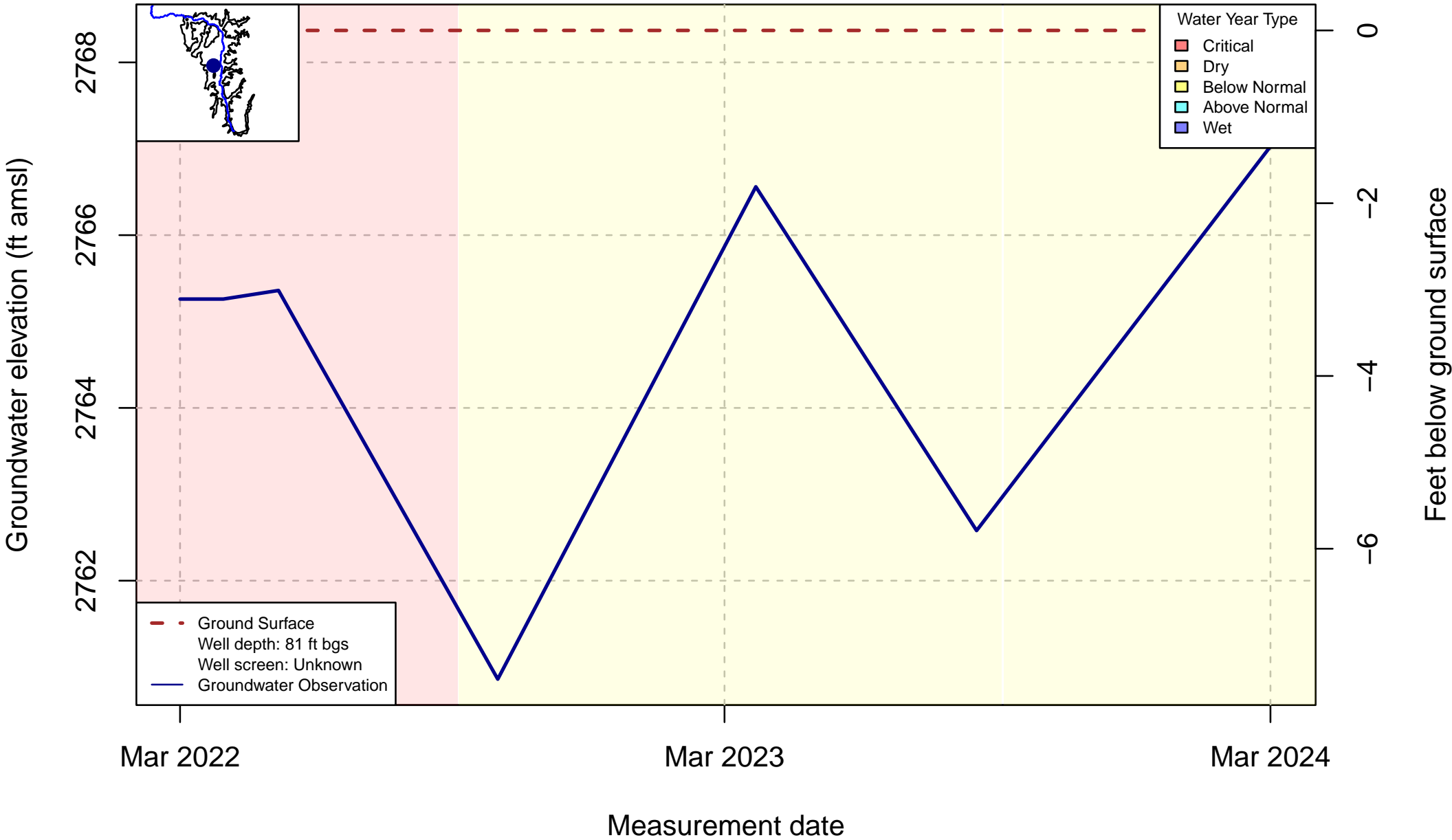
Well Code: SCT_201_2; SWN: NA



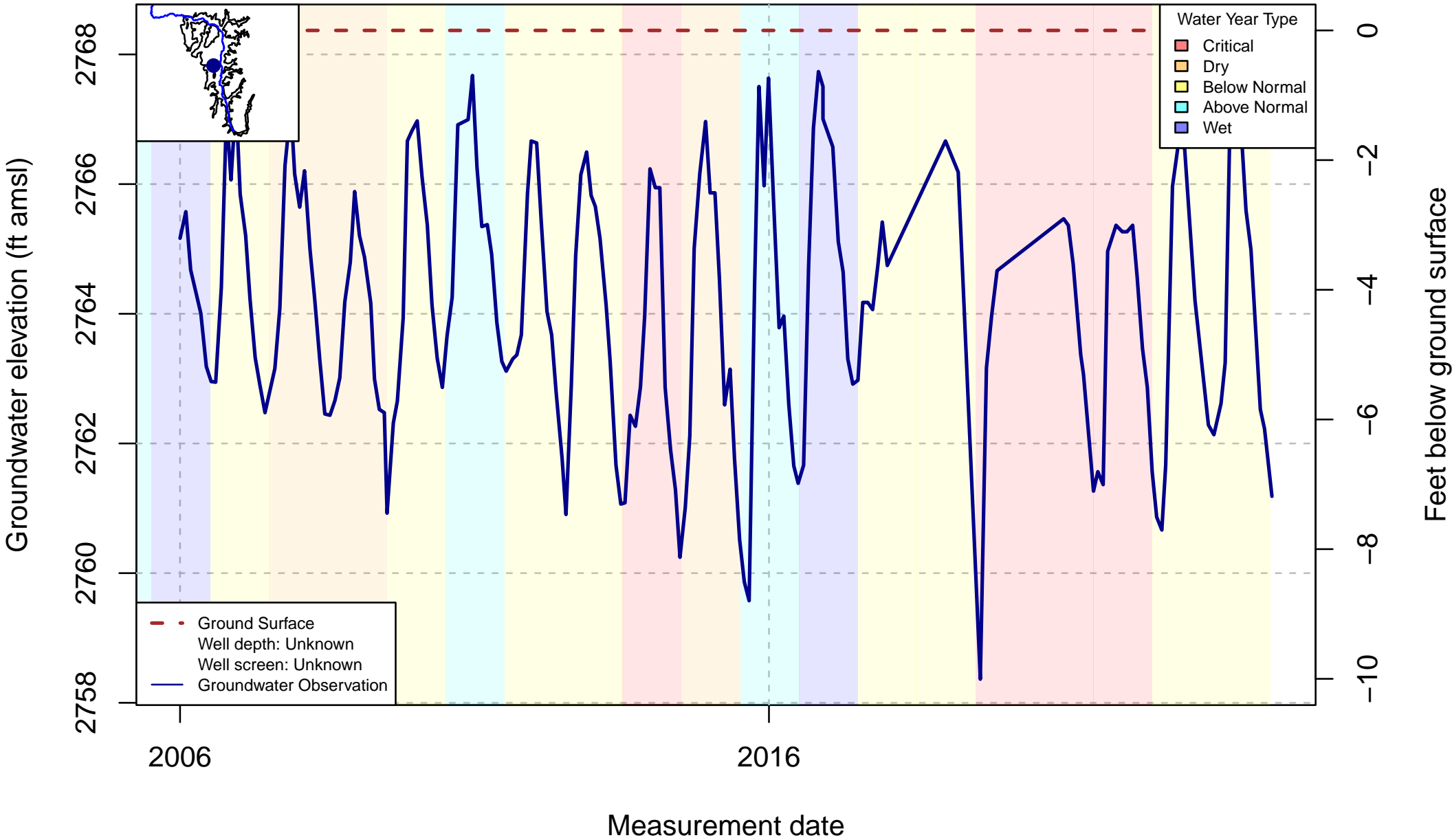
Well Code: SCT_070; SWN: NA



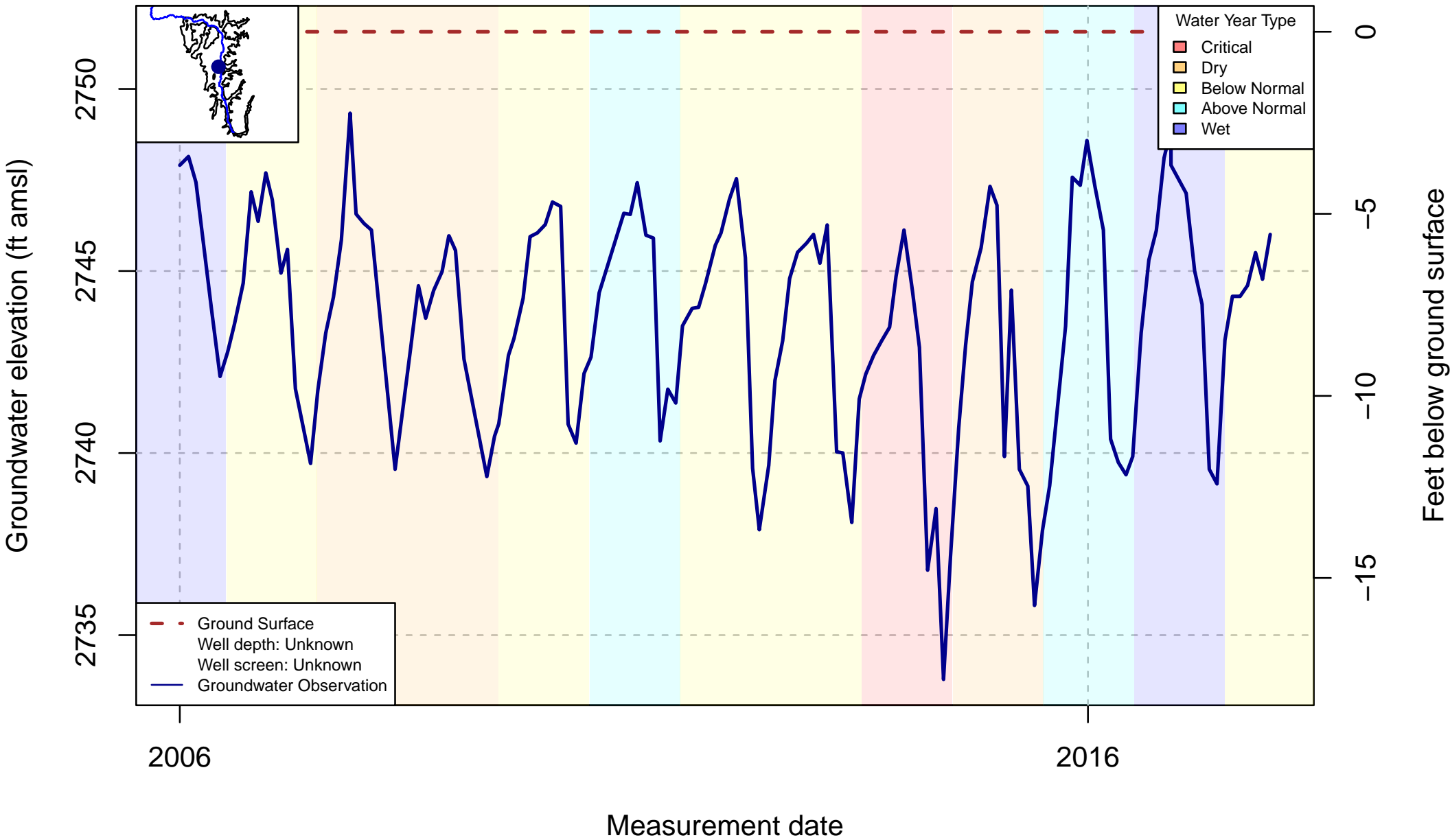
Well Code: 414980N1228791W001; SWN: NA



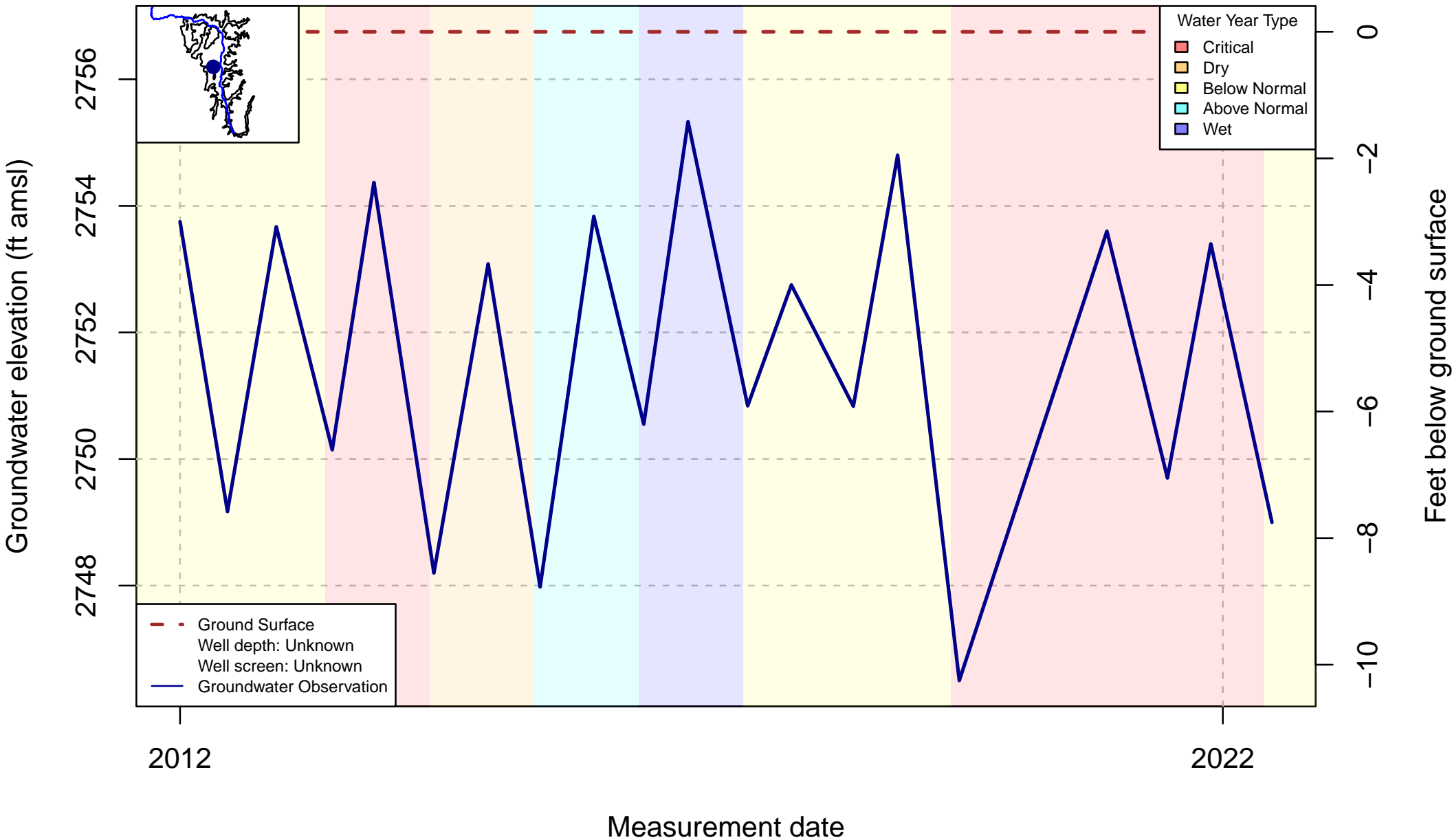
Well Code: D31; SWN: NA



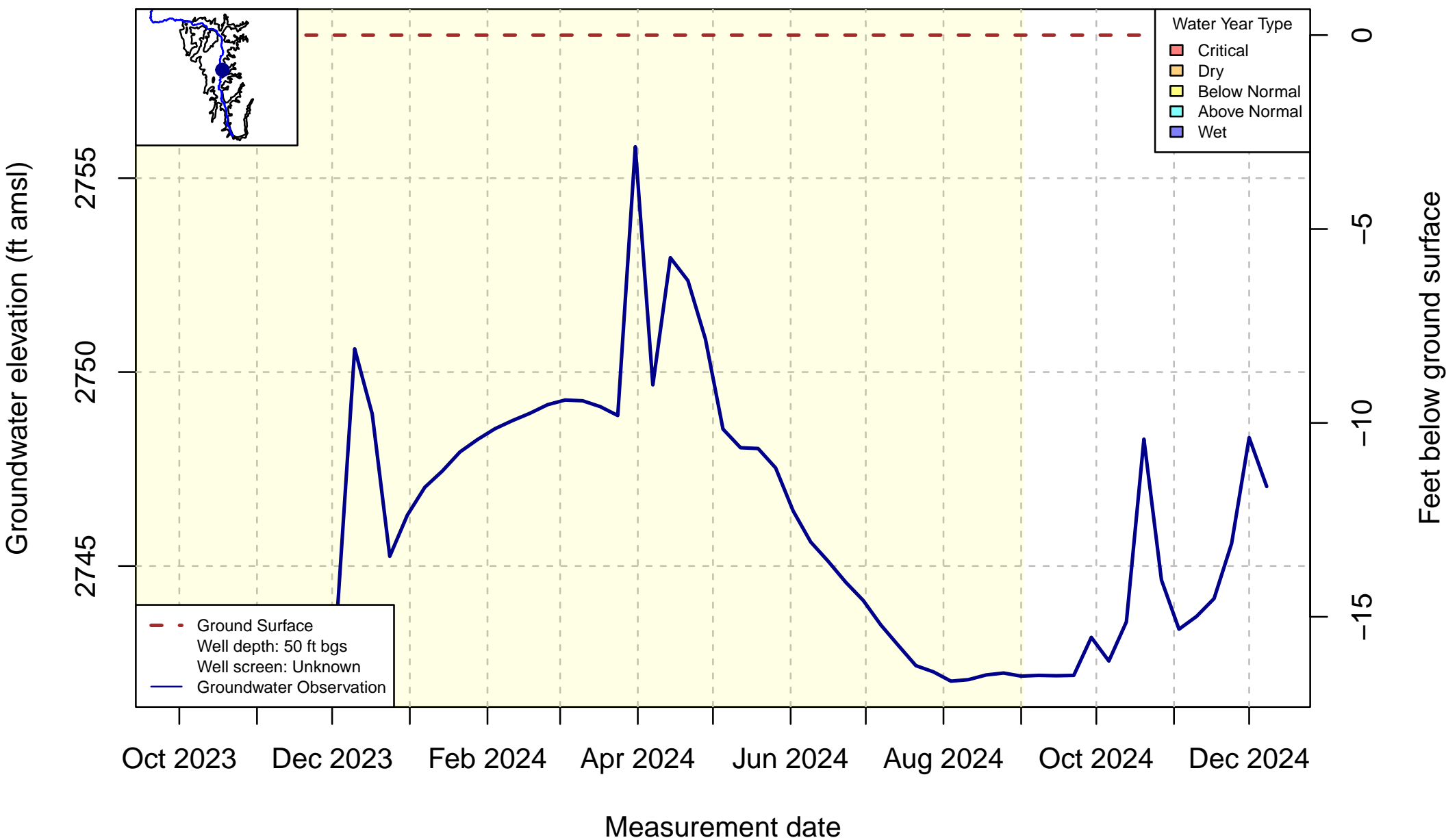
Well Code: N2; SWN: NA



Well Code: 412990N1225279W001; SWN: NA



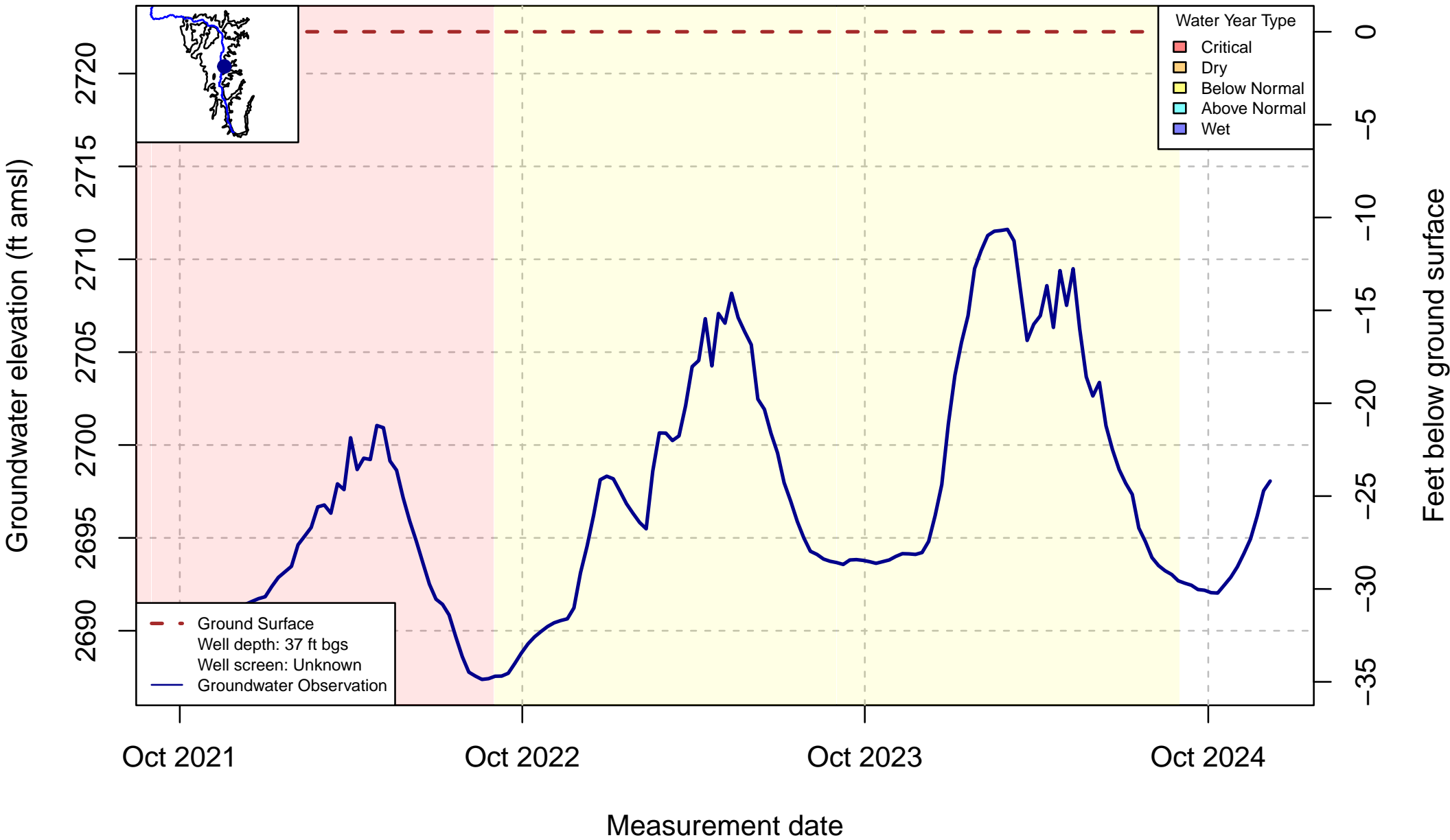
Well Code: SCT_667; SWN: NA



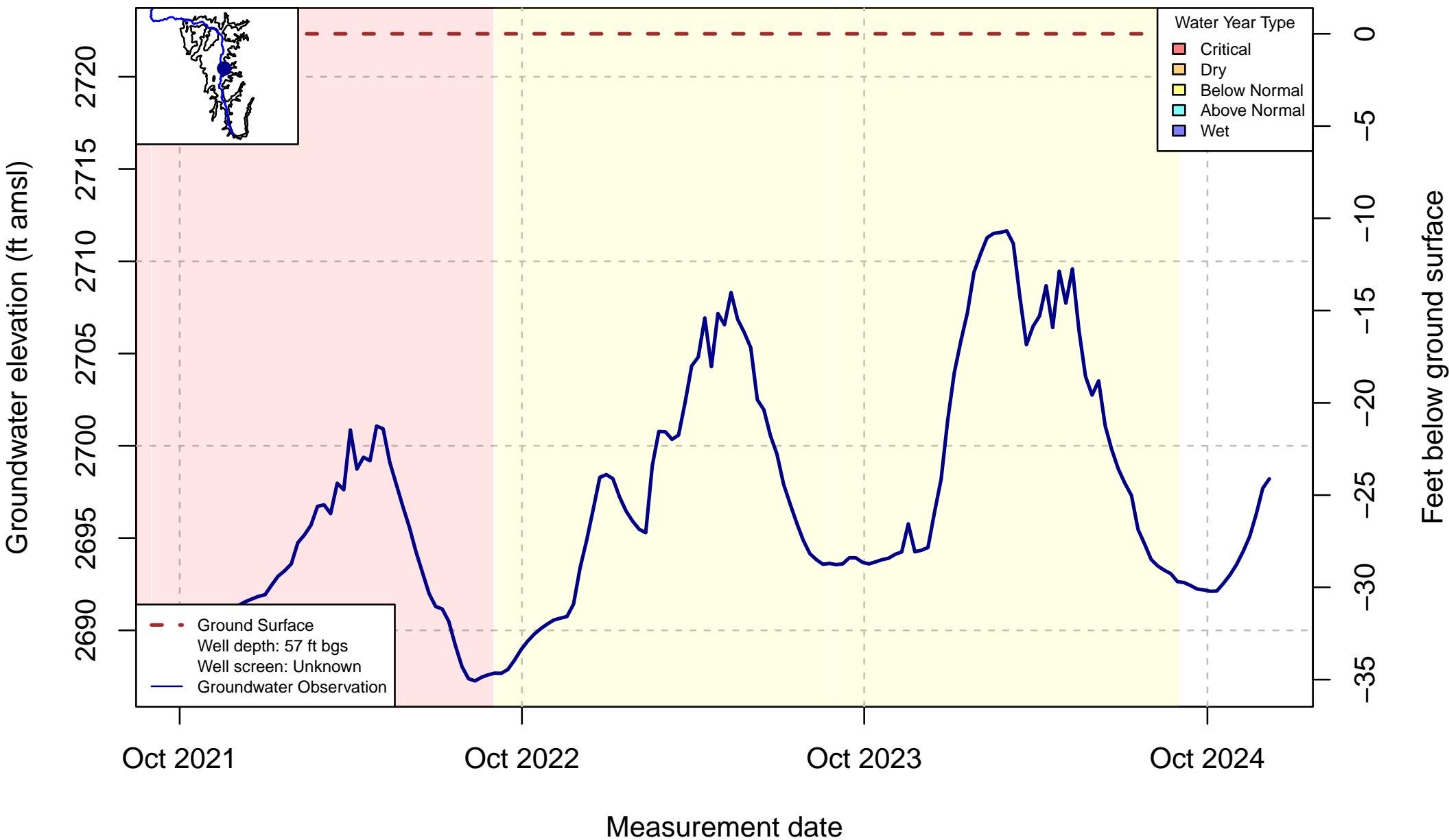
Well Code: SCT_654; SWN: NA



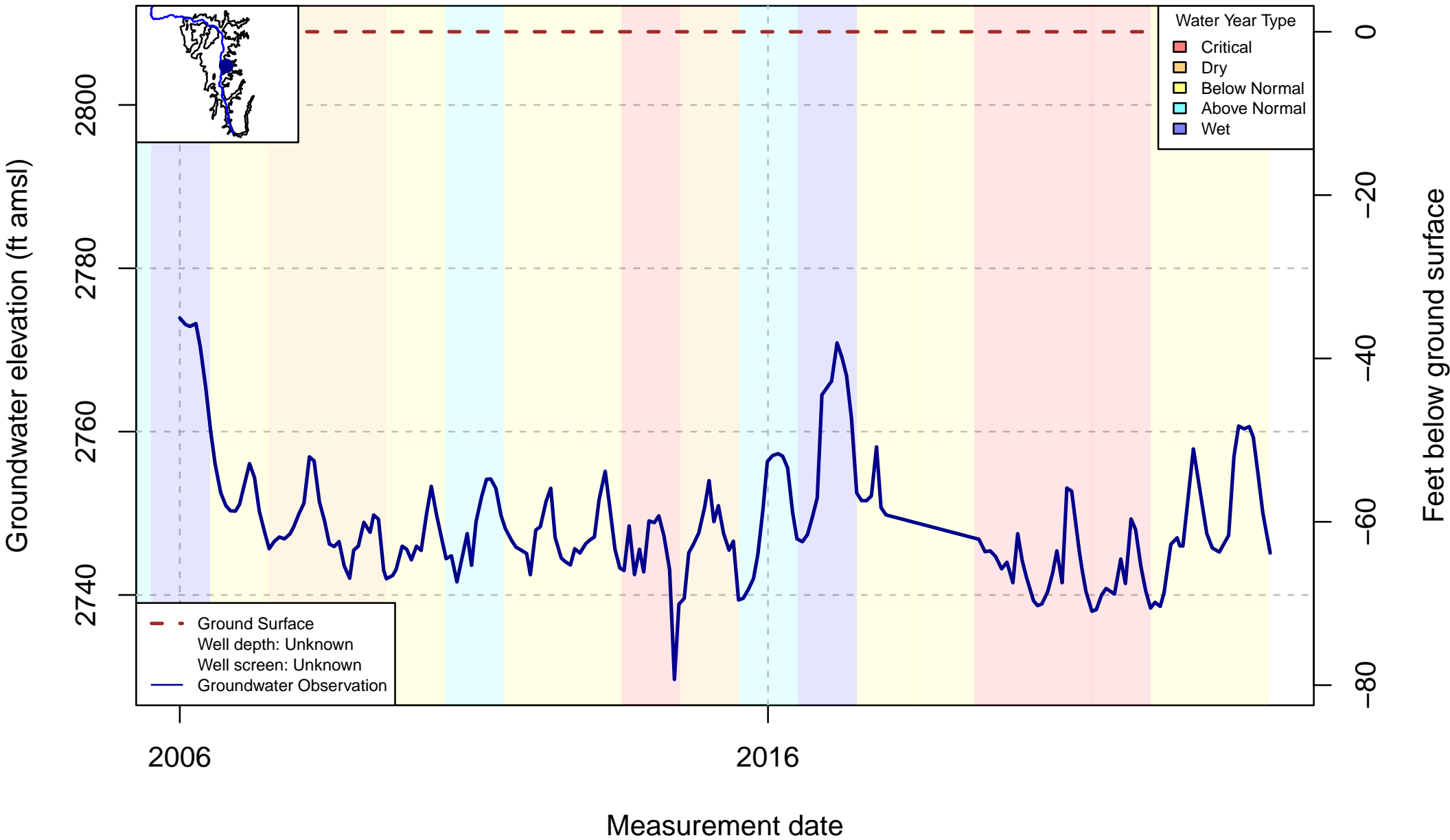
Well Code: SCT_786_2; SWN: NA



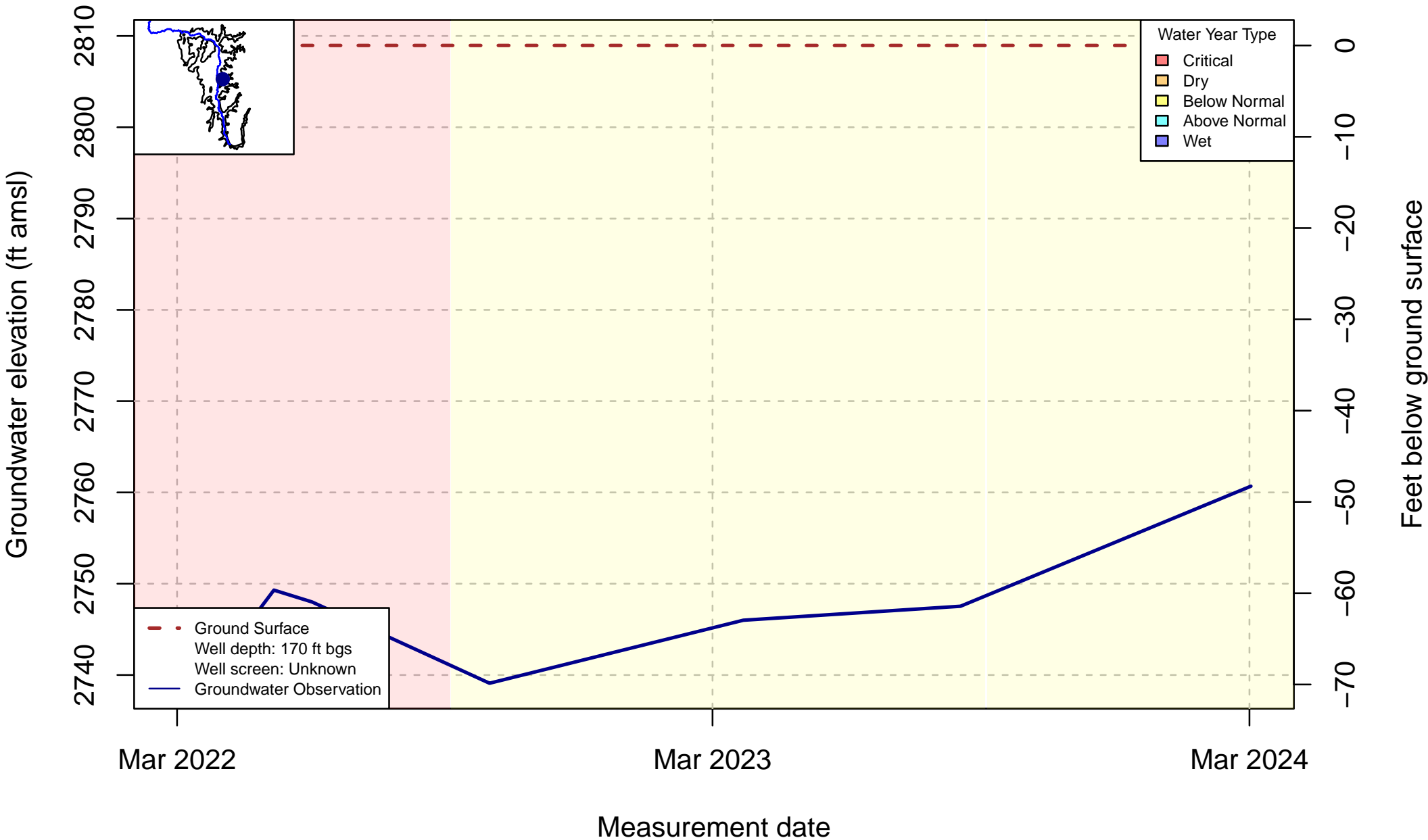
Well Code: SCT_786; SWN: NA



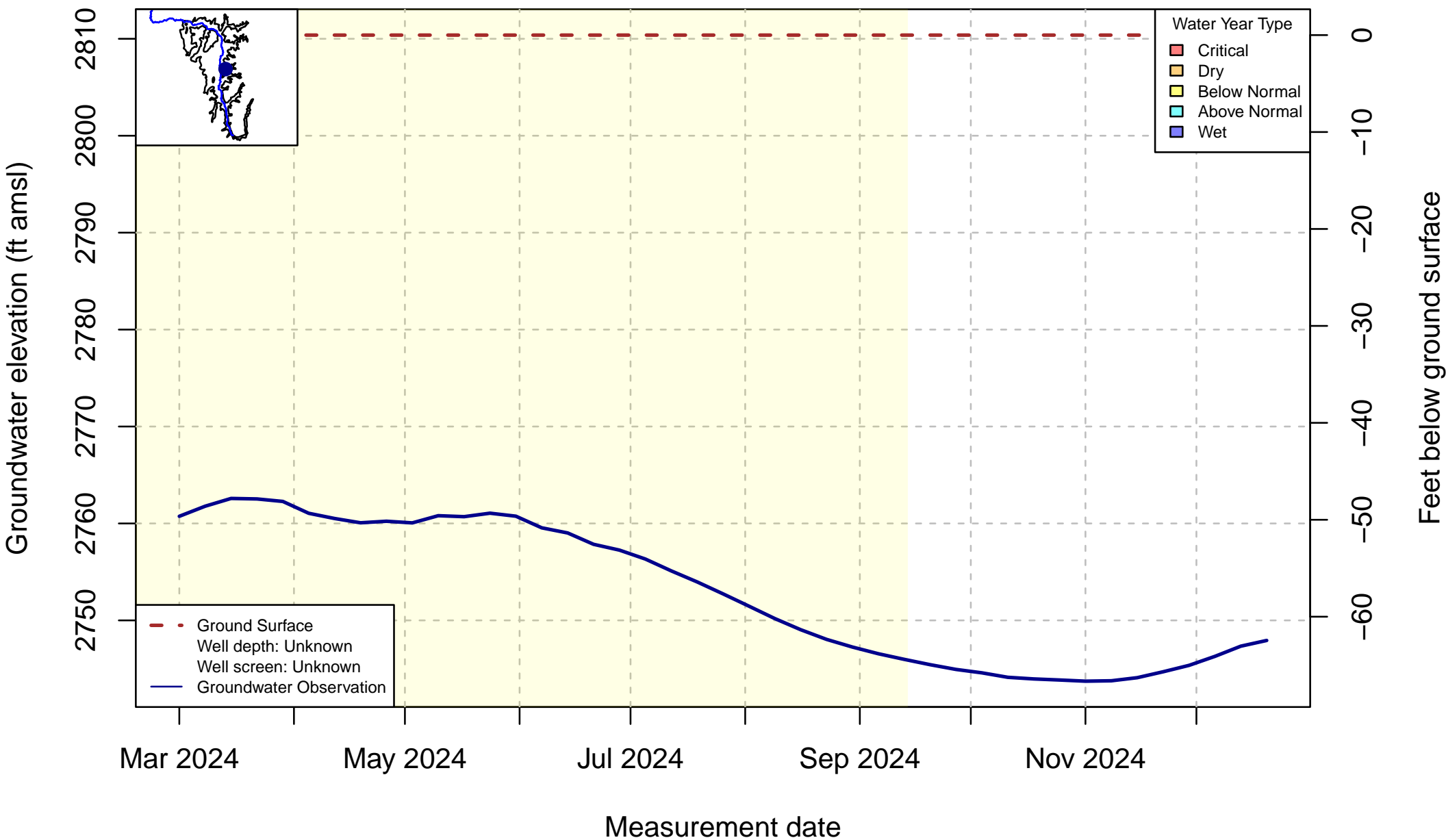
Well Code: L18; SWN: NA



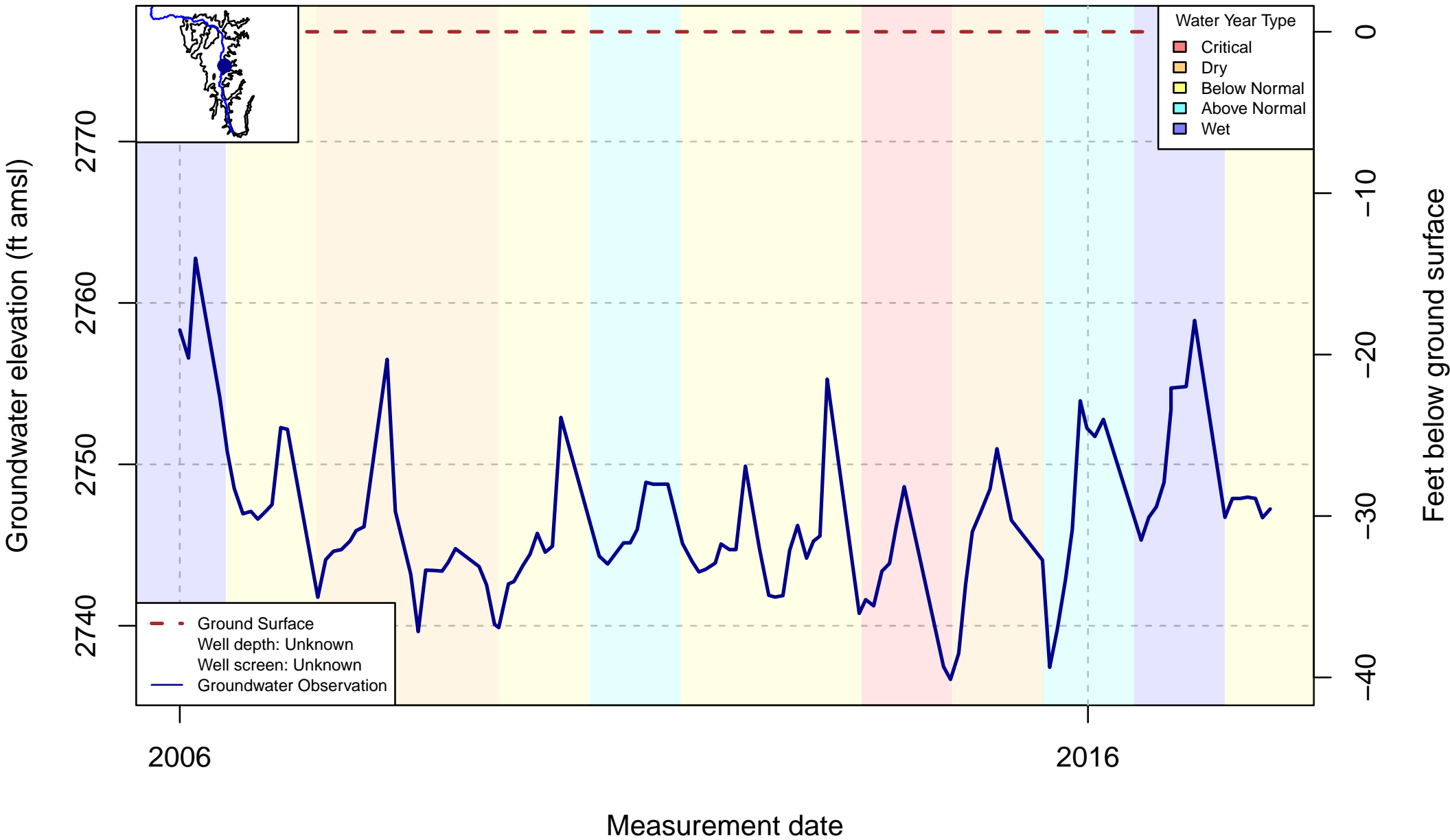
Well Code: 415005N1228298W001; SWN: NA



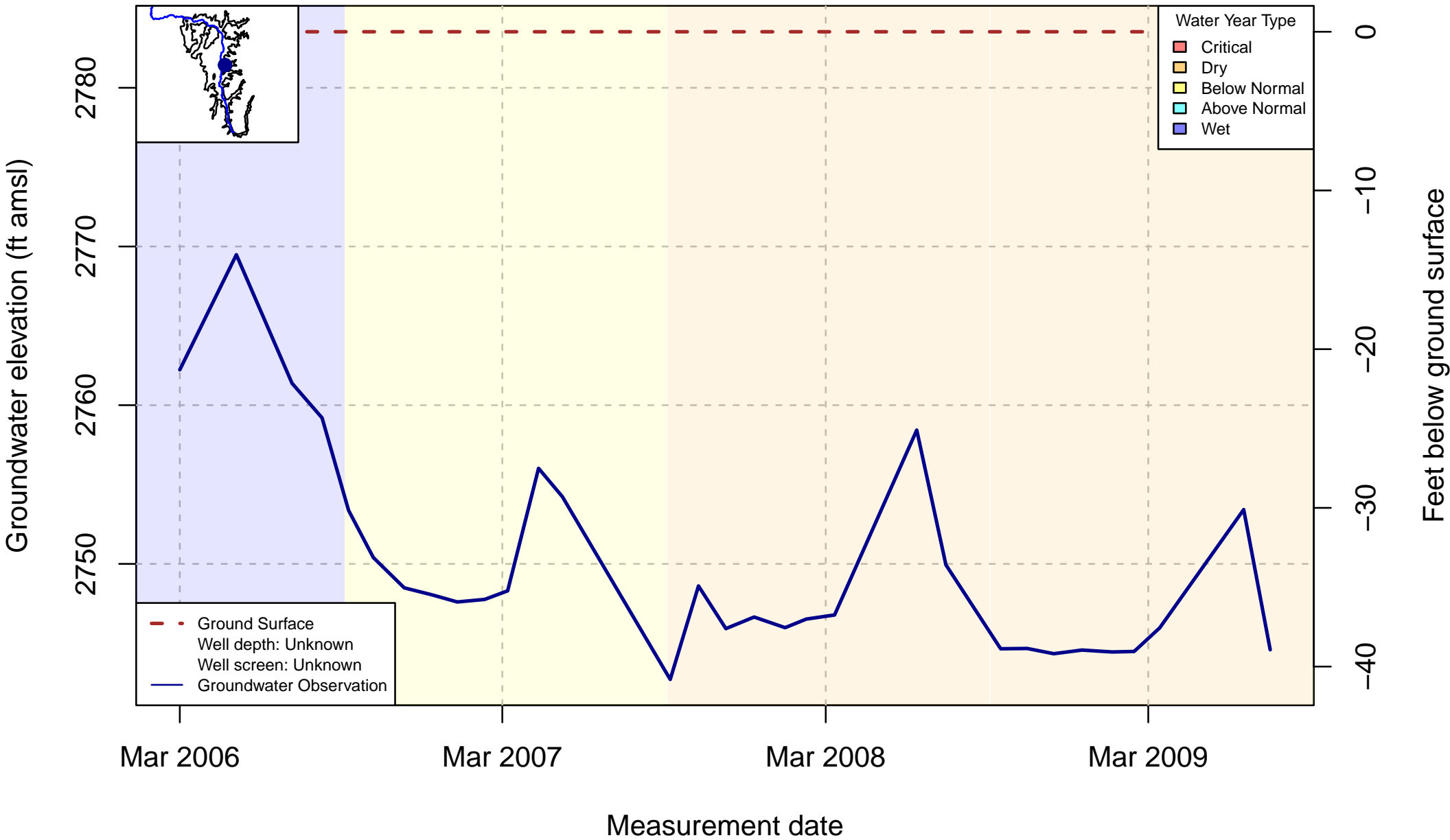
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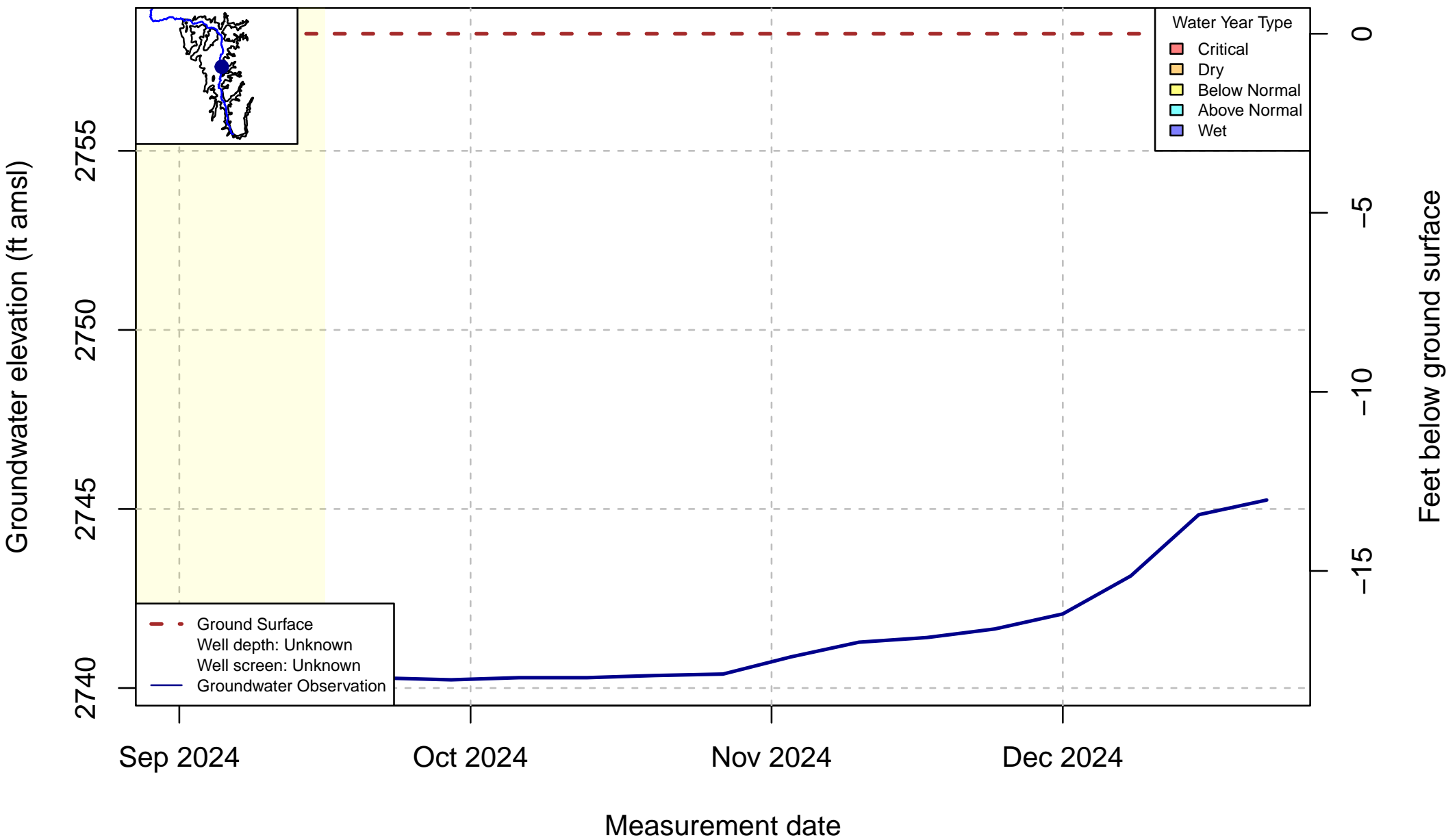
Well Code: K9; SWN: NA



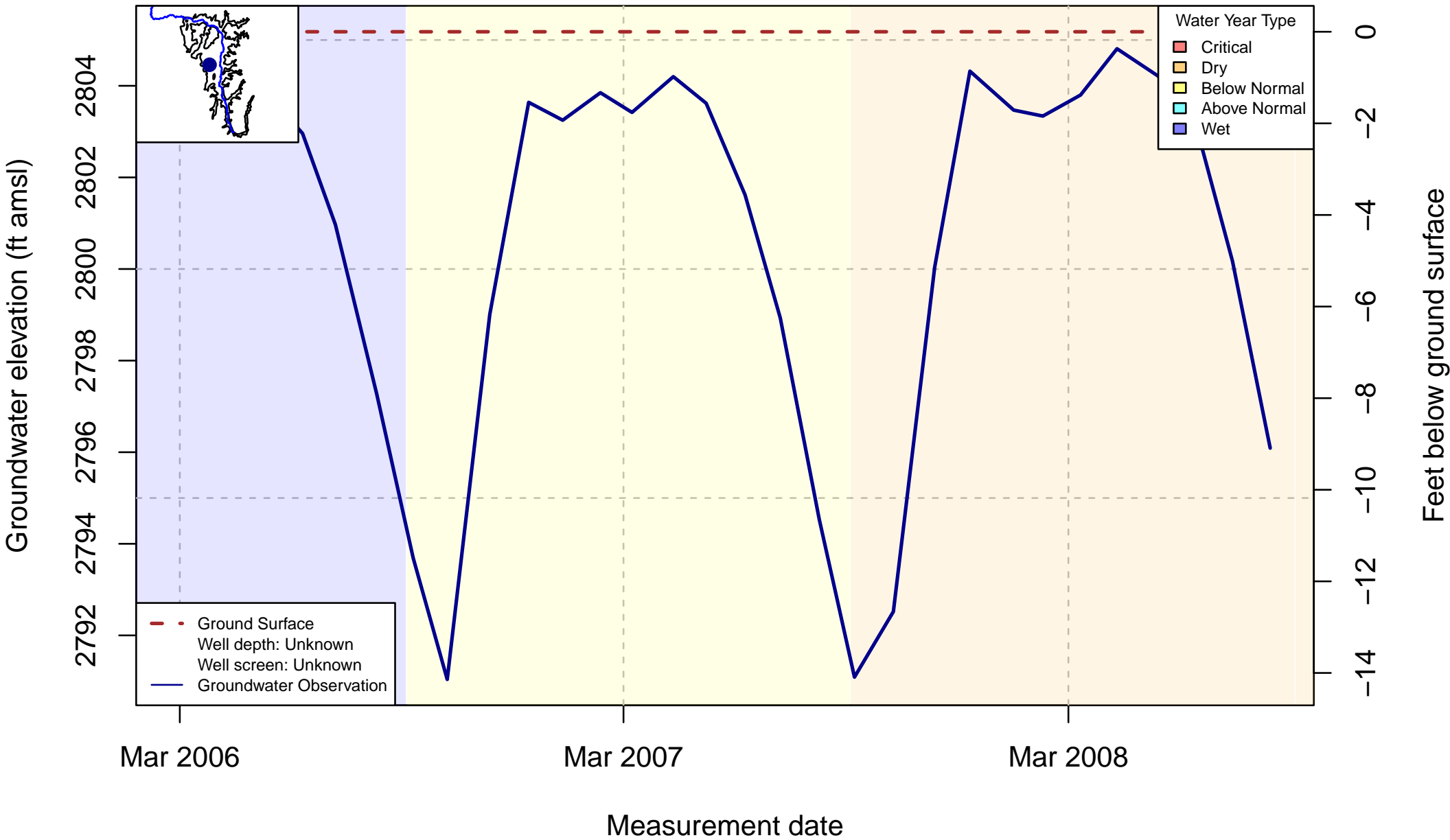
Well Code: V87; SWN: NA



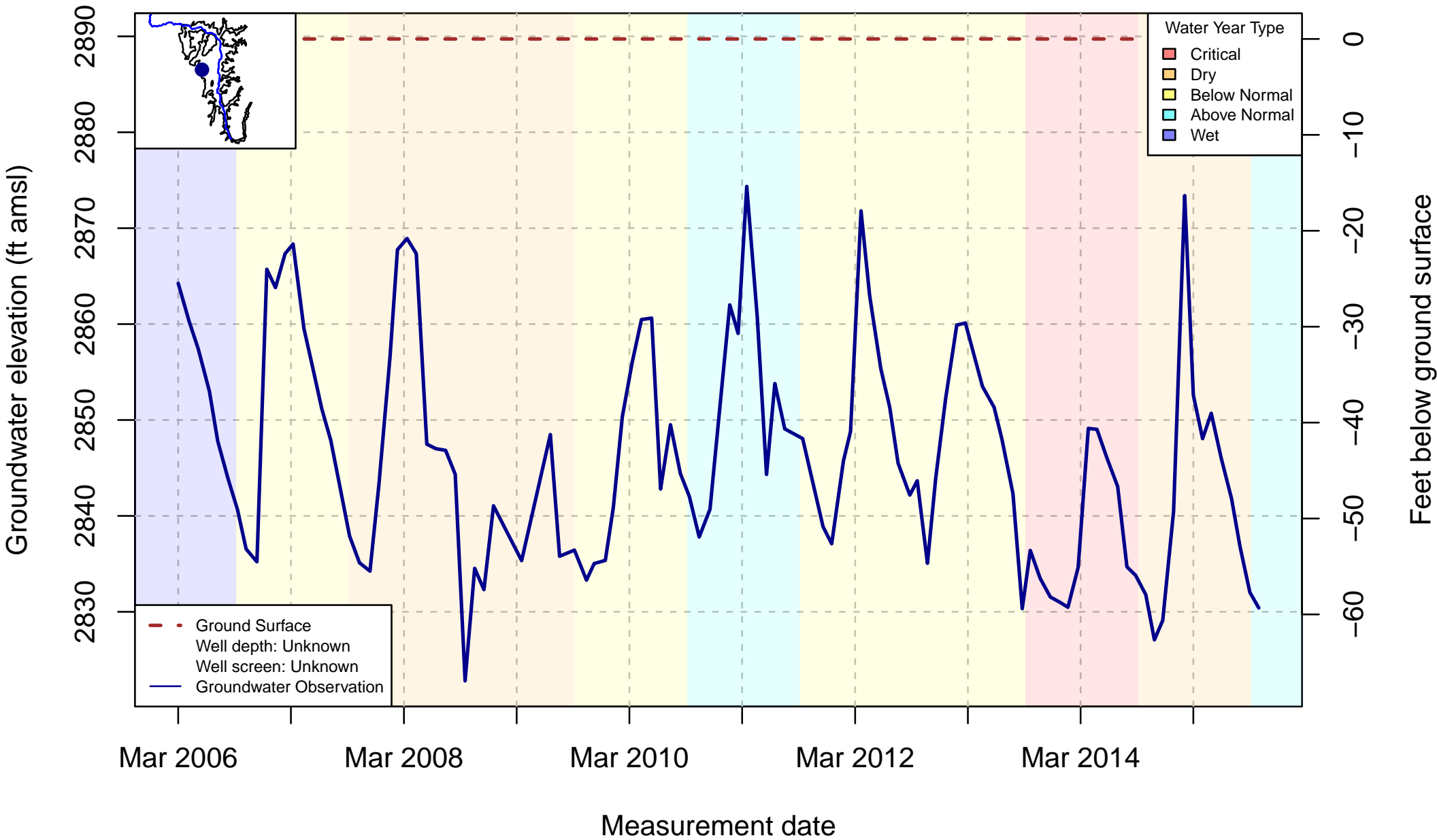
Well Code: SCT_071; SWN: NA



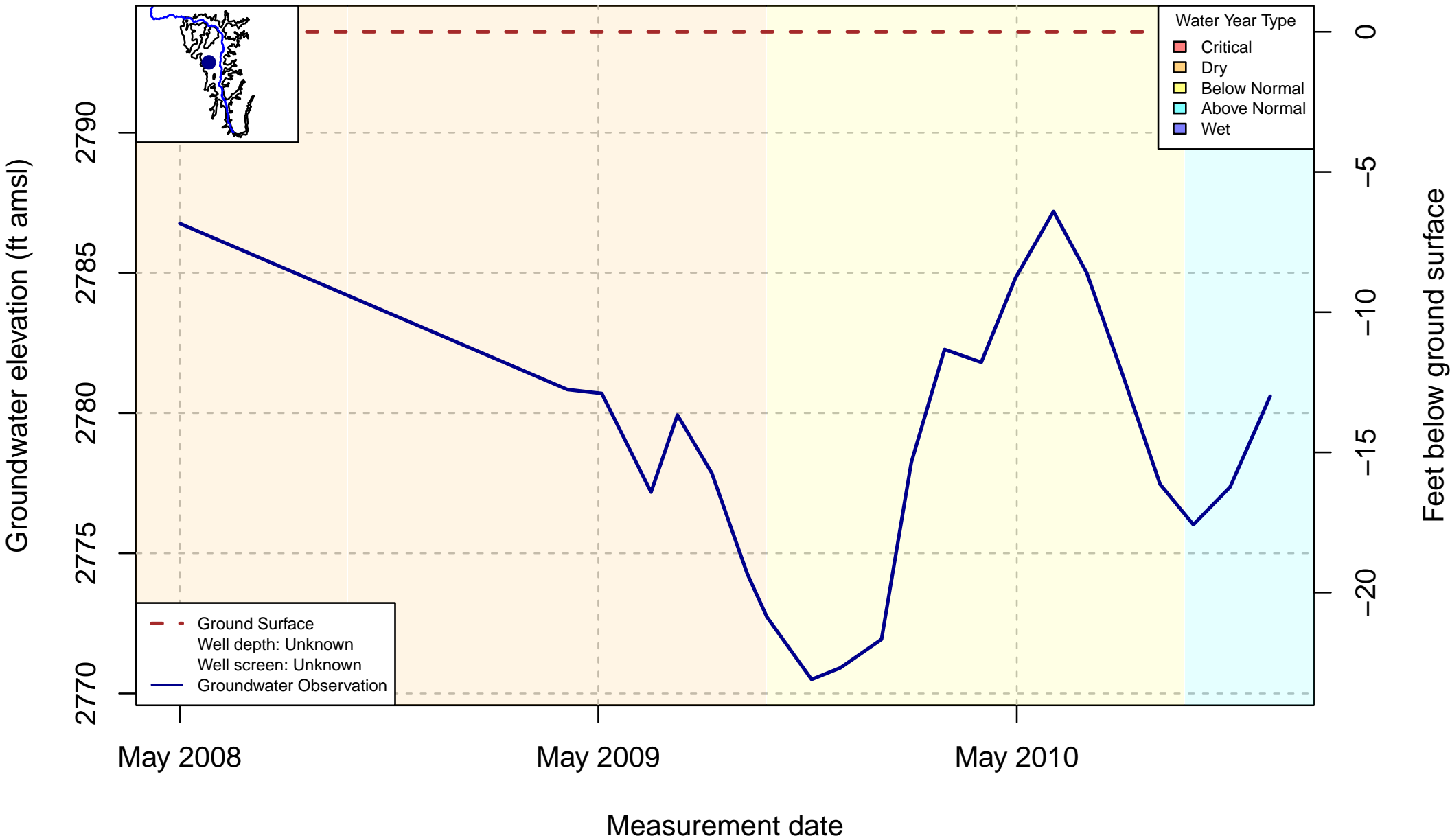
Well Code: A41; SWN: NA



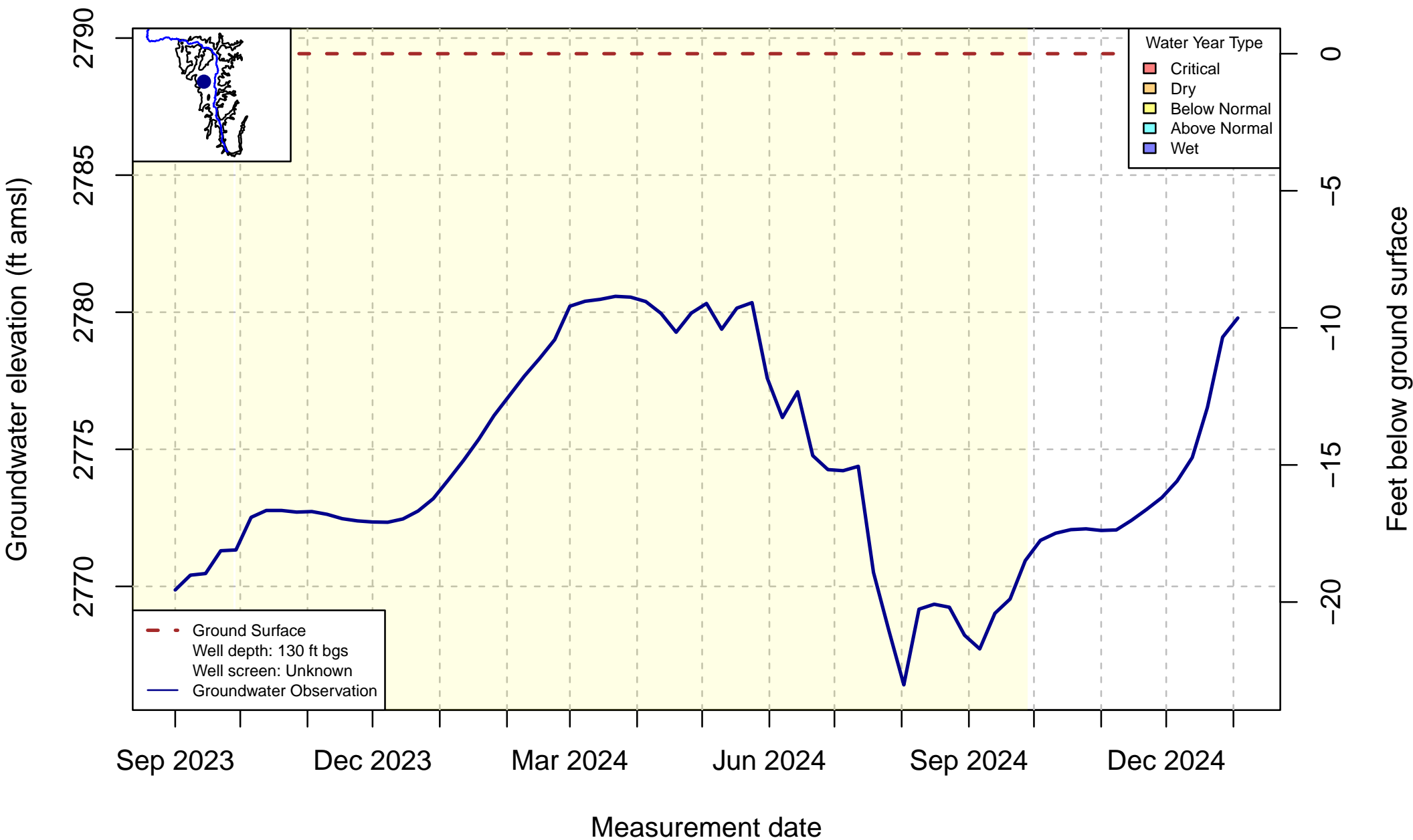
Well Code: F56; SWN: NA



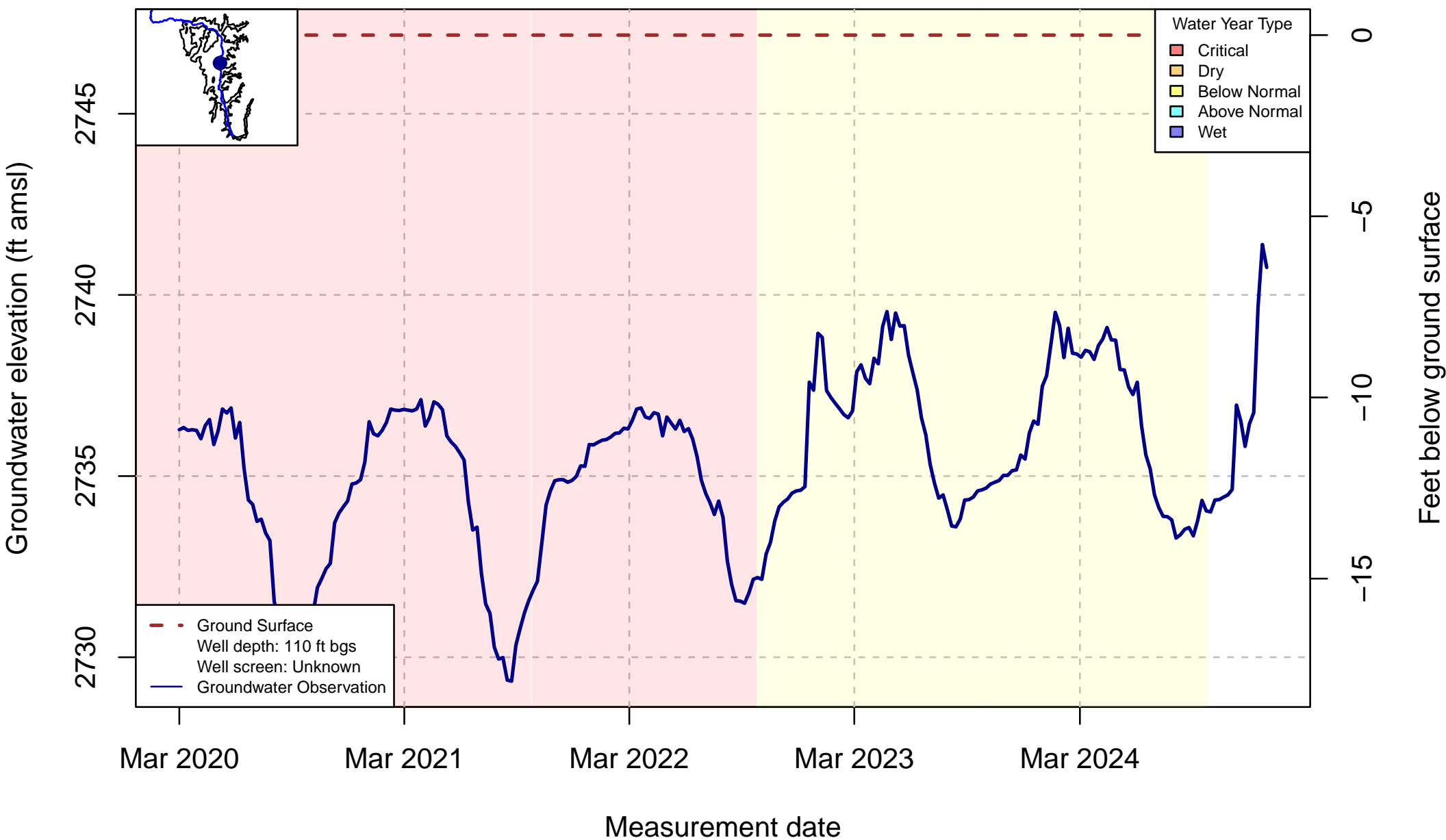
Well Code: E71; SWN: NA



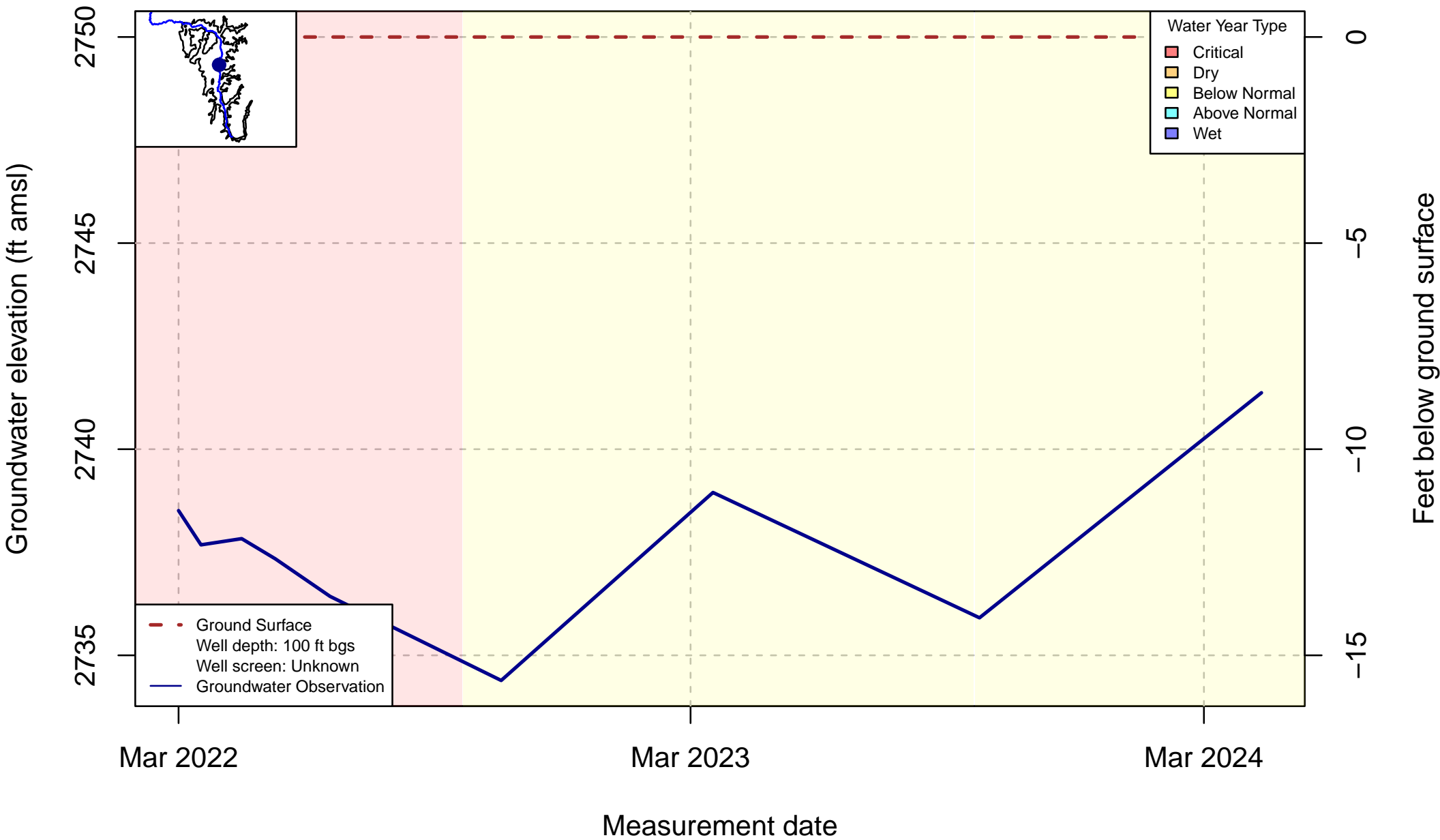
Well Code: SCT_644; SWN: NA



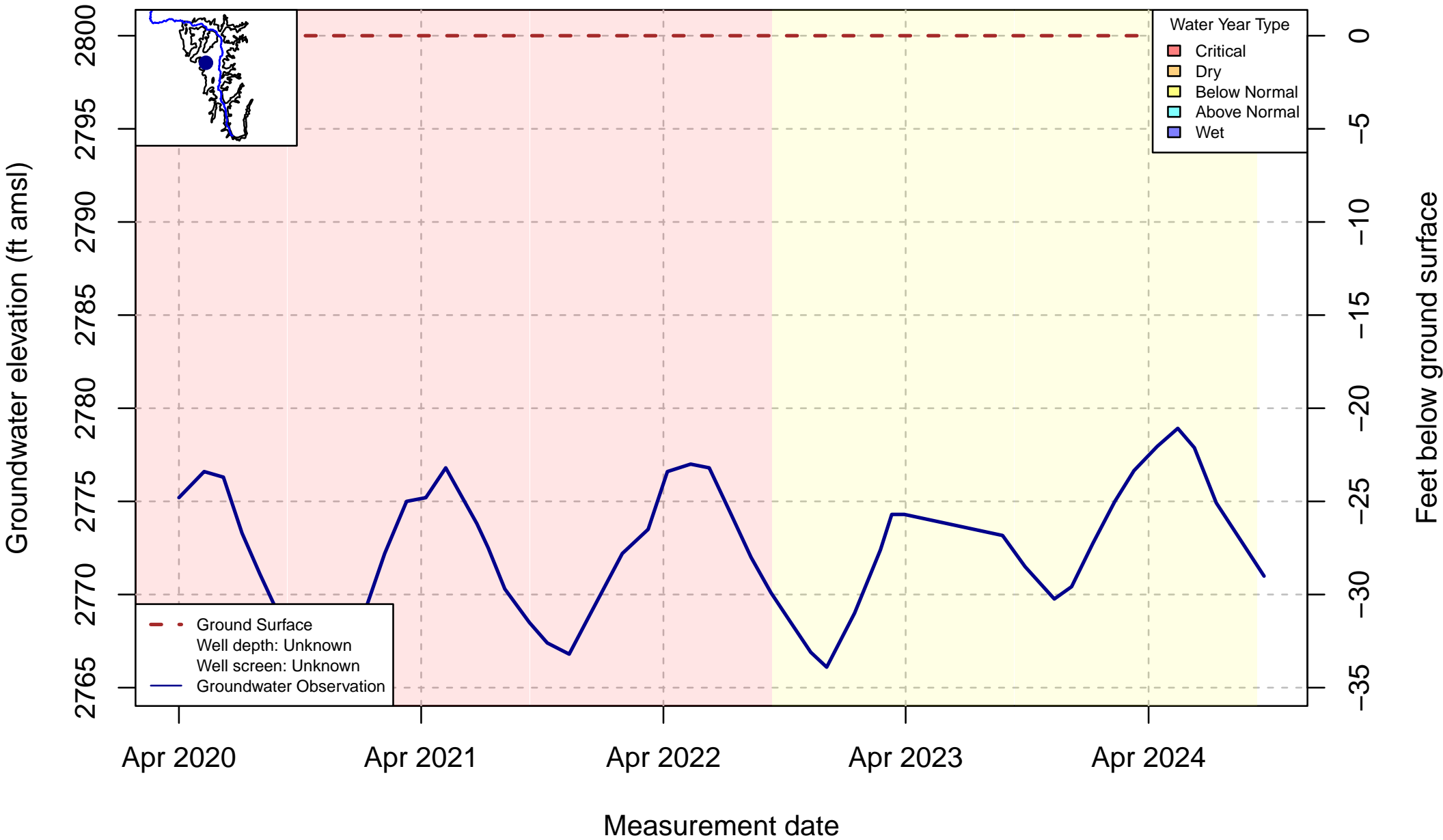
Well Code: SCT_183; SWN: NA



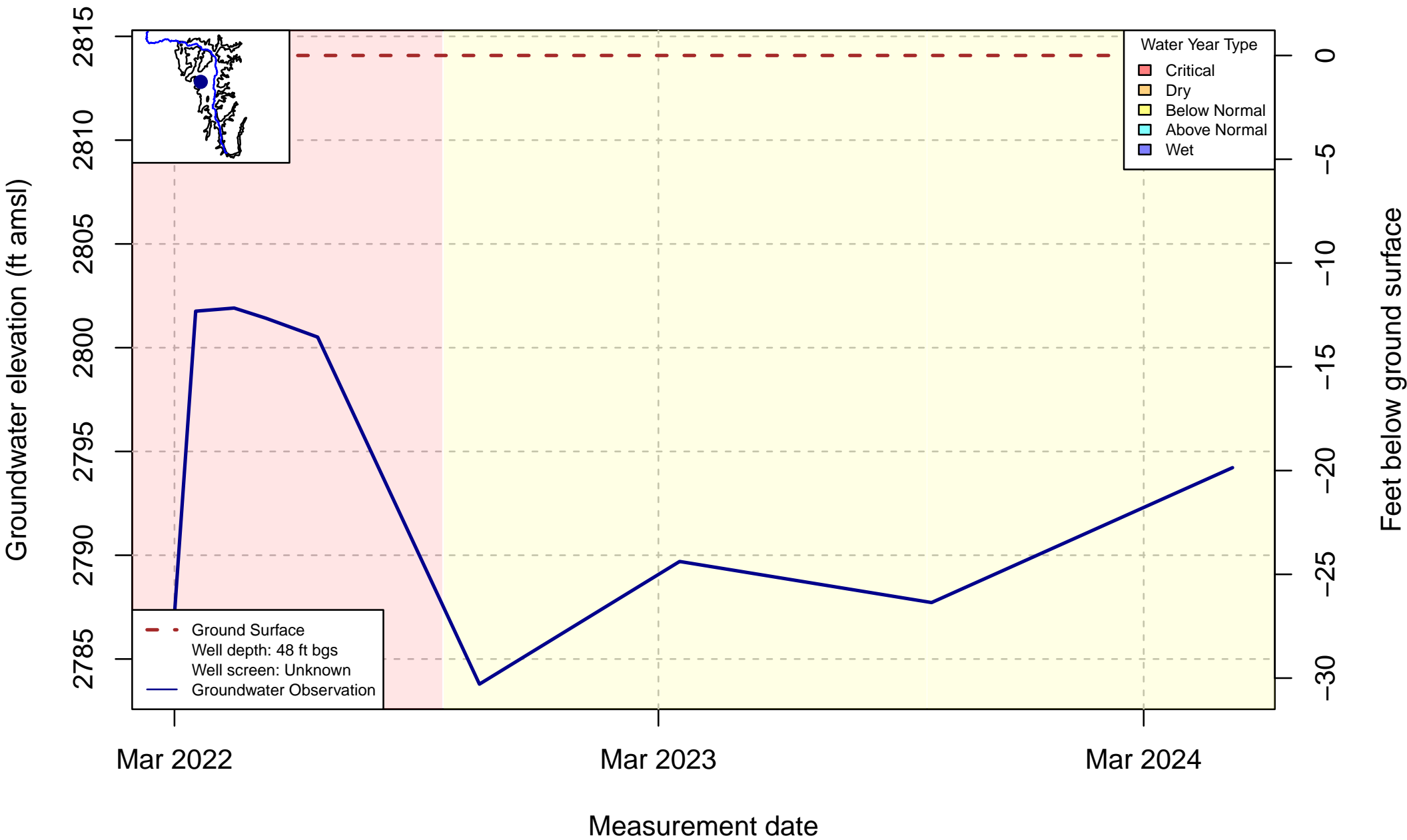
Well Code: 415181N1228509W001; SWN: NA



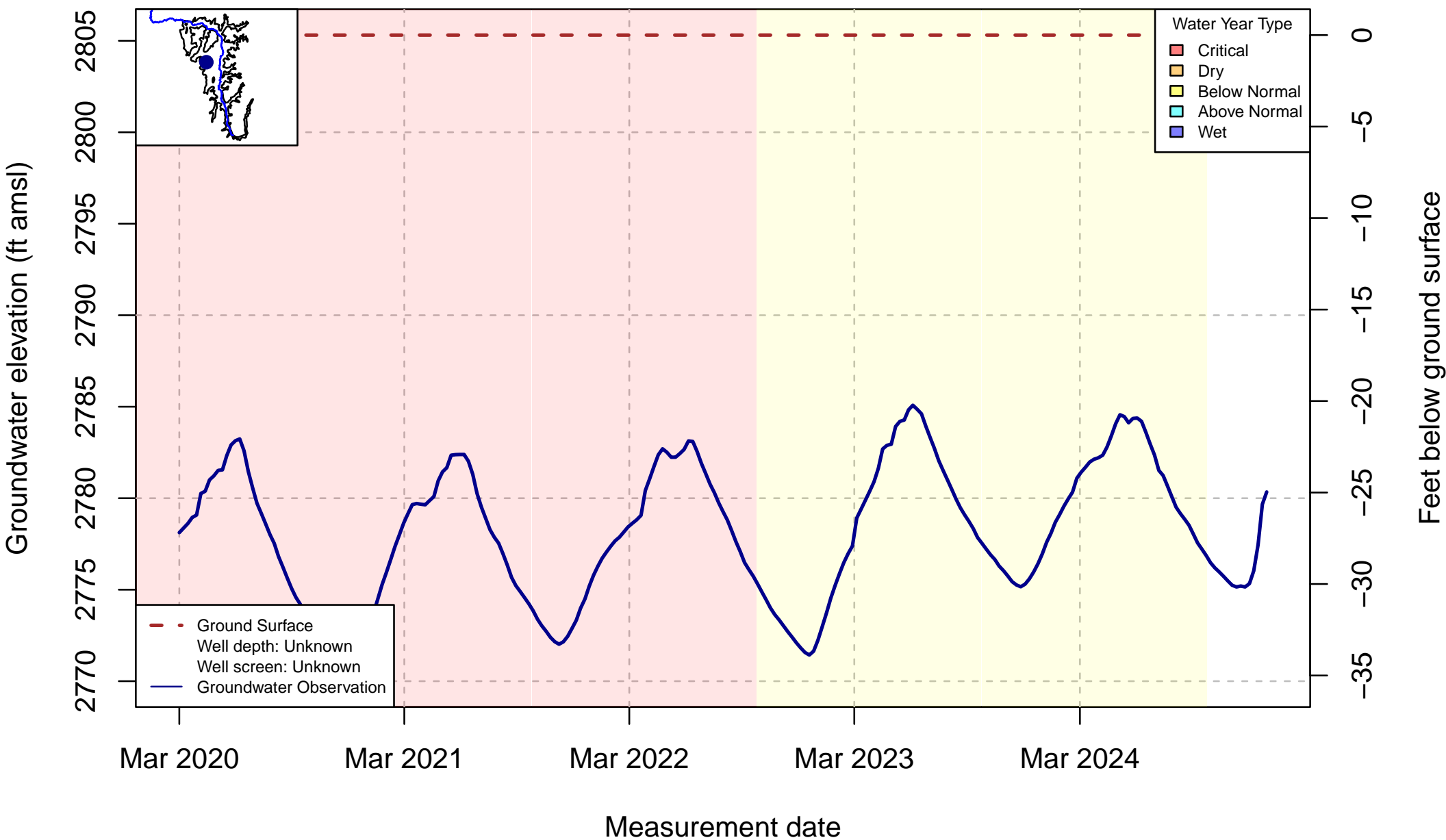
Well Code: E57; SWN: NA



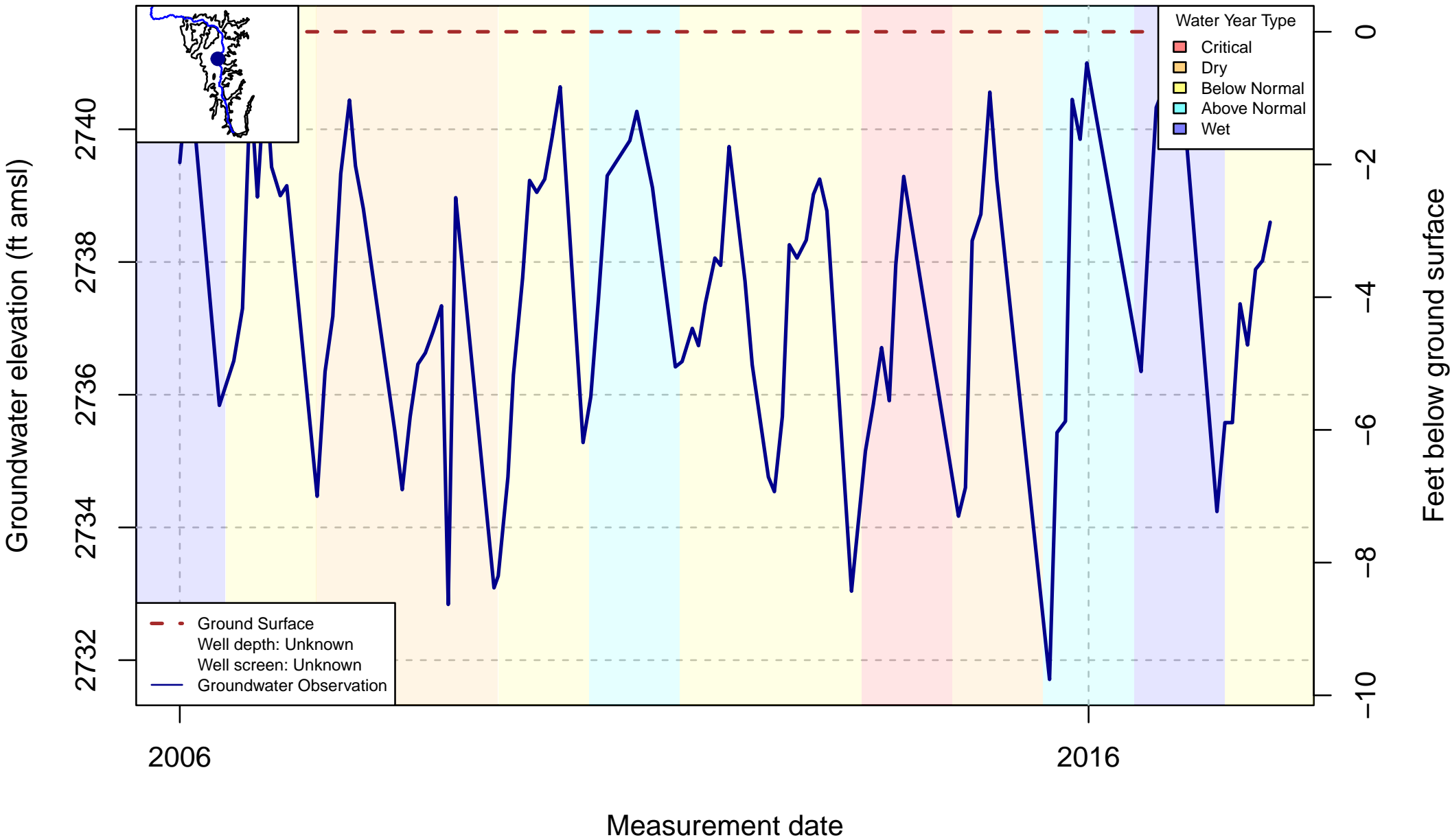
Well Code: 415204N1229027W004; SWN: NA



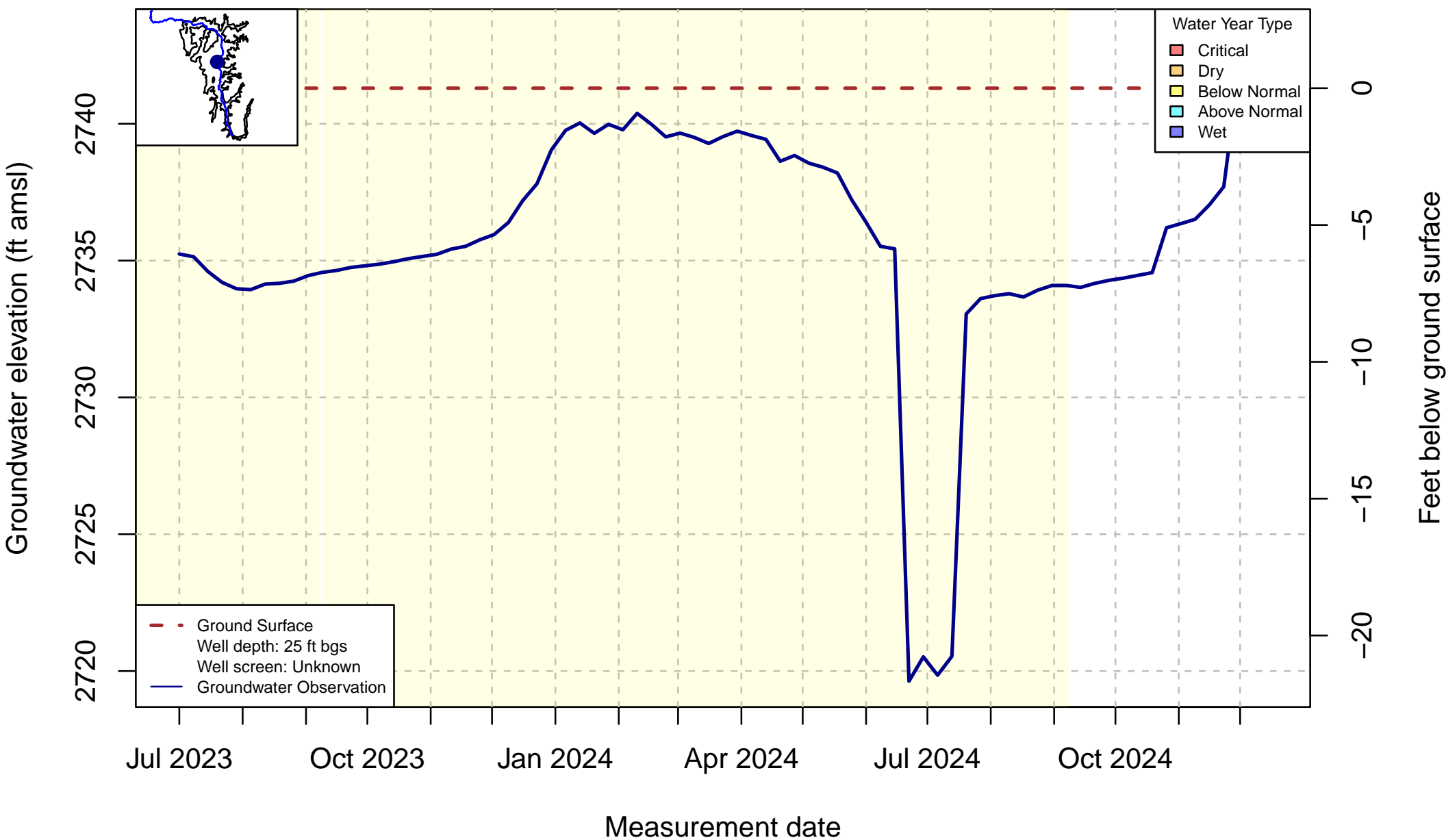
Well Code: SCT_186; SWN: NA



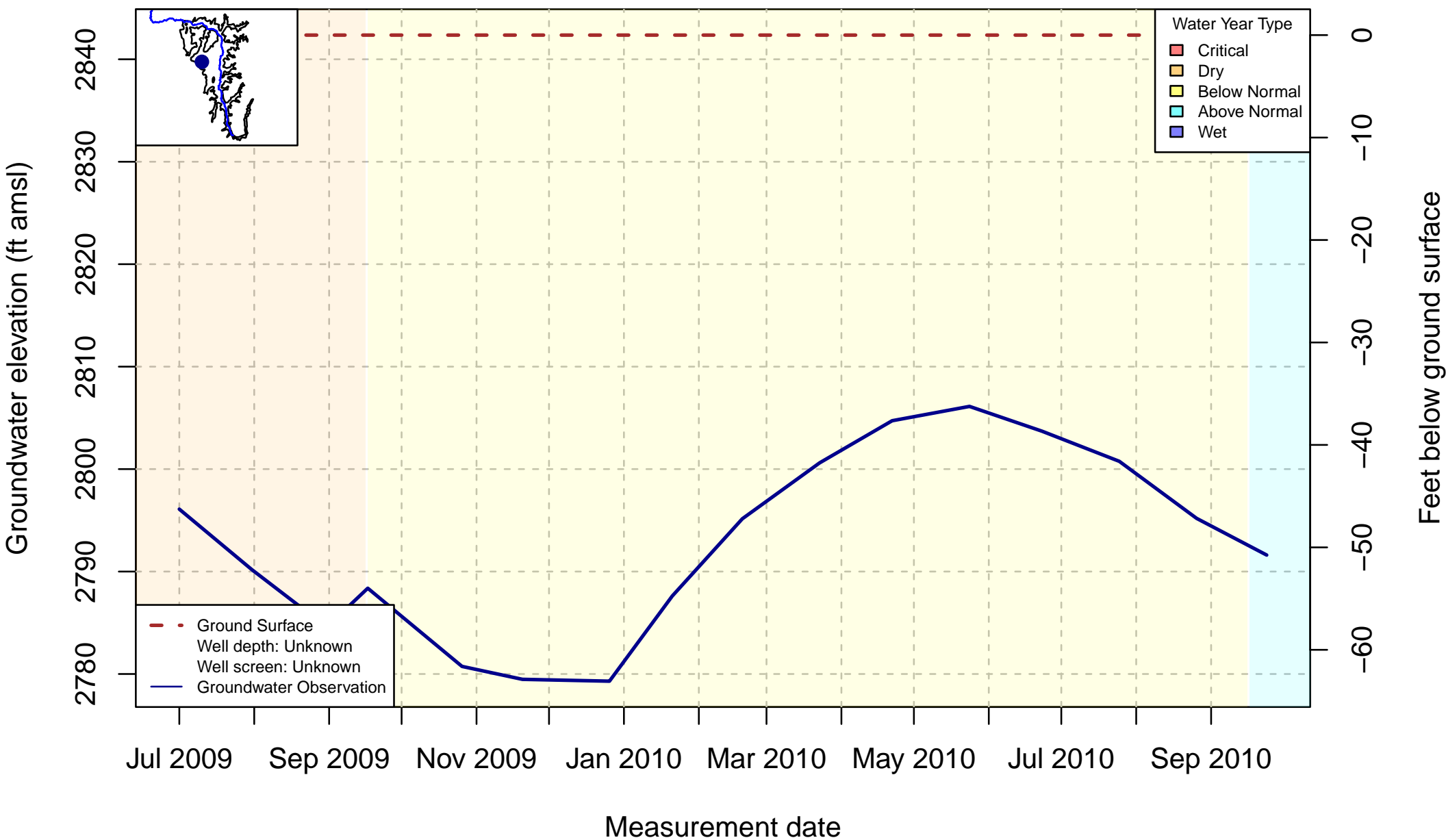
Well Code: H6; SWN: NA



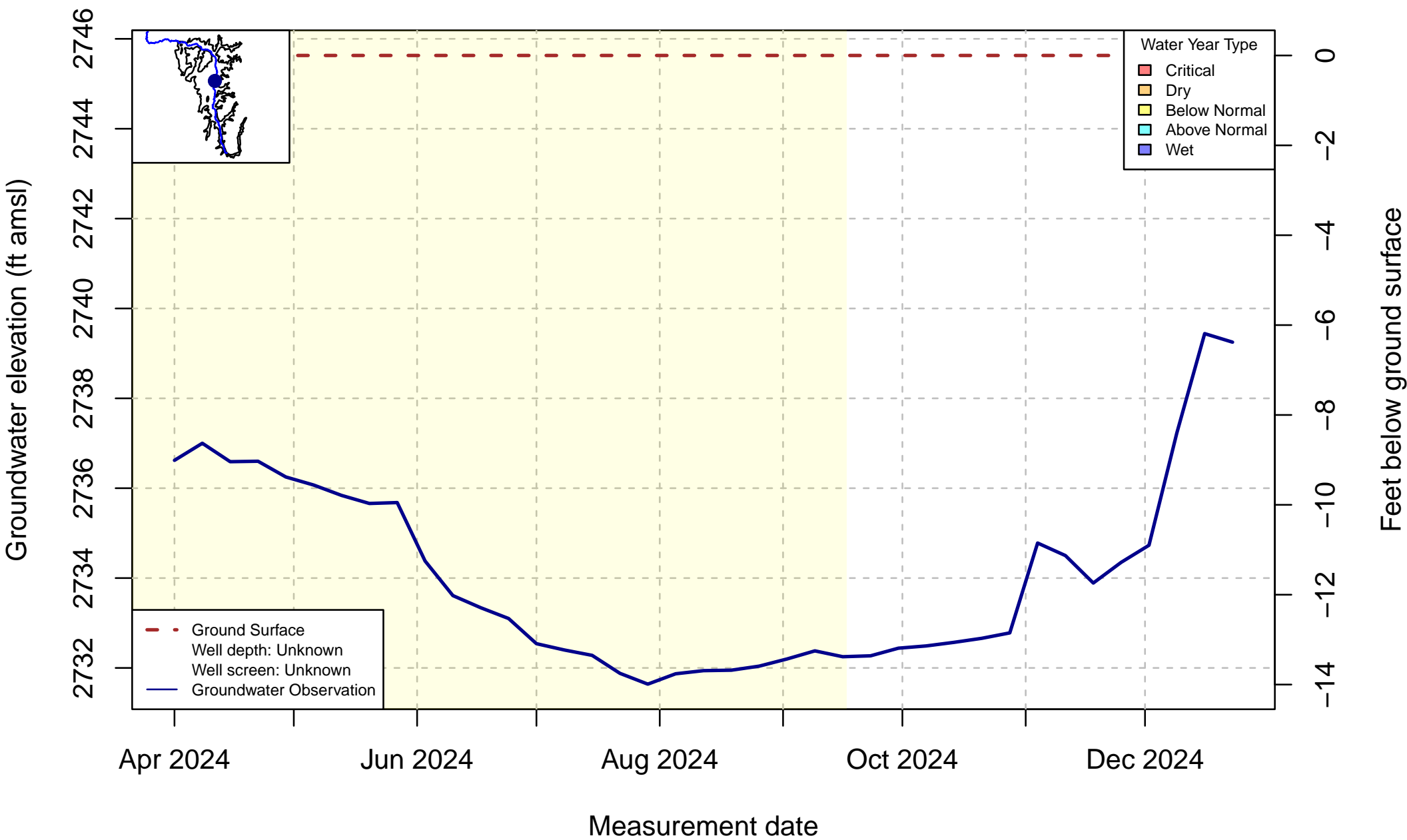
Well Code: SCT_690; SWN: NA



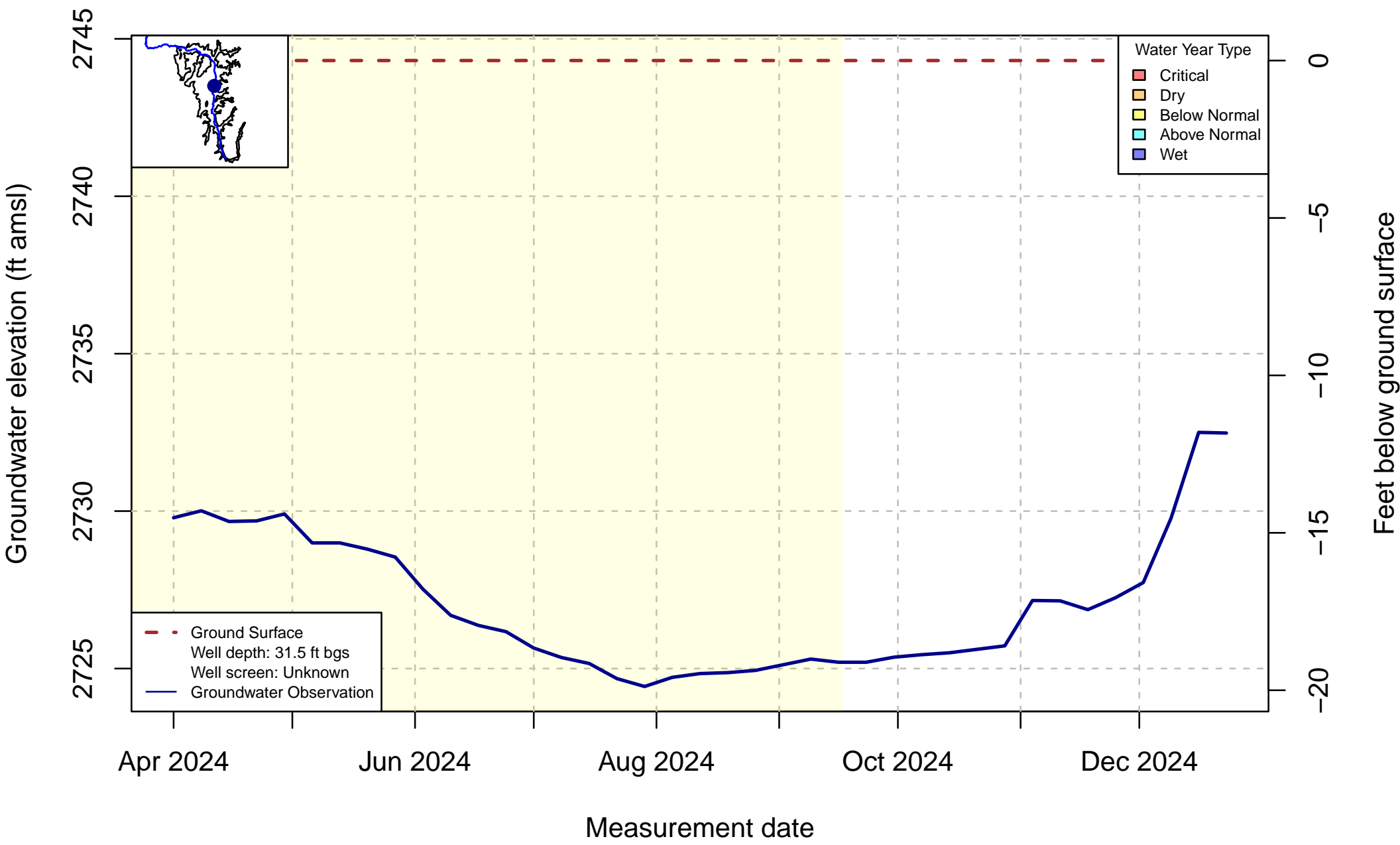
Well Code: B9; SWN: NA



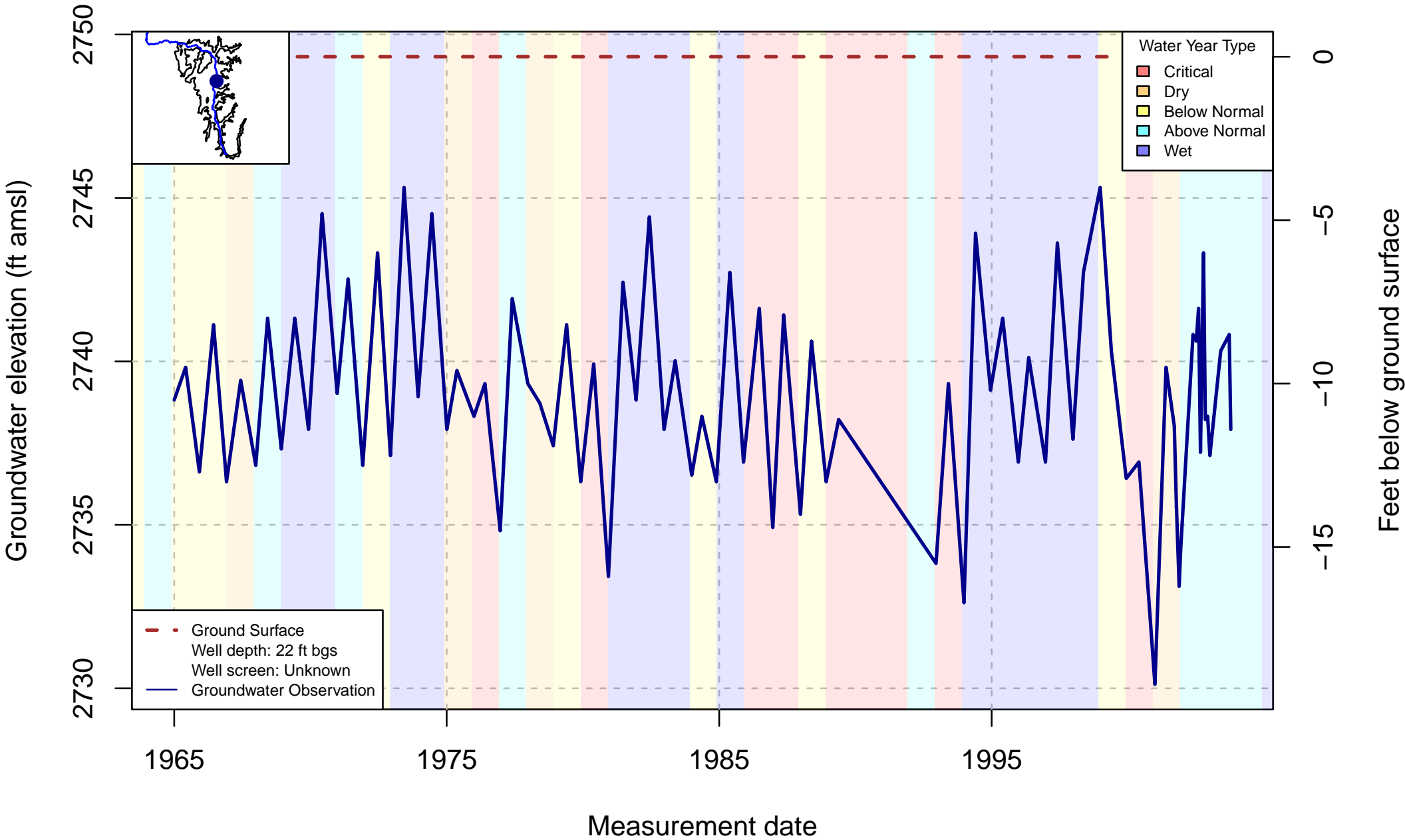
Well Code: SCT_190; SWN: NA



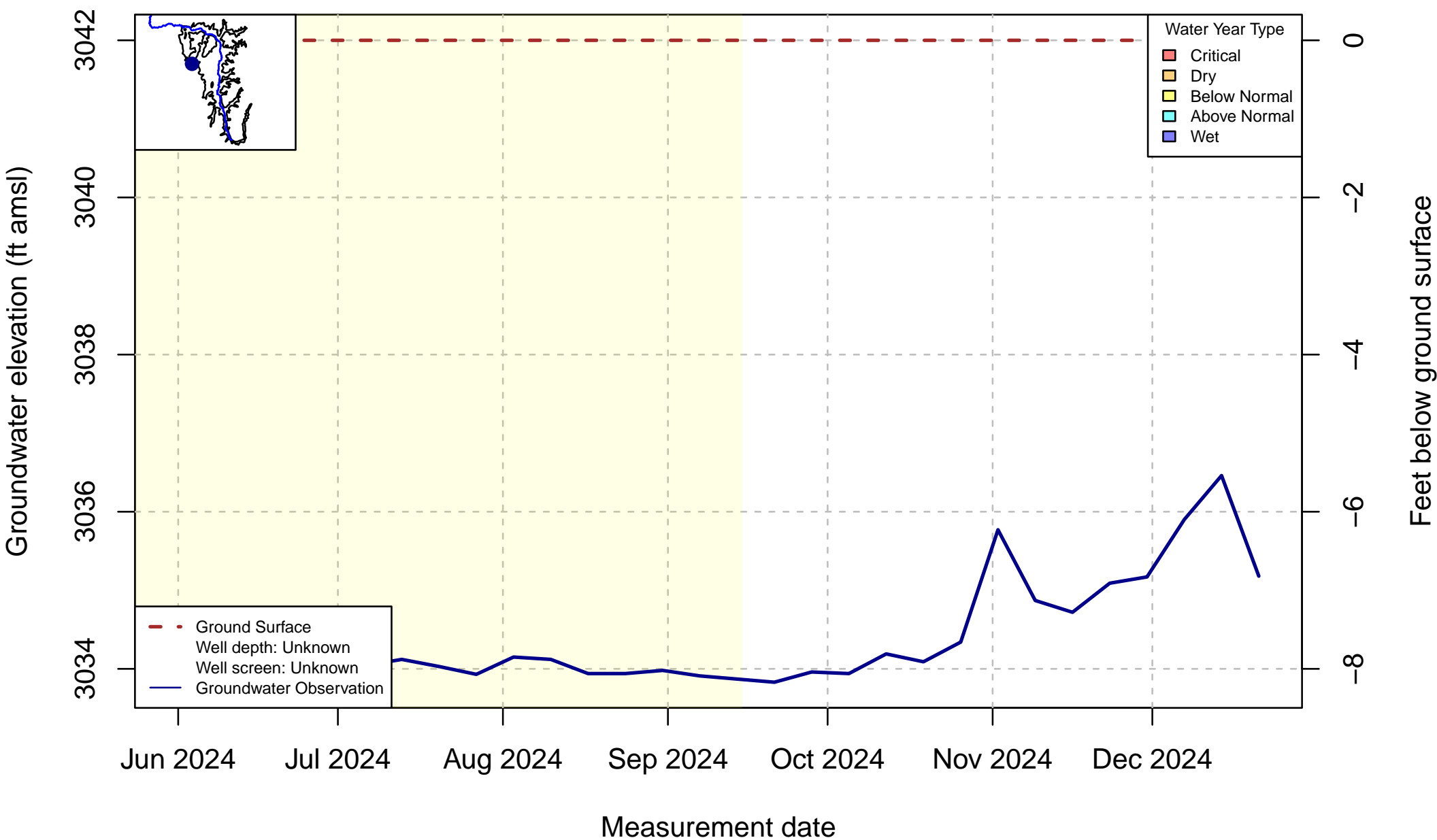
Well Code: SCT_124; SWN: NA



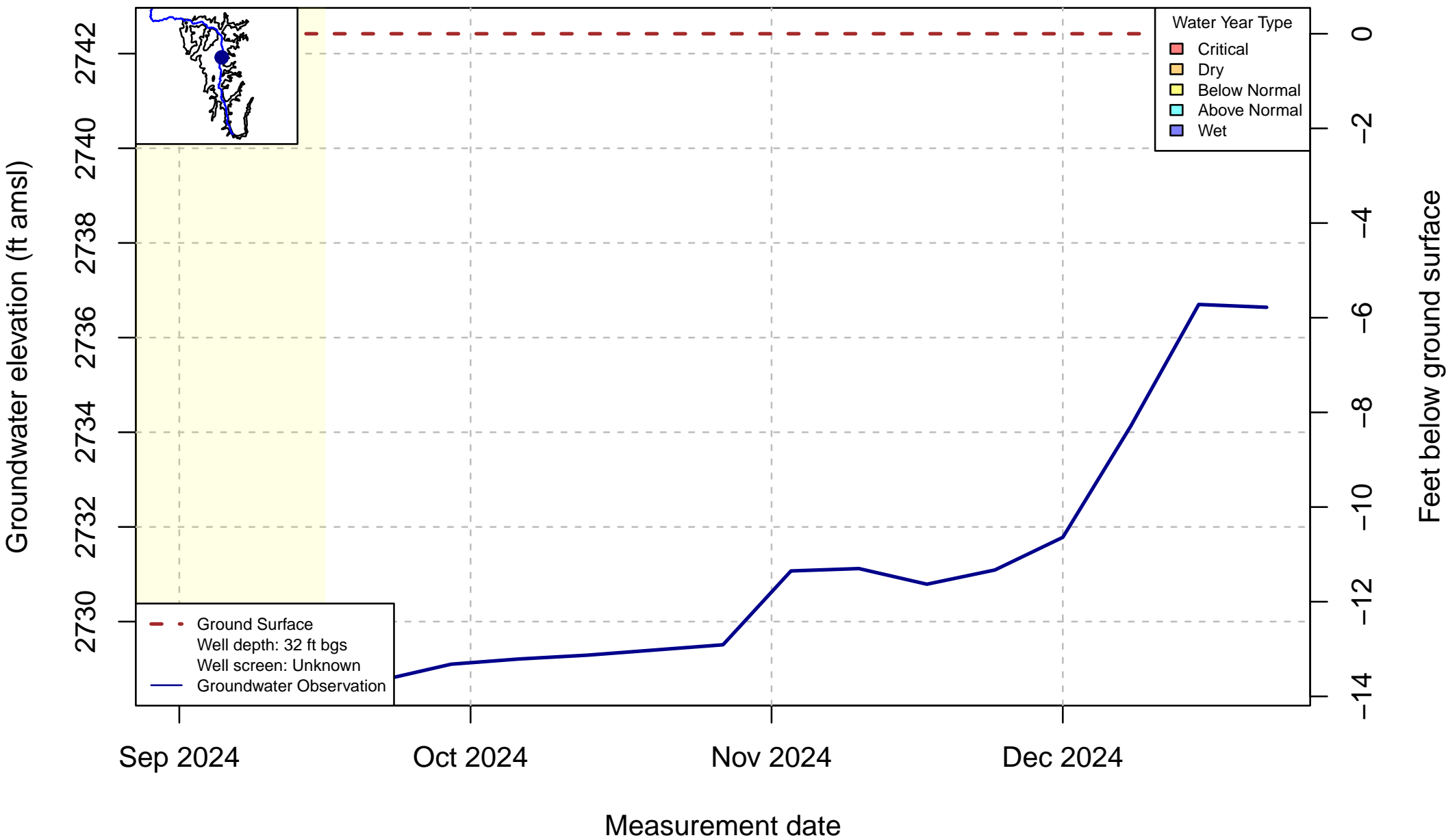
Well Code: 415262N1228403W001; SWN: 42N09W02A002M



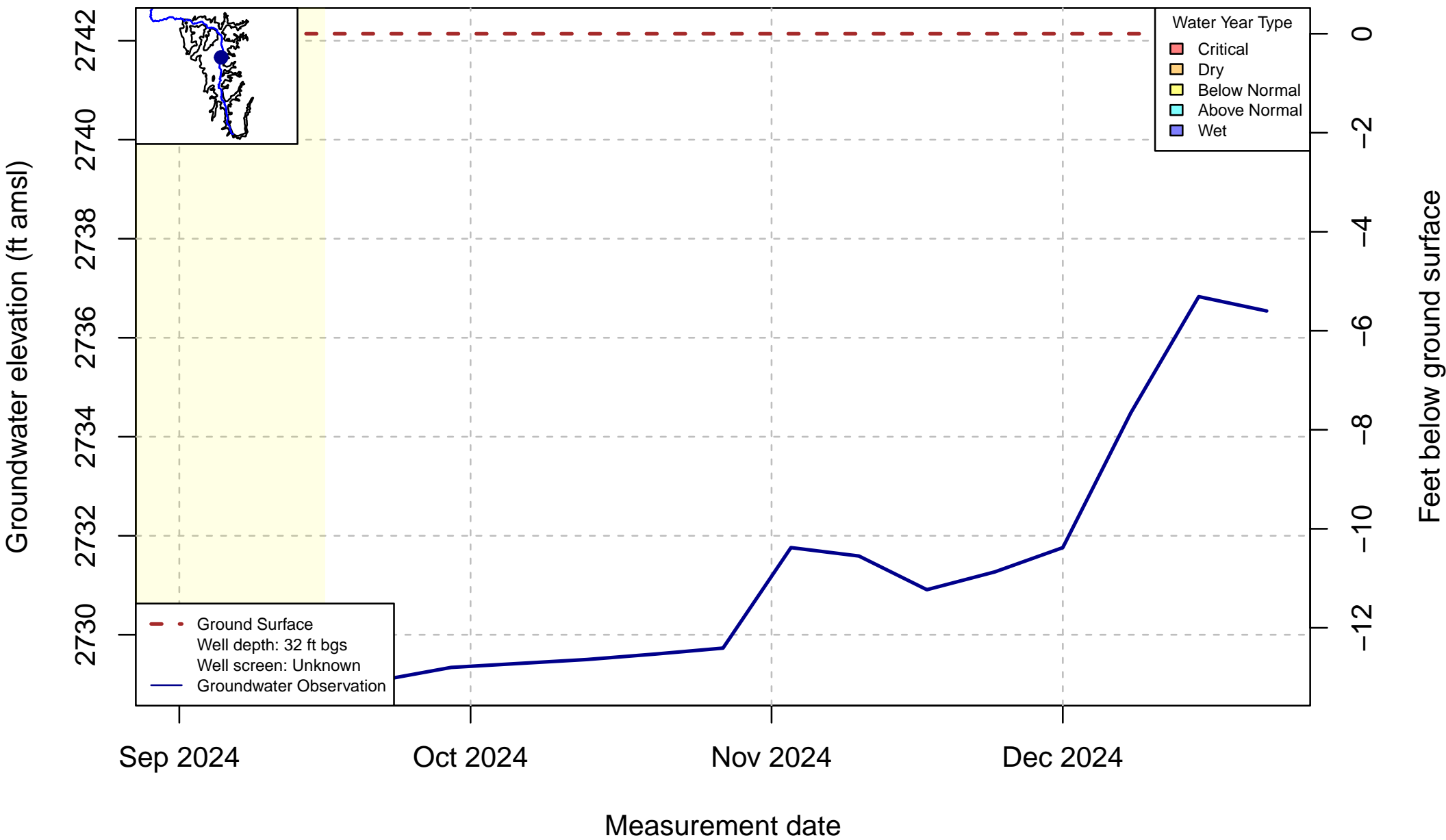
Well Code: SCT_655; SWN: NA



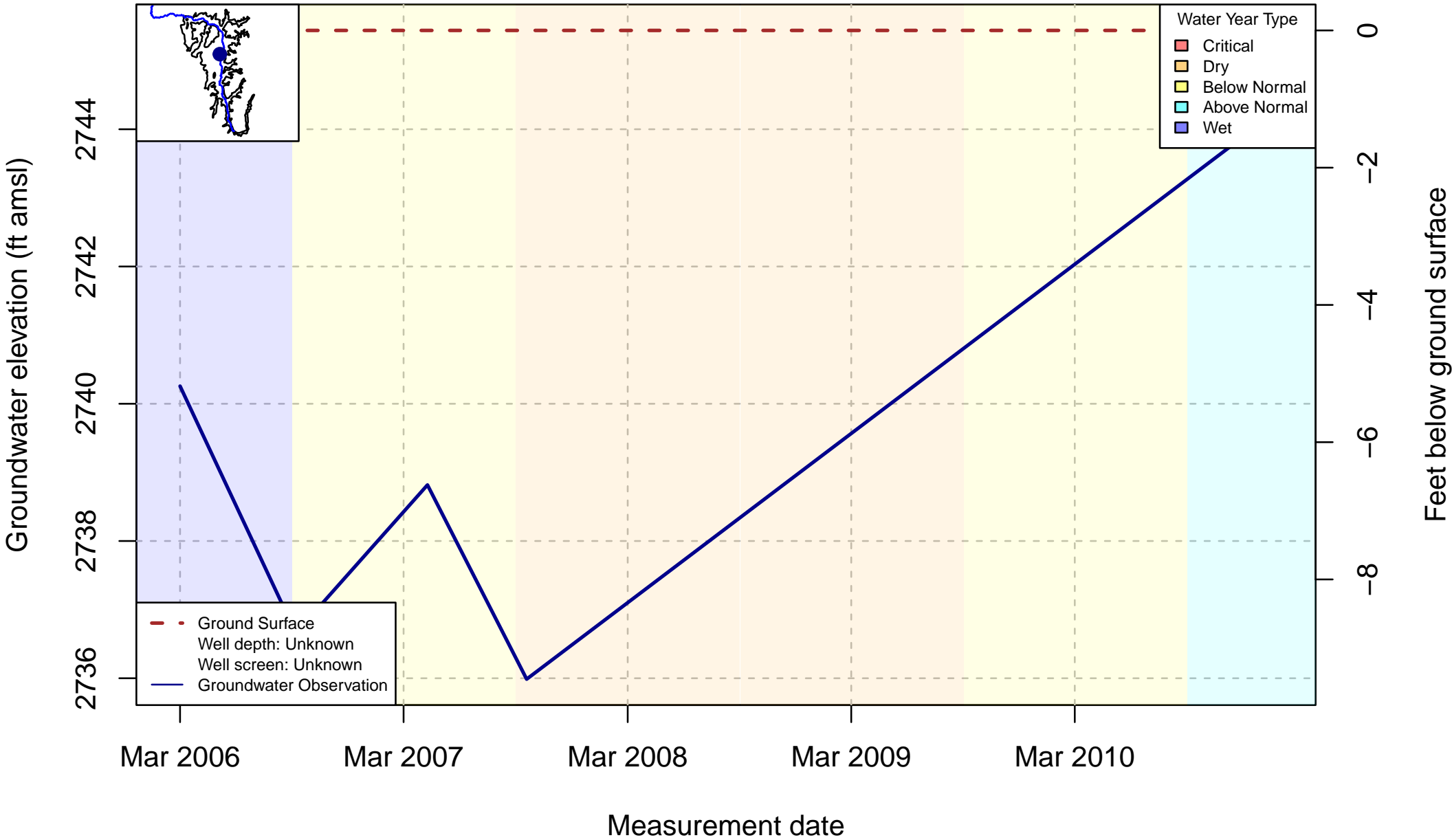
Well Code: SCT_065; SWN: NA



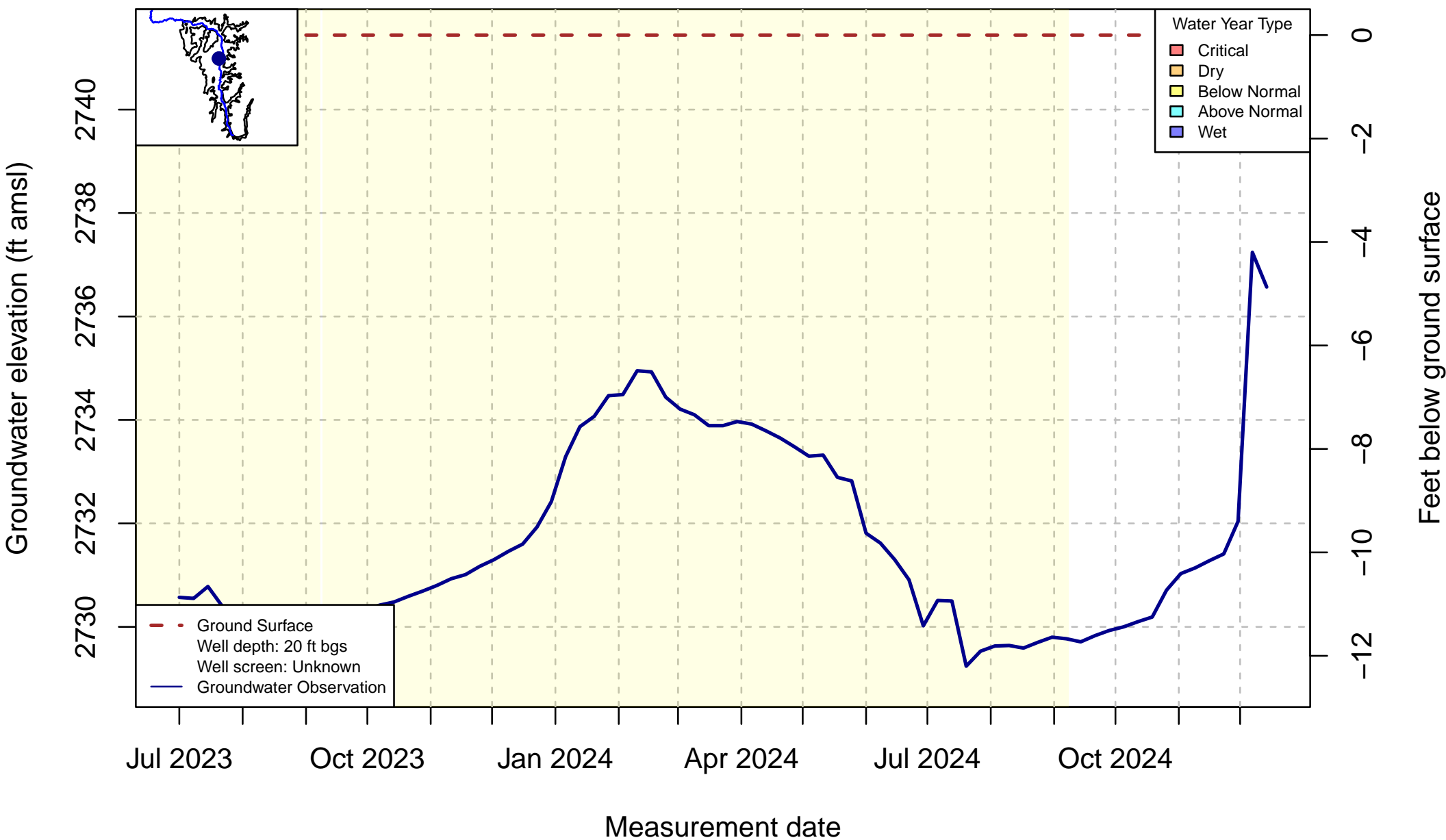
Well Code: SCT_081; SWN: NA



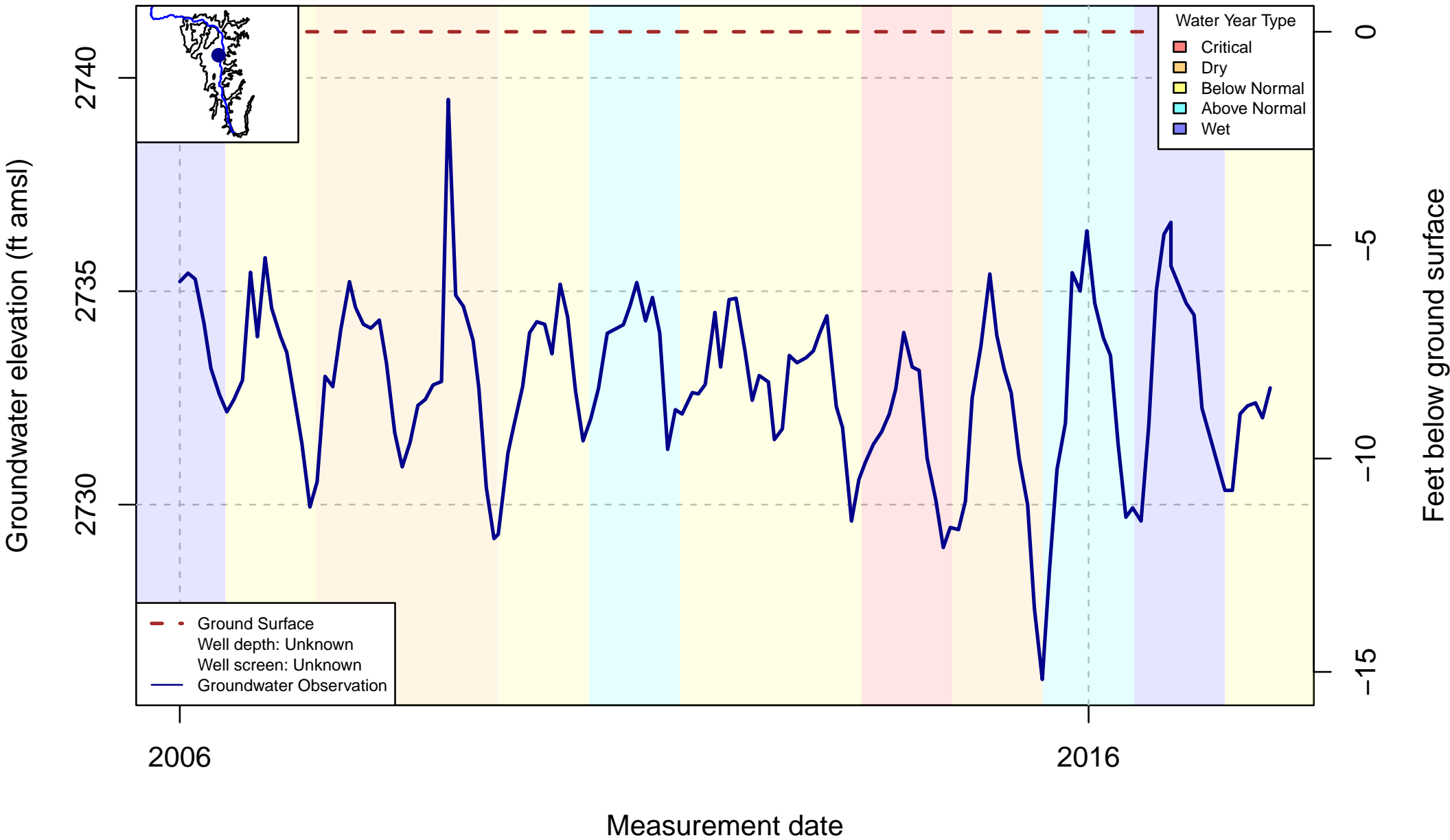
Well Code: G11; SWN: NA



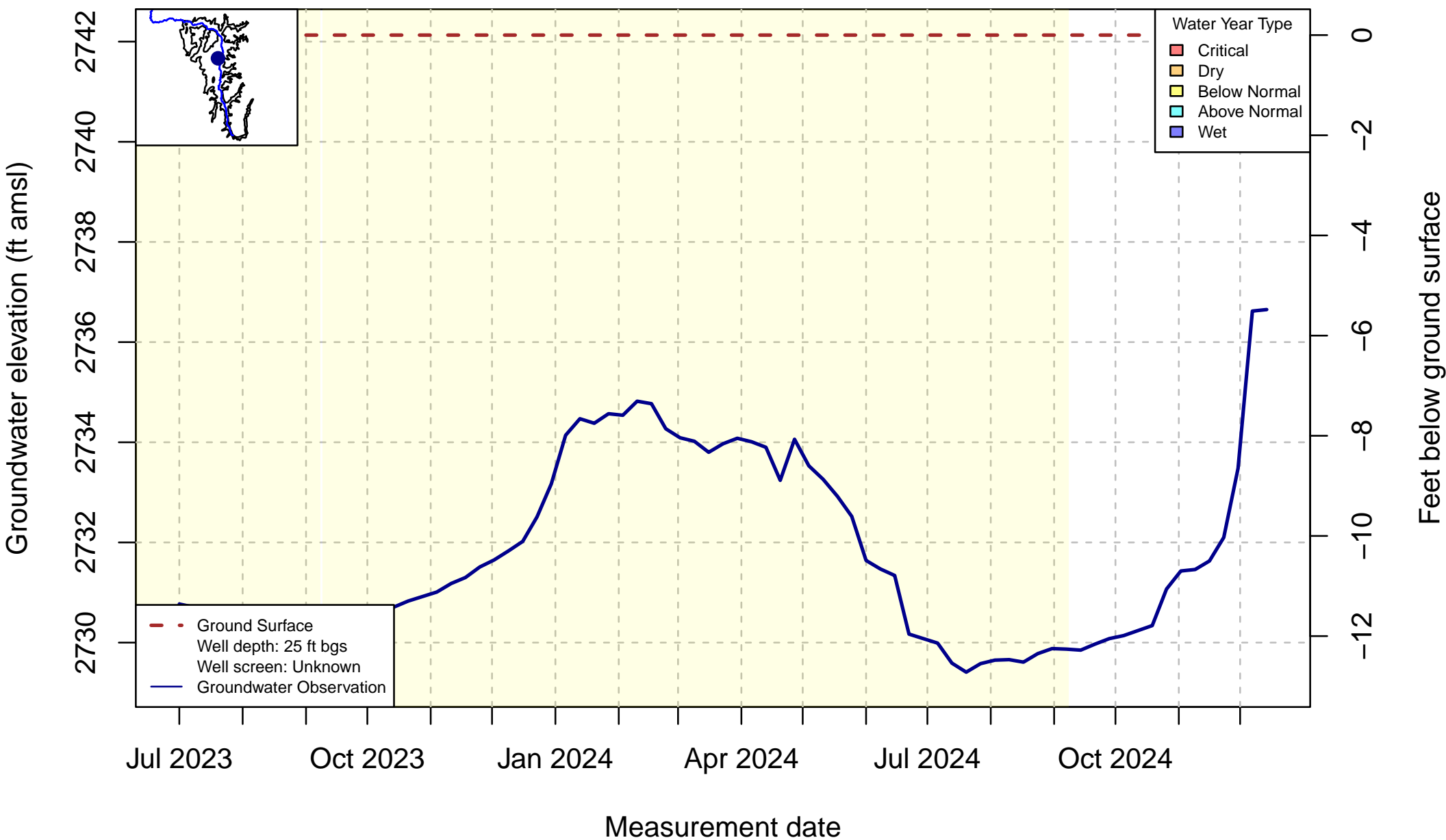
Well Code: SCT_689; SWN: NA



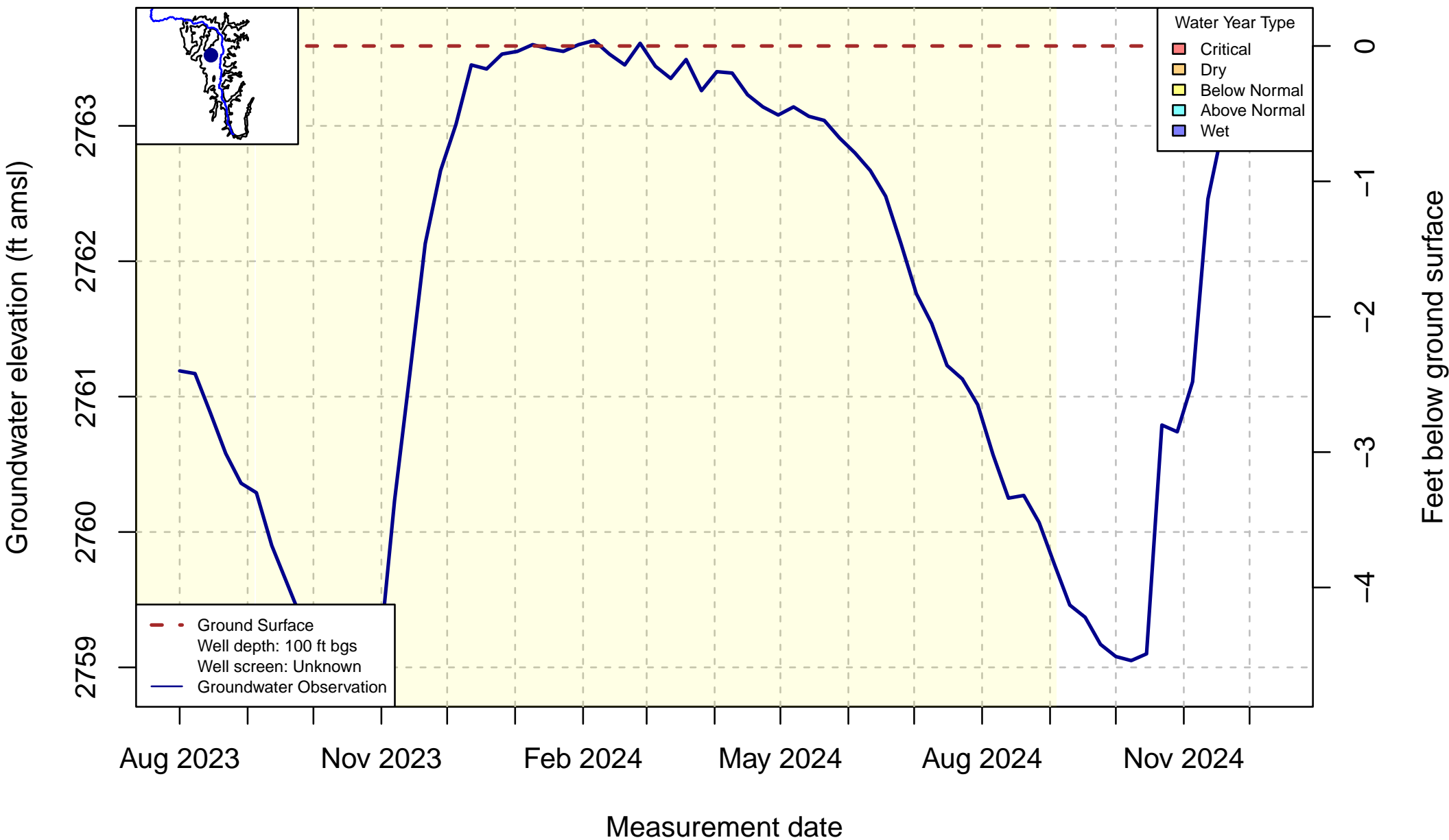
Well Code: I16; SWN: NA



Well Code: SCT_661; SWN: NA



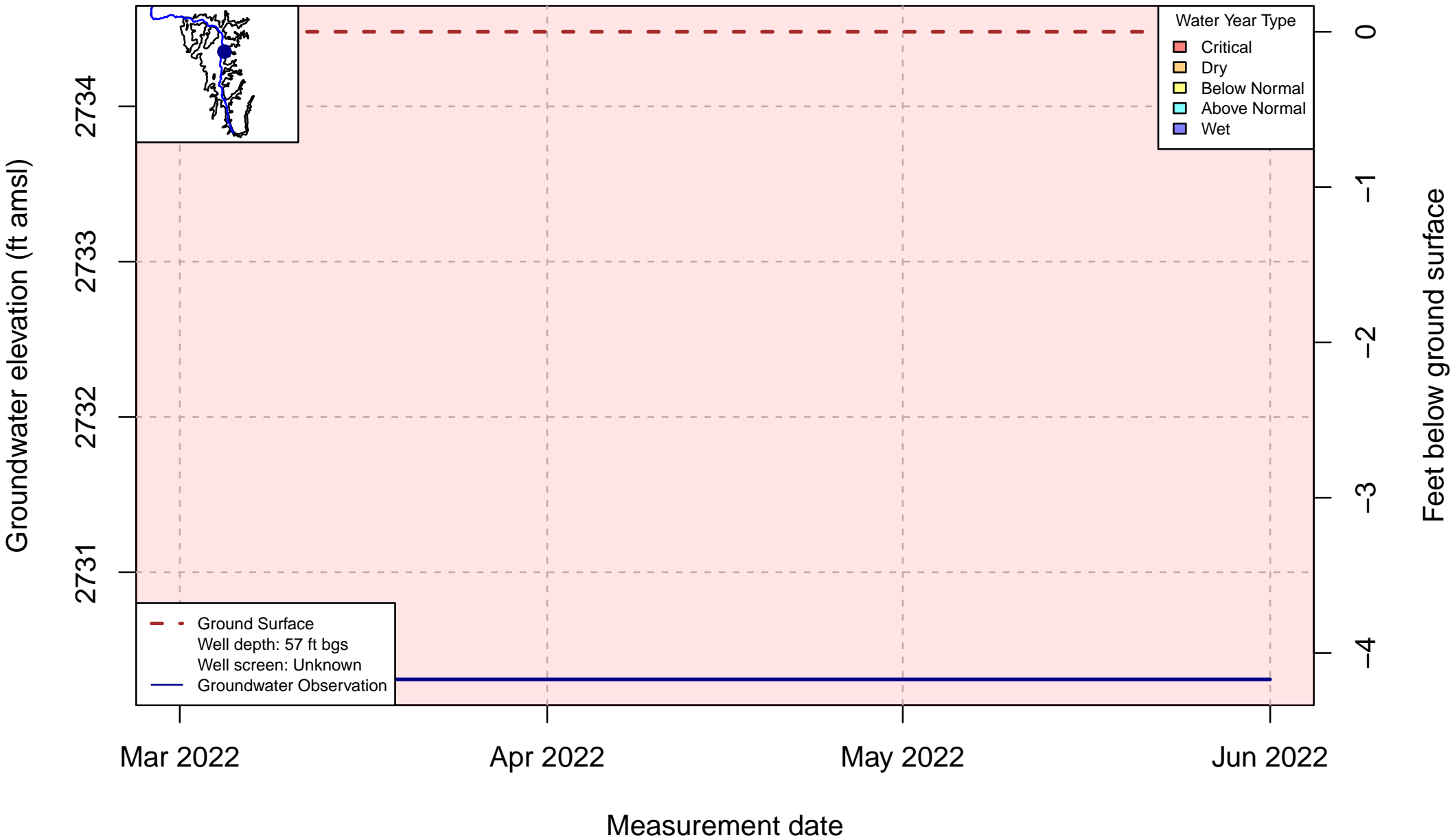
Well Code: SCT_660; SWN: NA



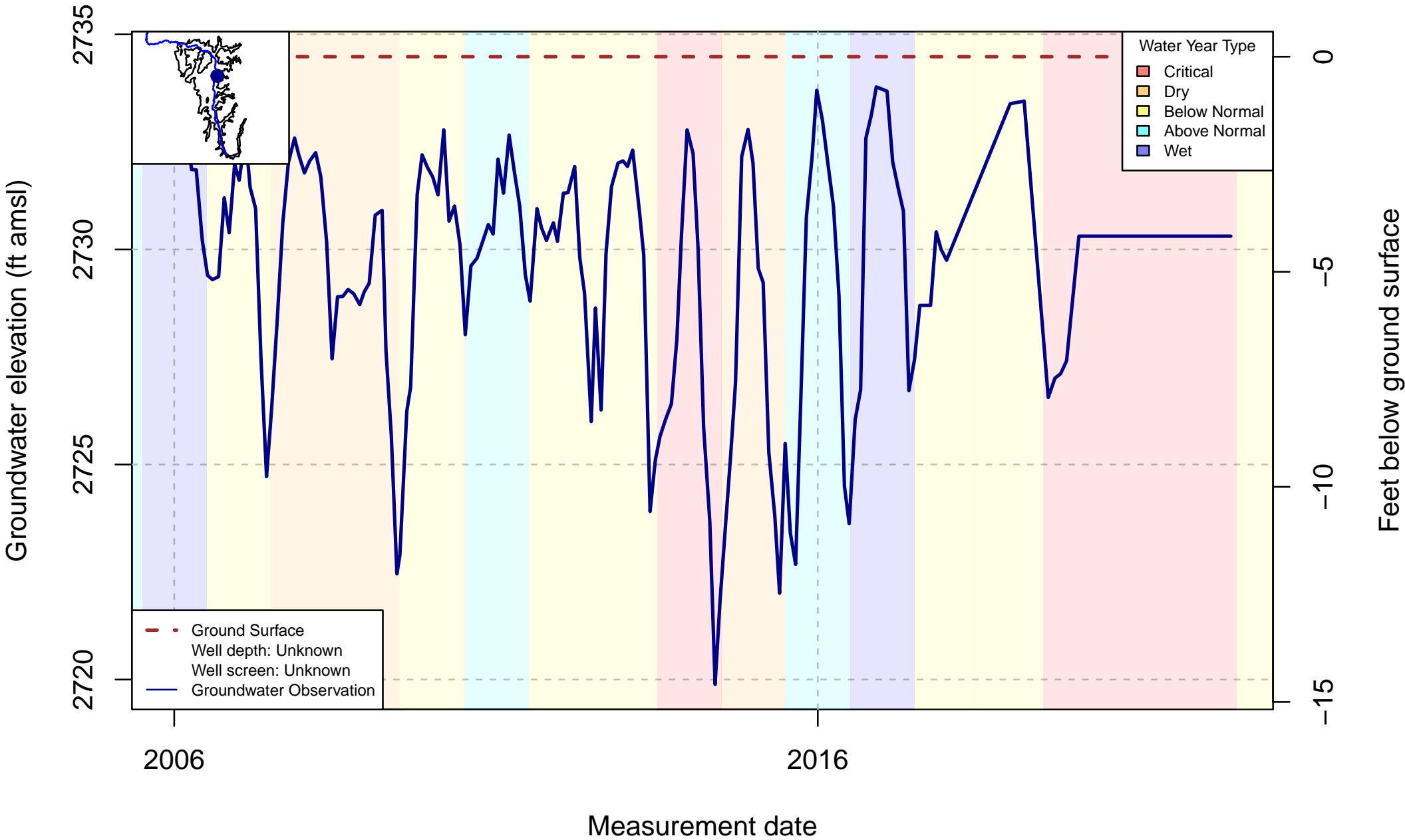
Well Code: SCT_794; SWN: NA



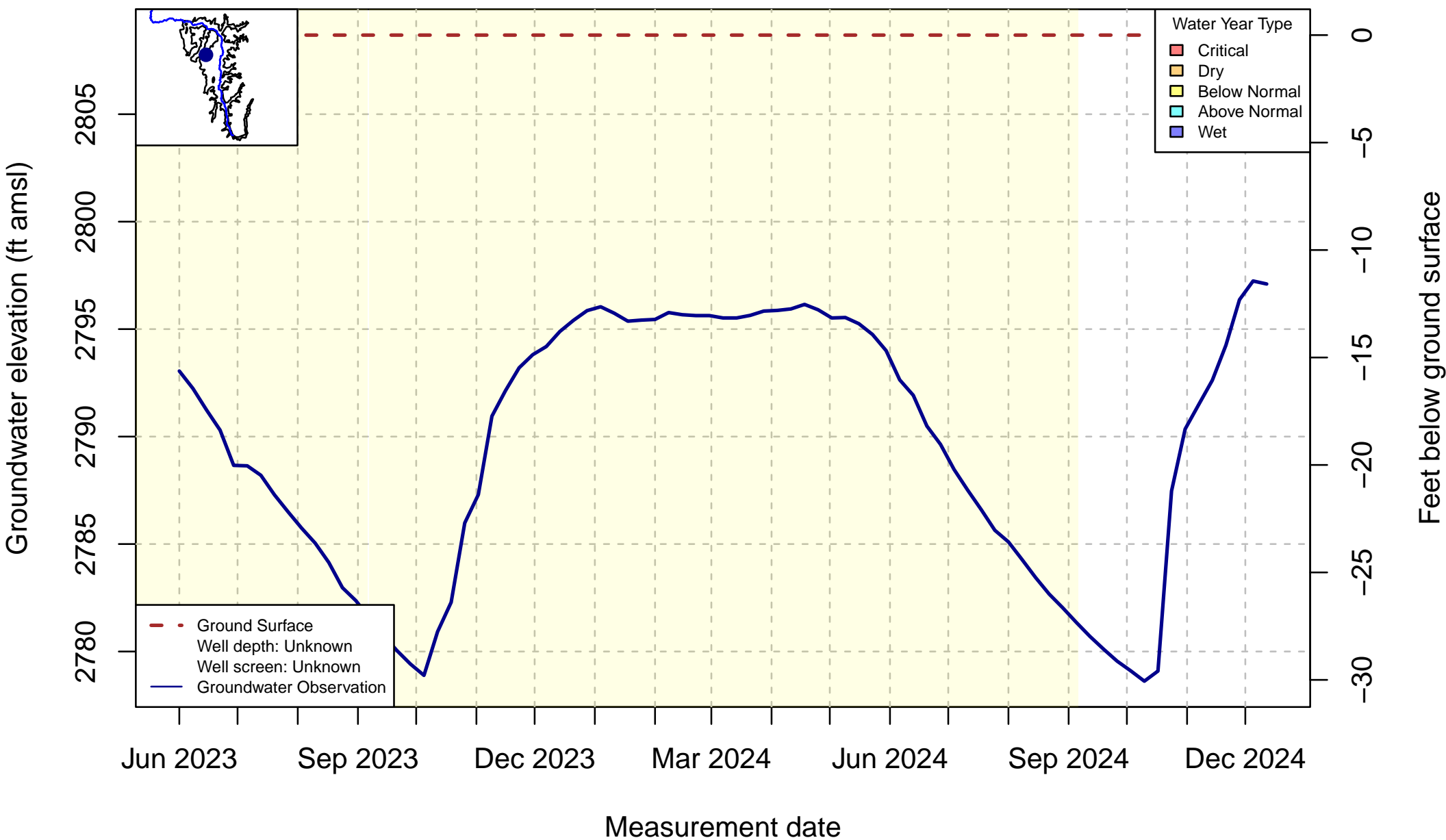
Well Code: 415413N1228366W004; SWN: NA



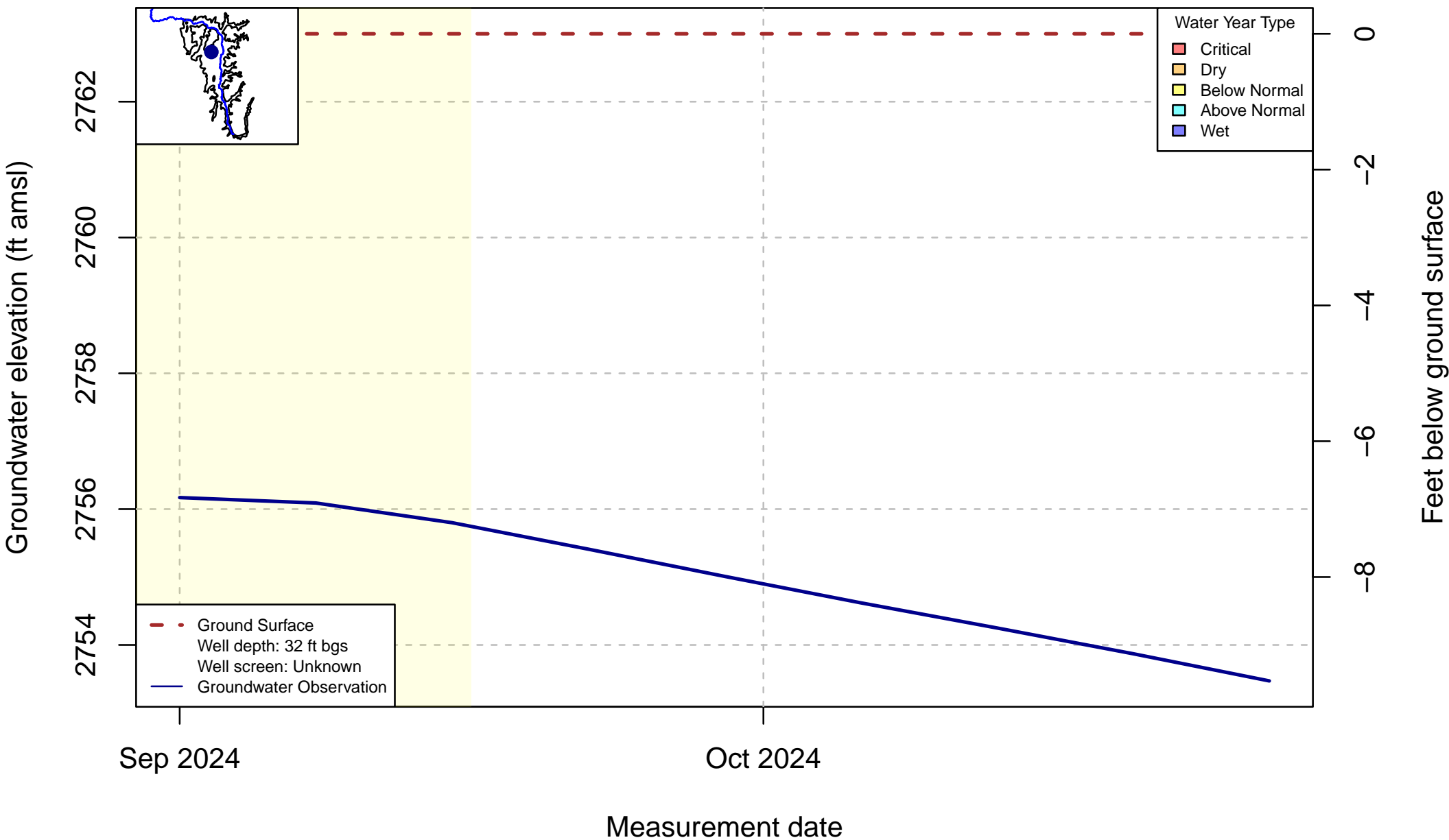
Well Code: Q32; SWN: NA



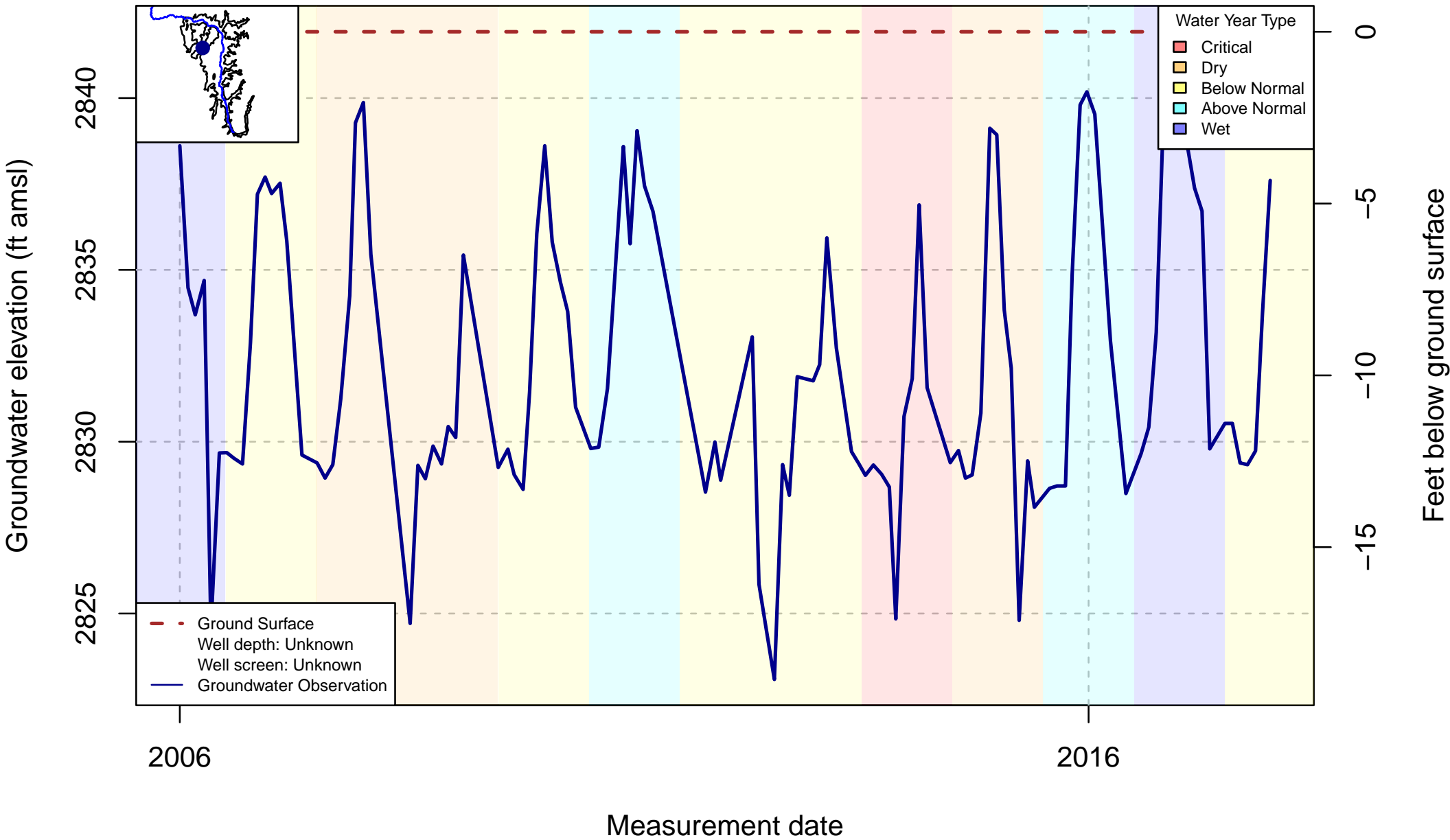
Well Code: SCT_688; SWN: NA



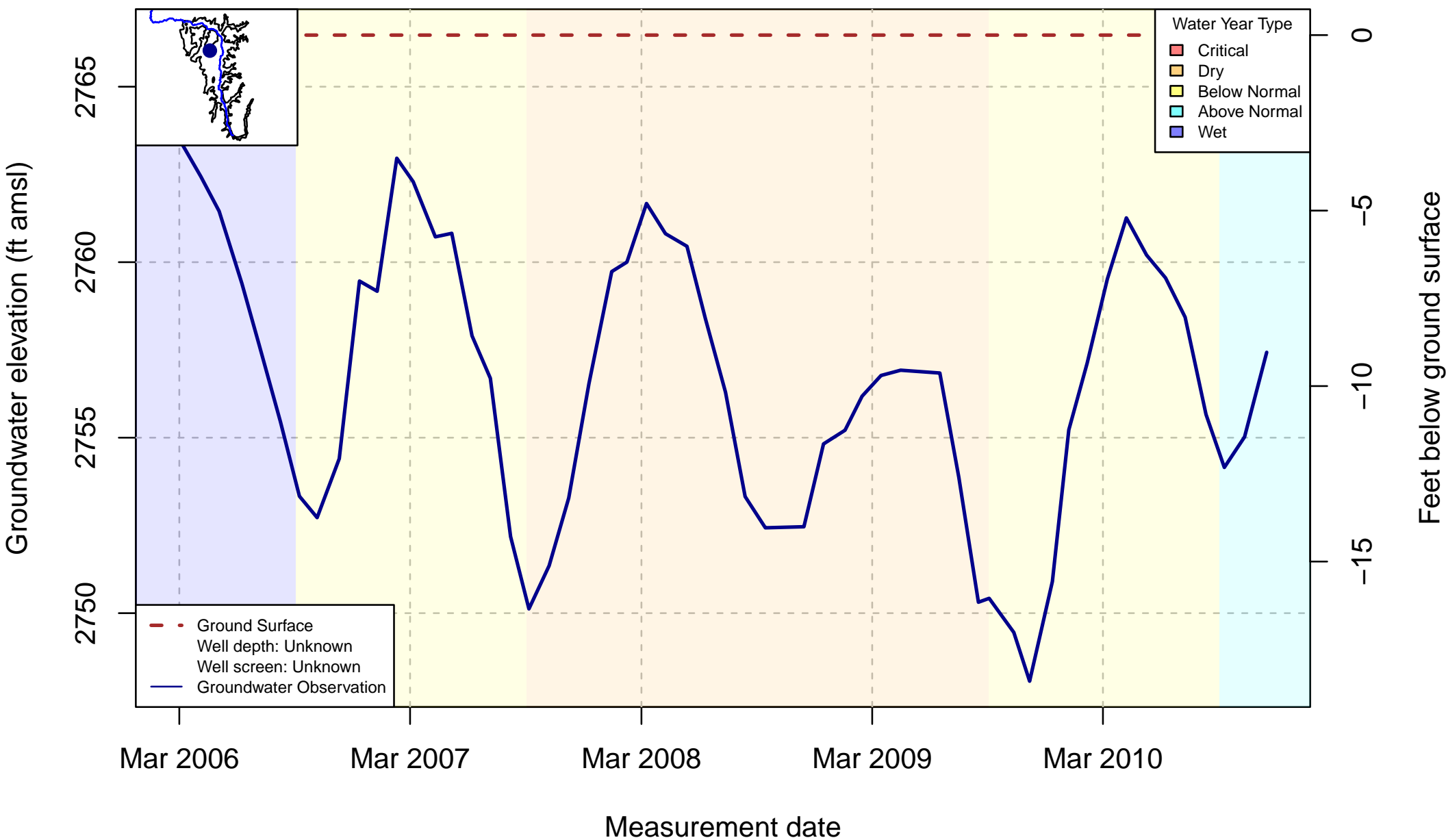
Well Code: SCT_056; SWN: NA



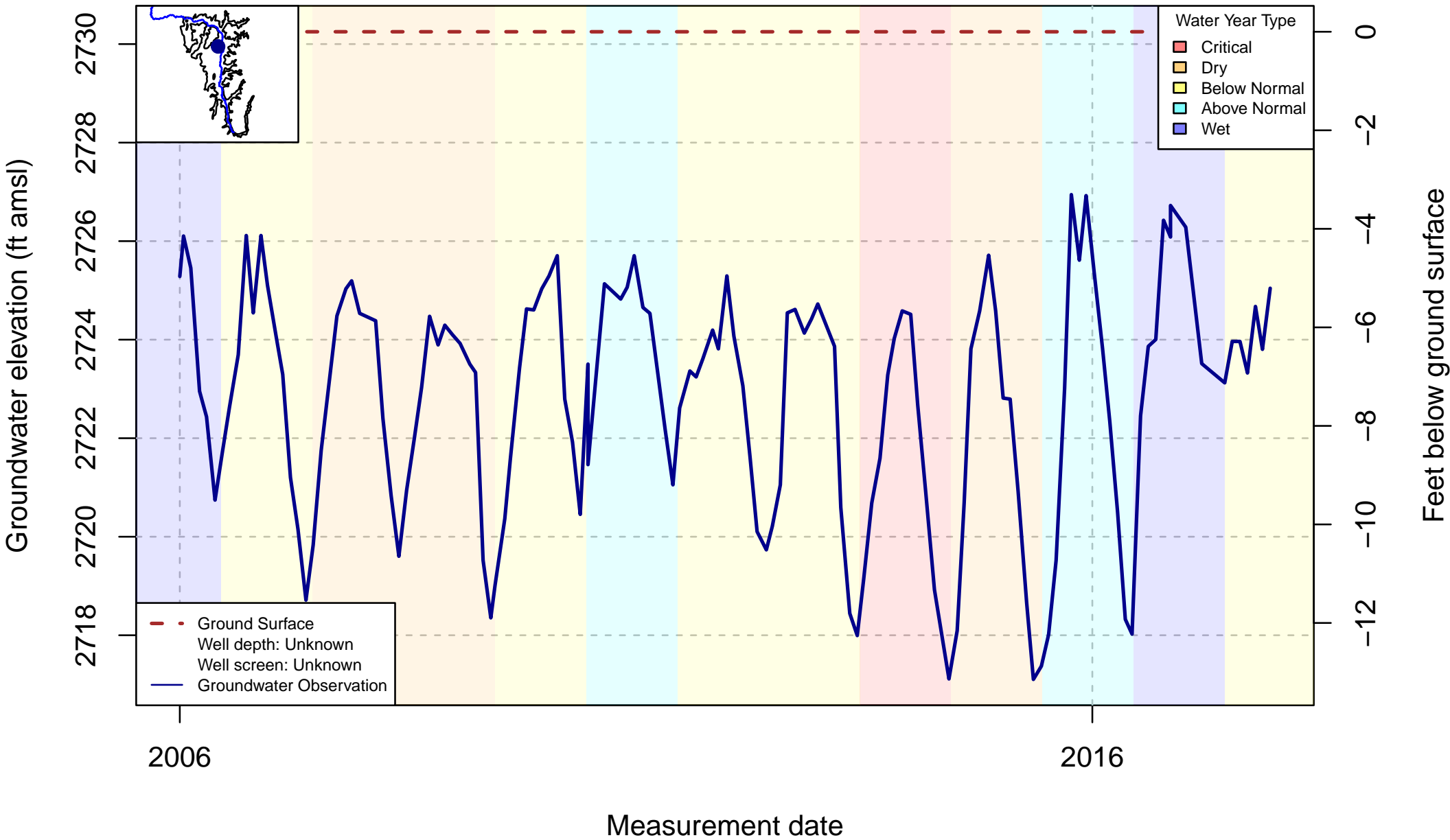
Well Code: C26; SWN: NA



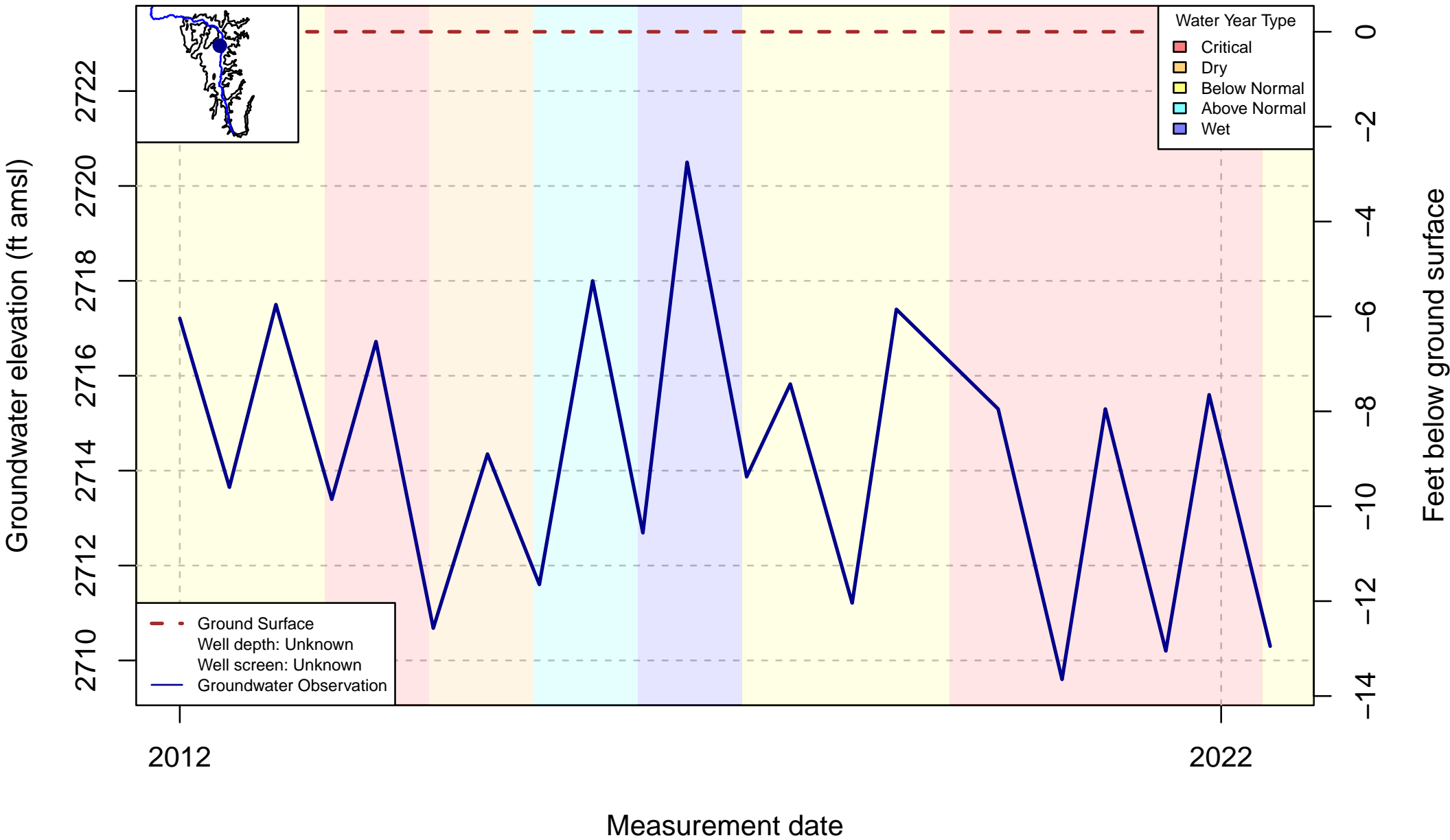
Well Code: B3; SWN: NA



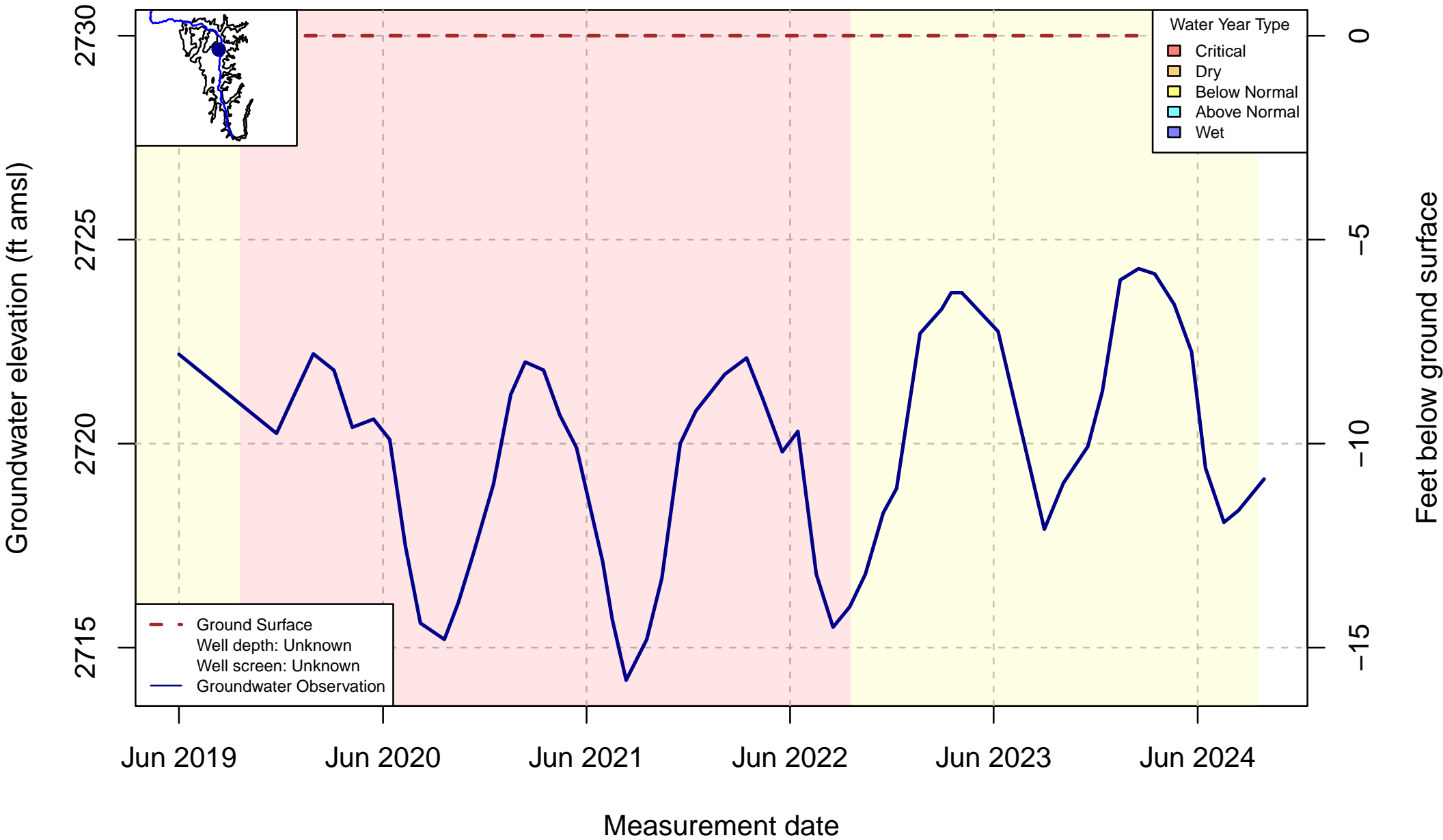
Well Code: O32; SWN: NA



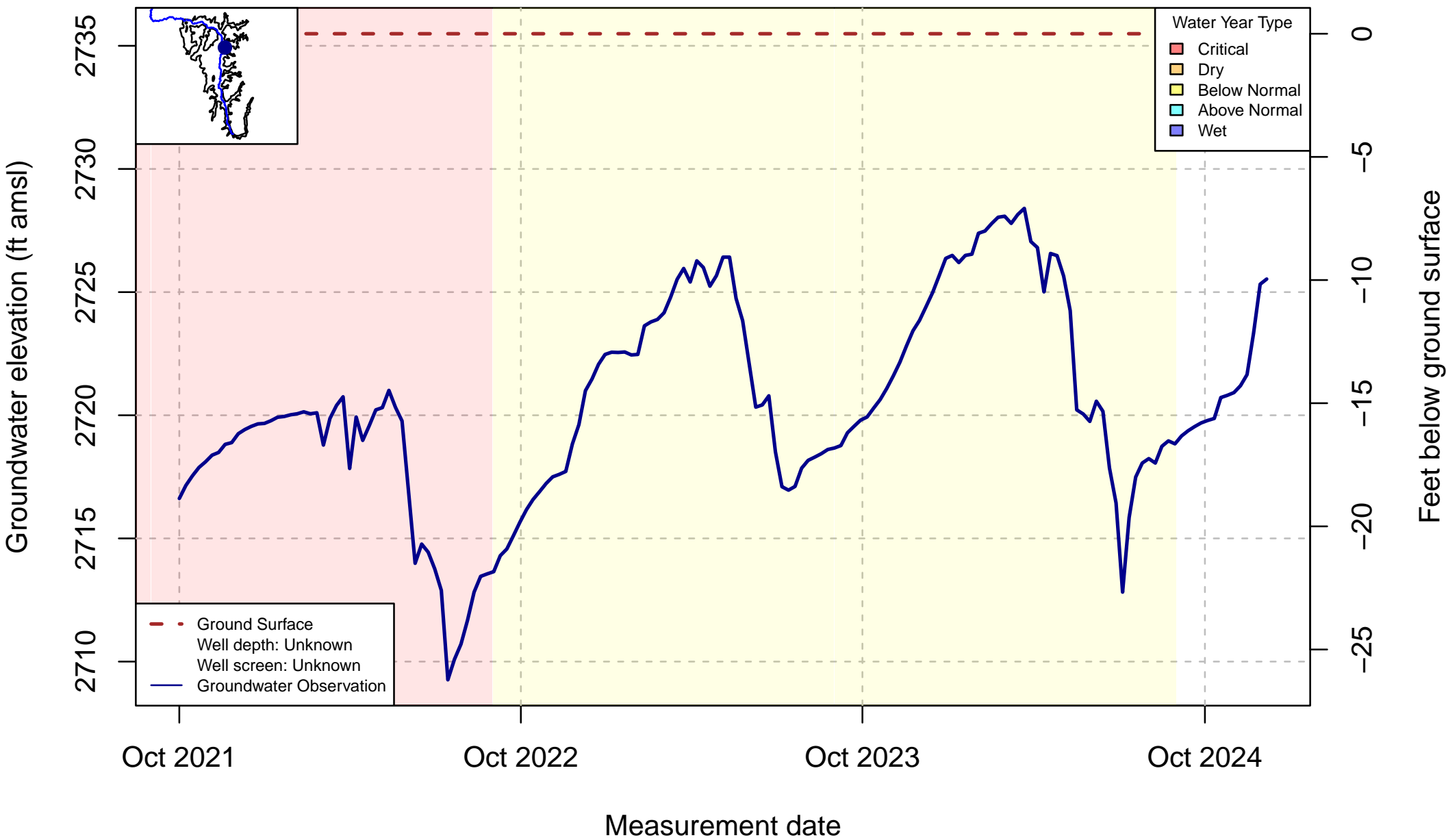
Well Code: 413348N1225123W001; SWN: NA



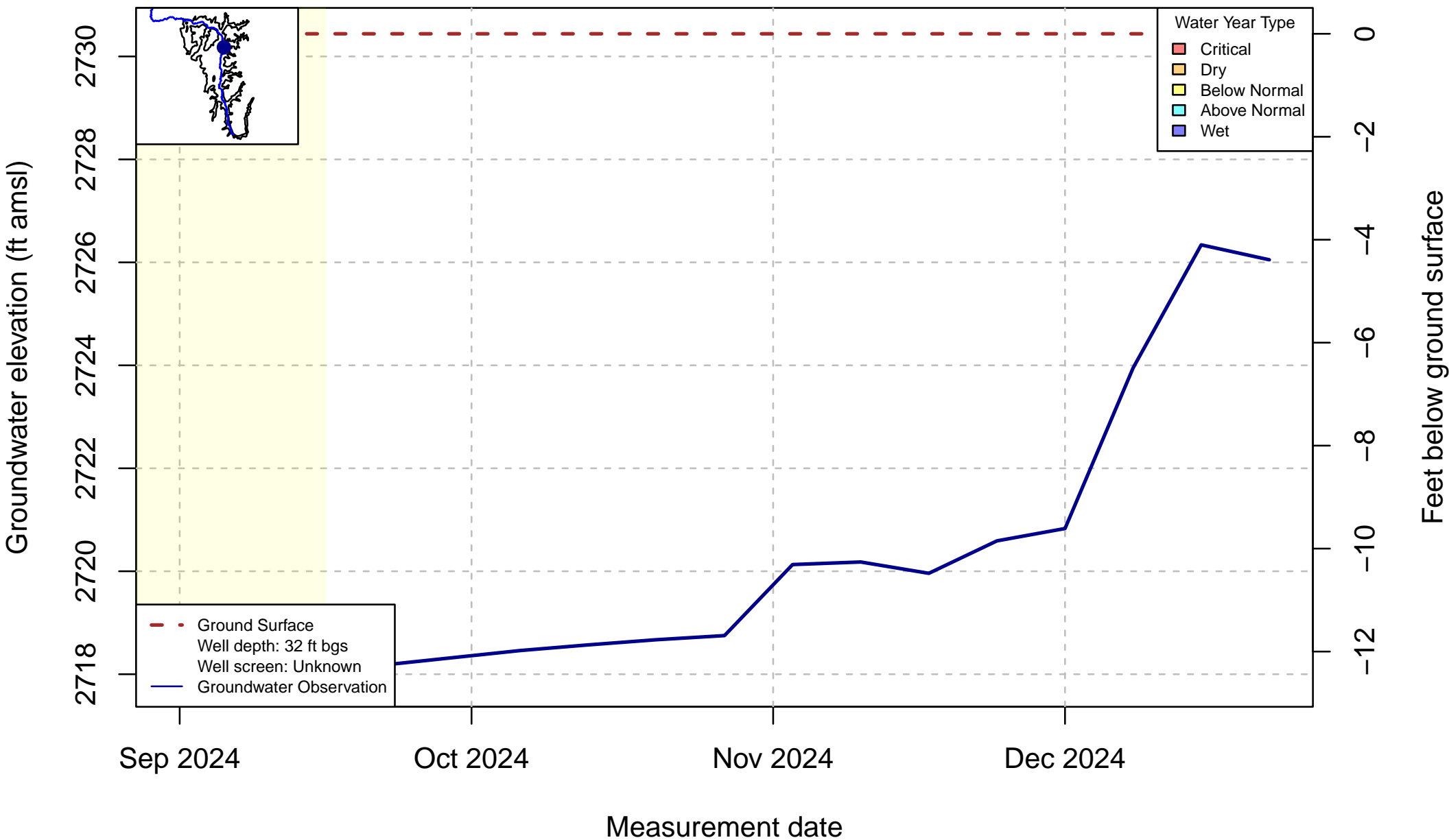
Well Code: R23; SWN: NA



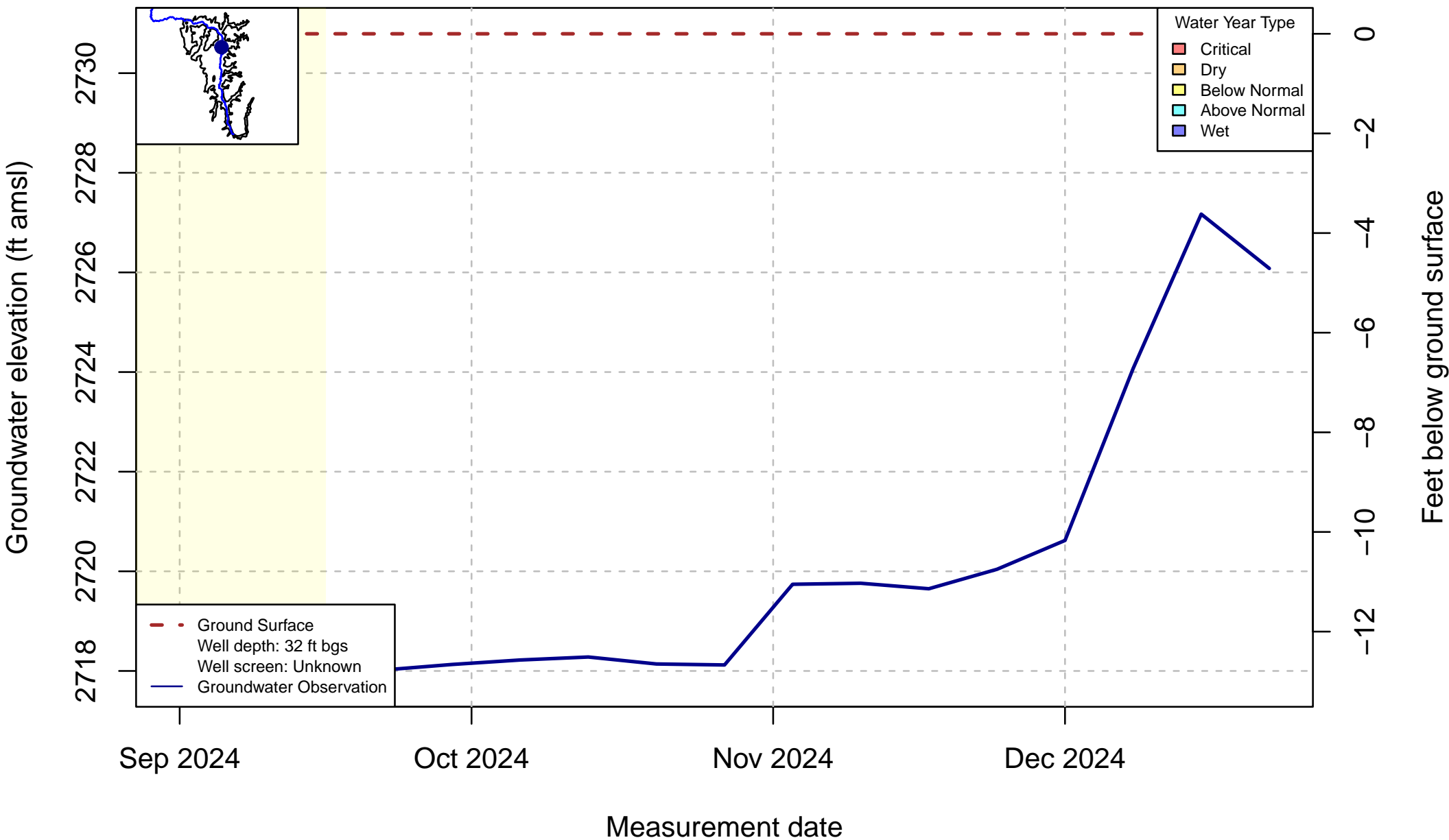
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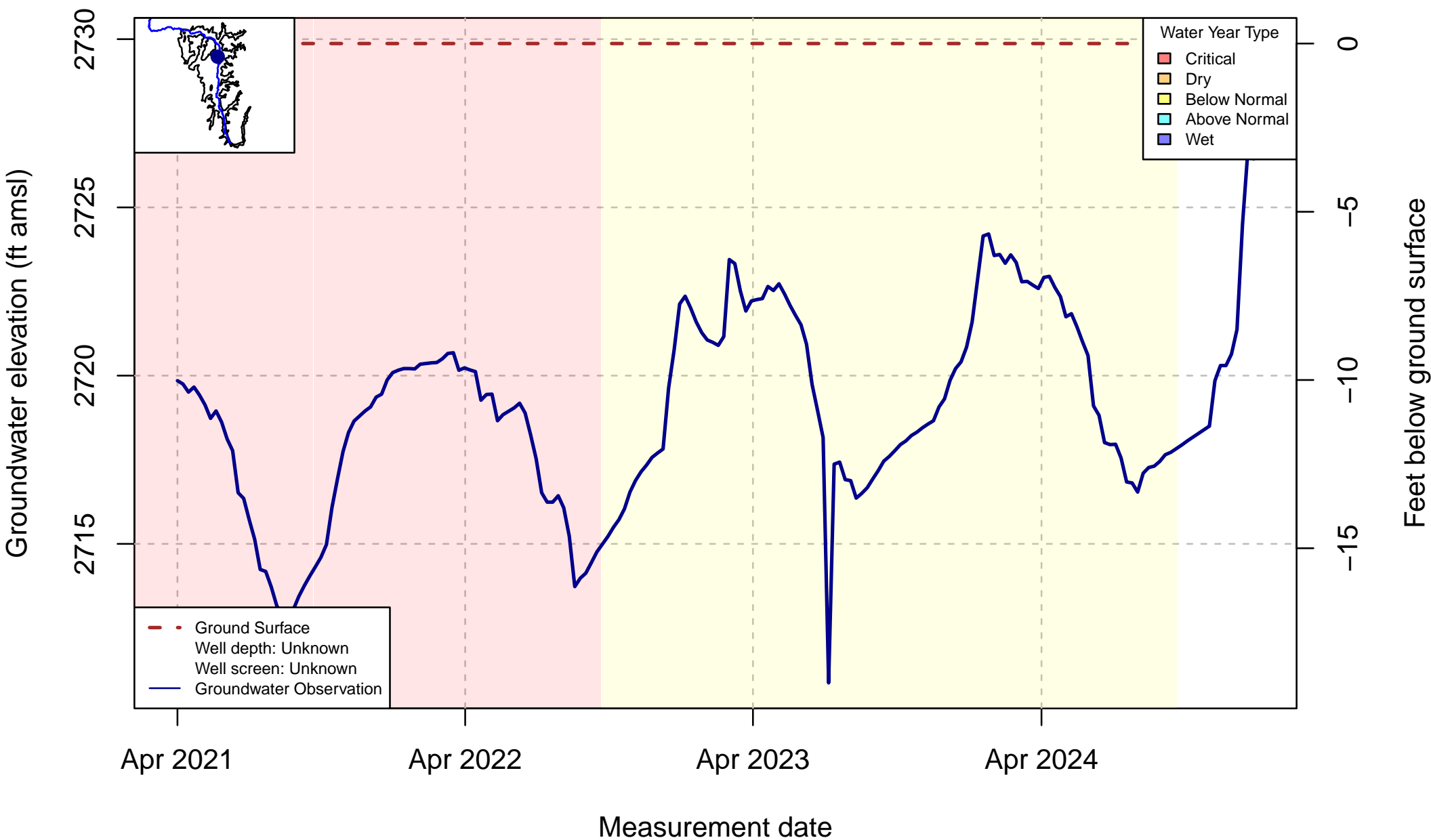
Well Code: SCT_156; SWN: NA



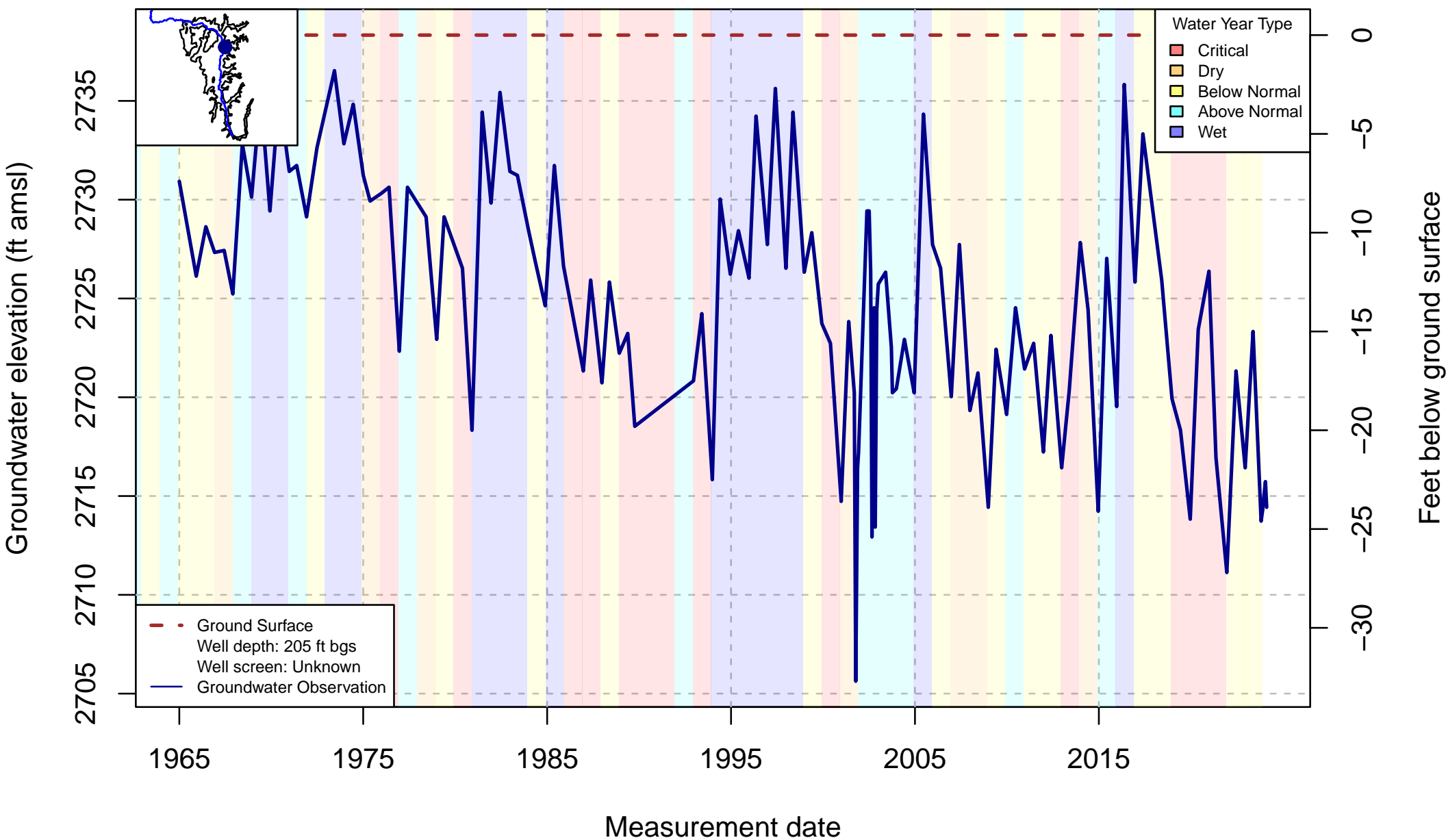
Well Code: SCT_064; SWN: NA



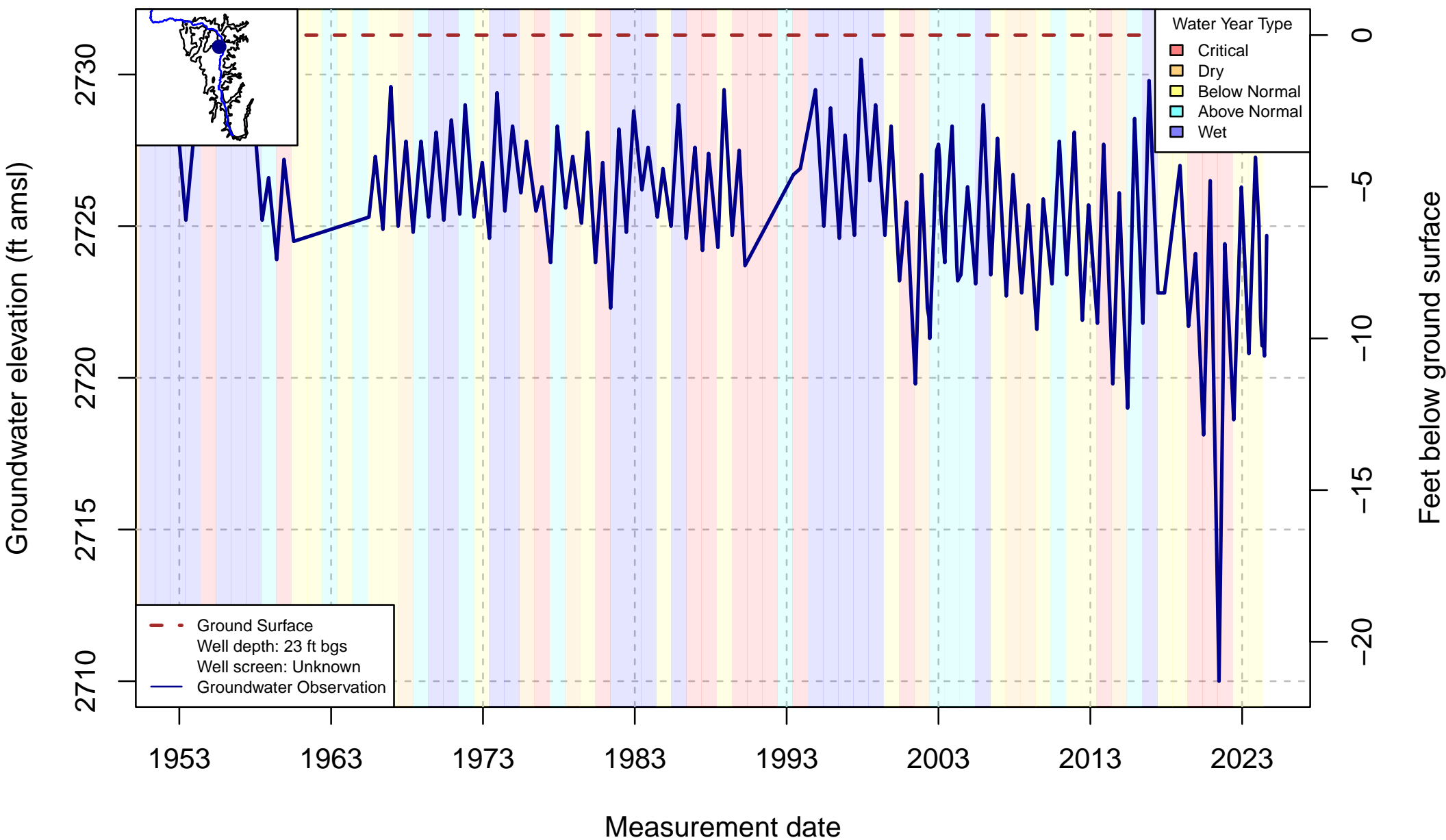
Well Code: SCT_170; SWN: NA



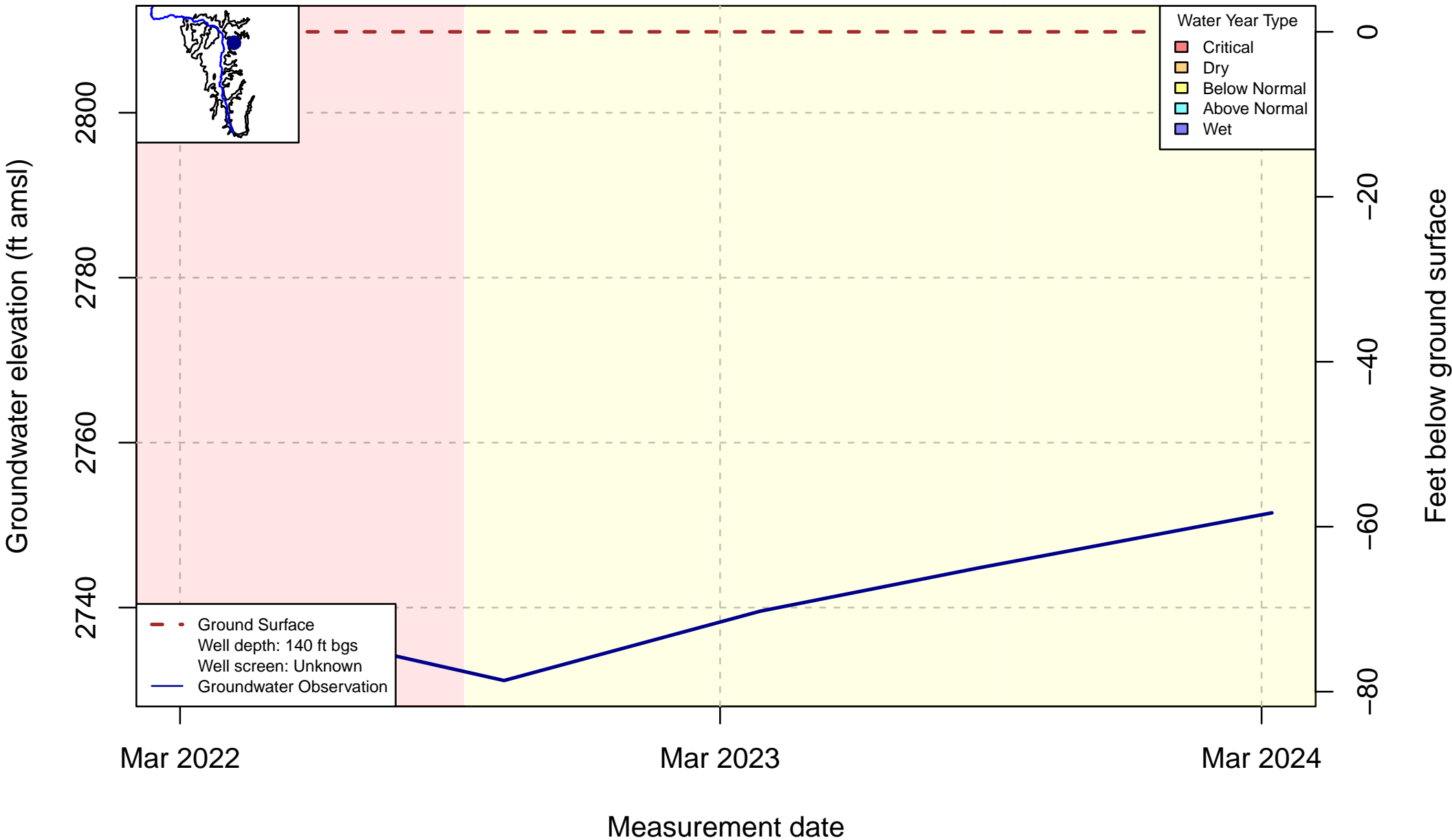
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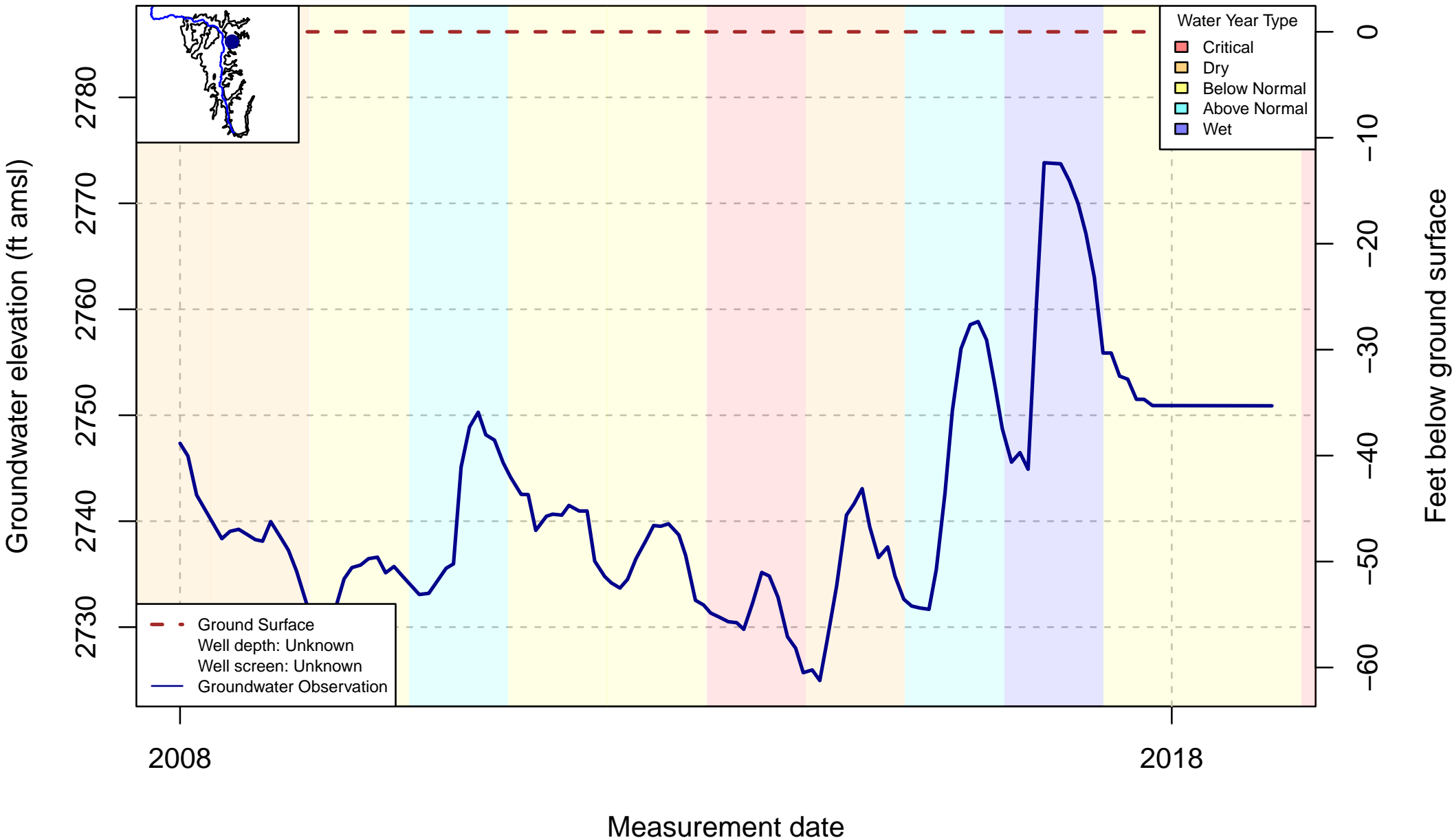
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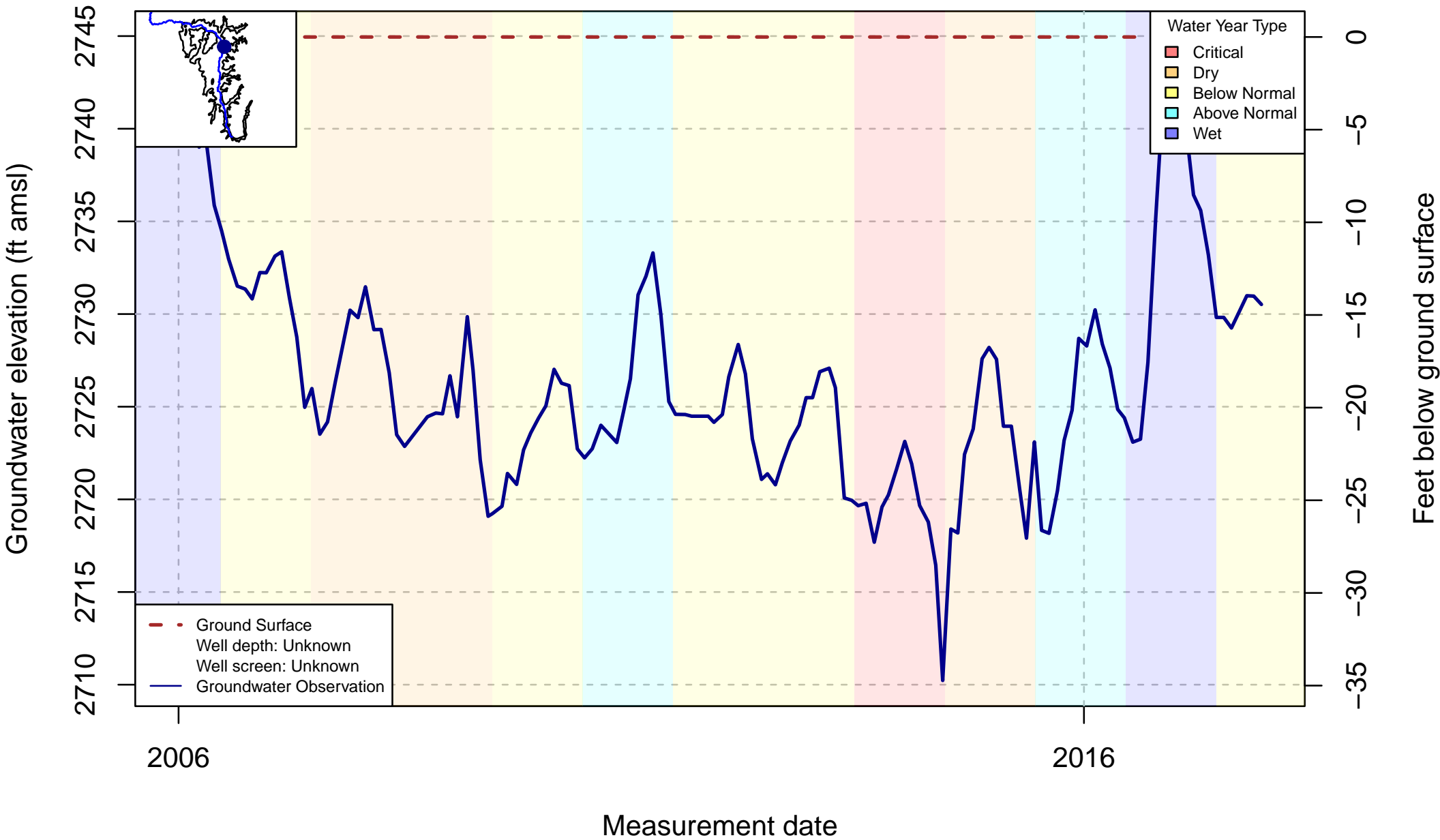
Measurement date



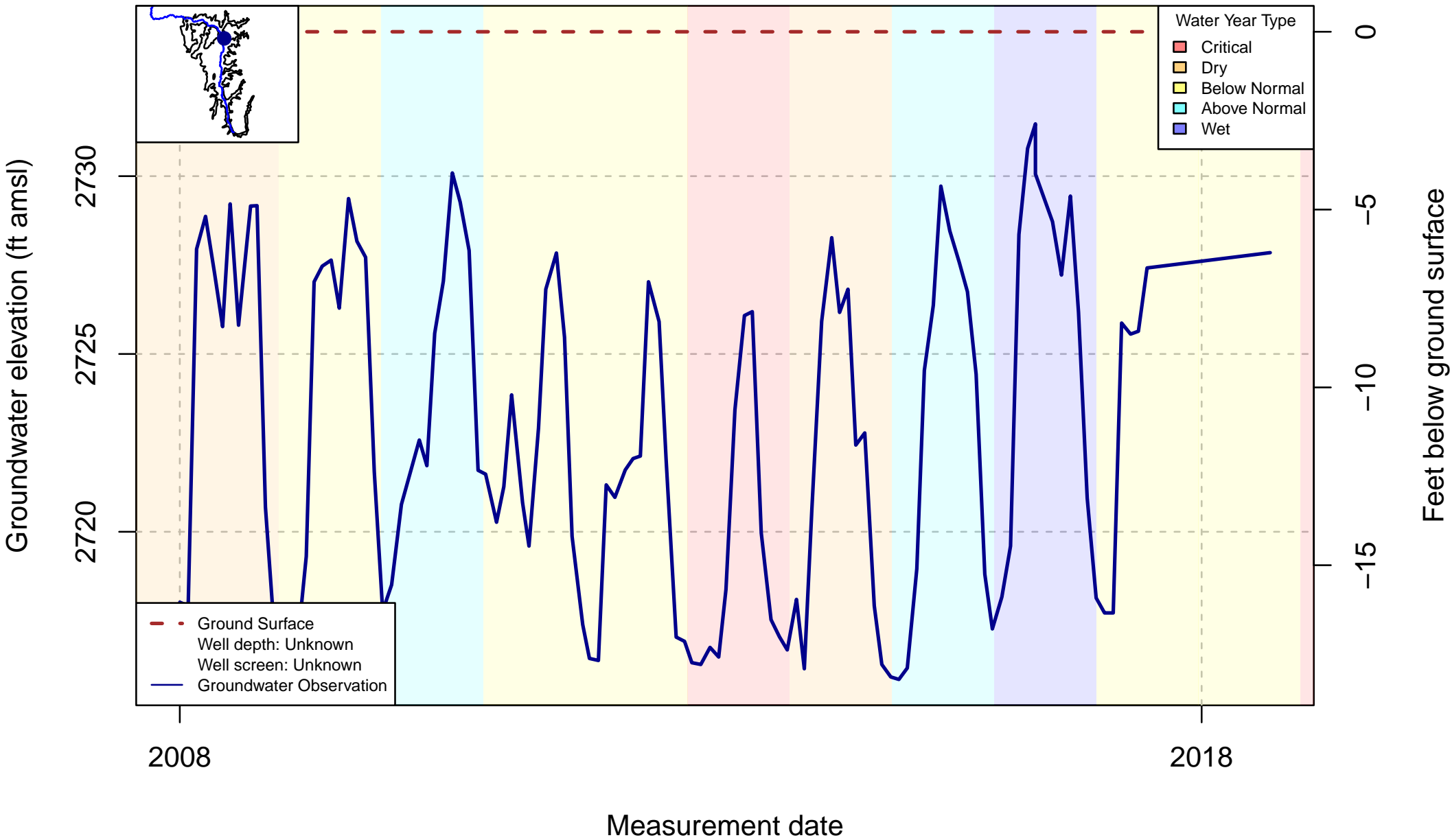
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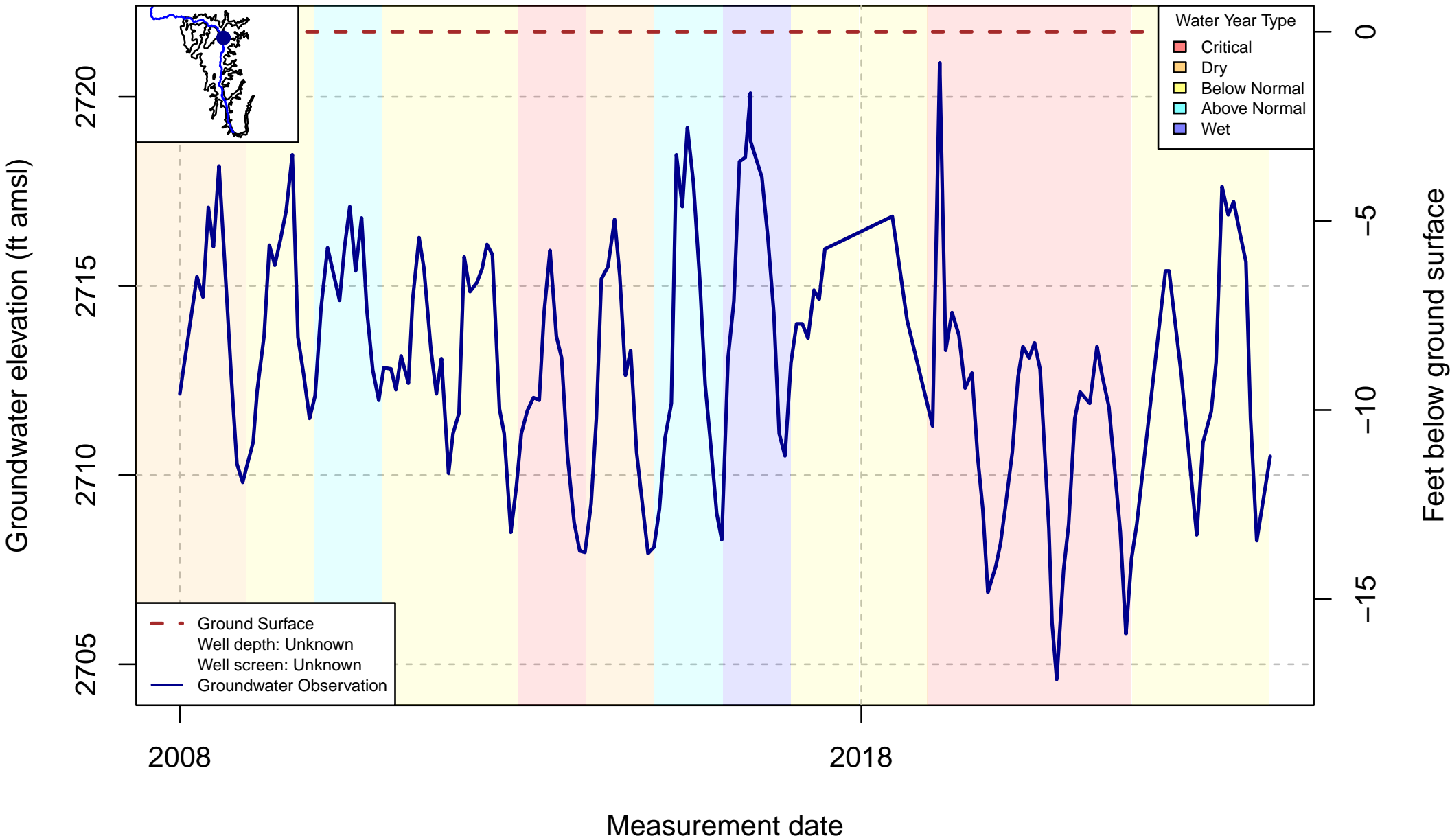
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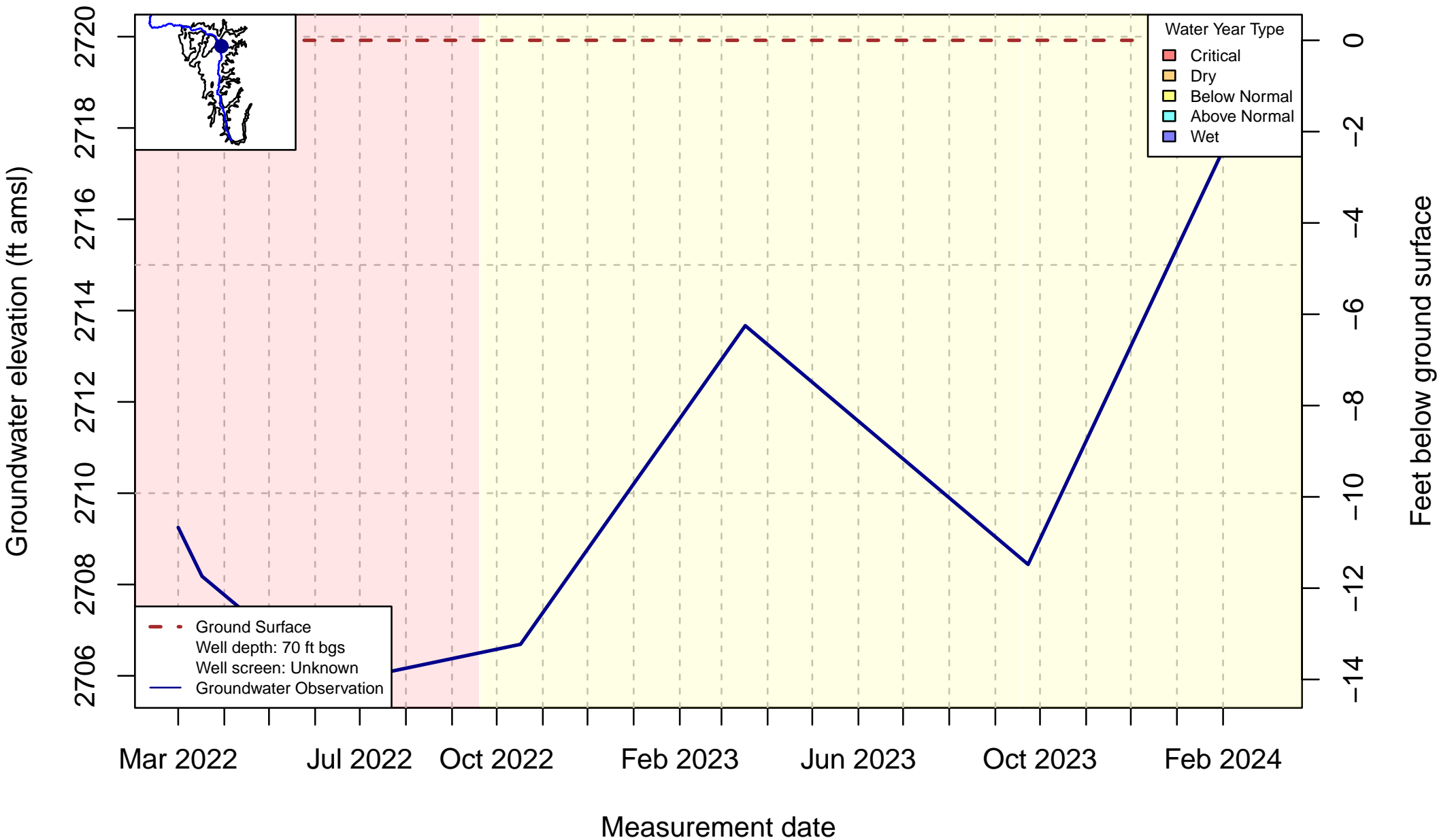
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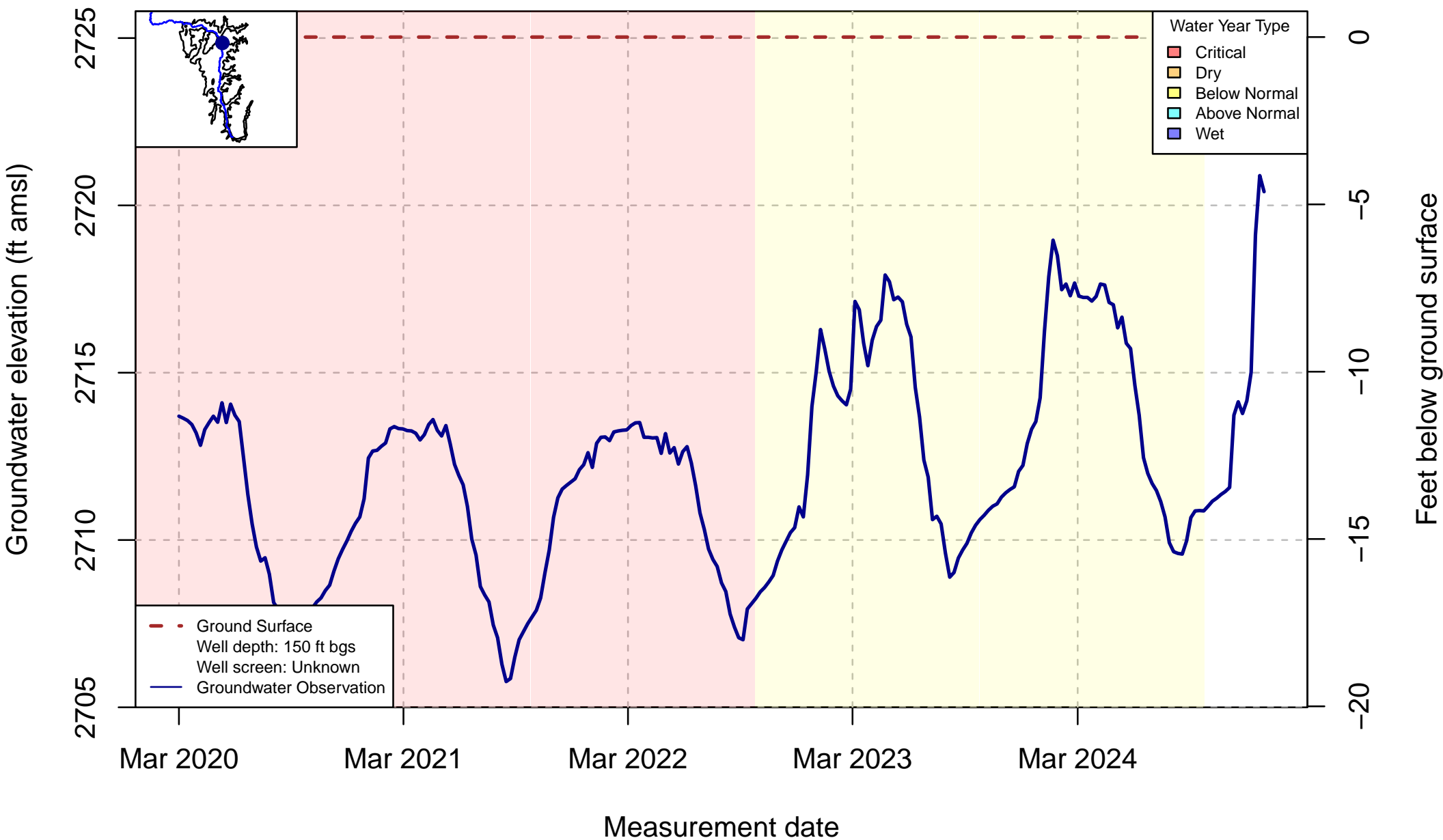
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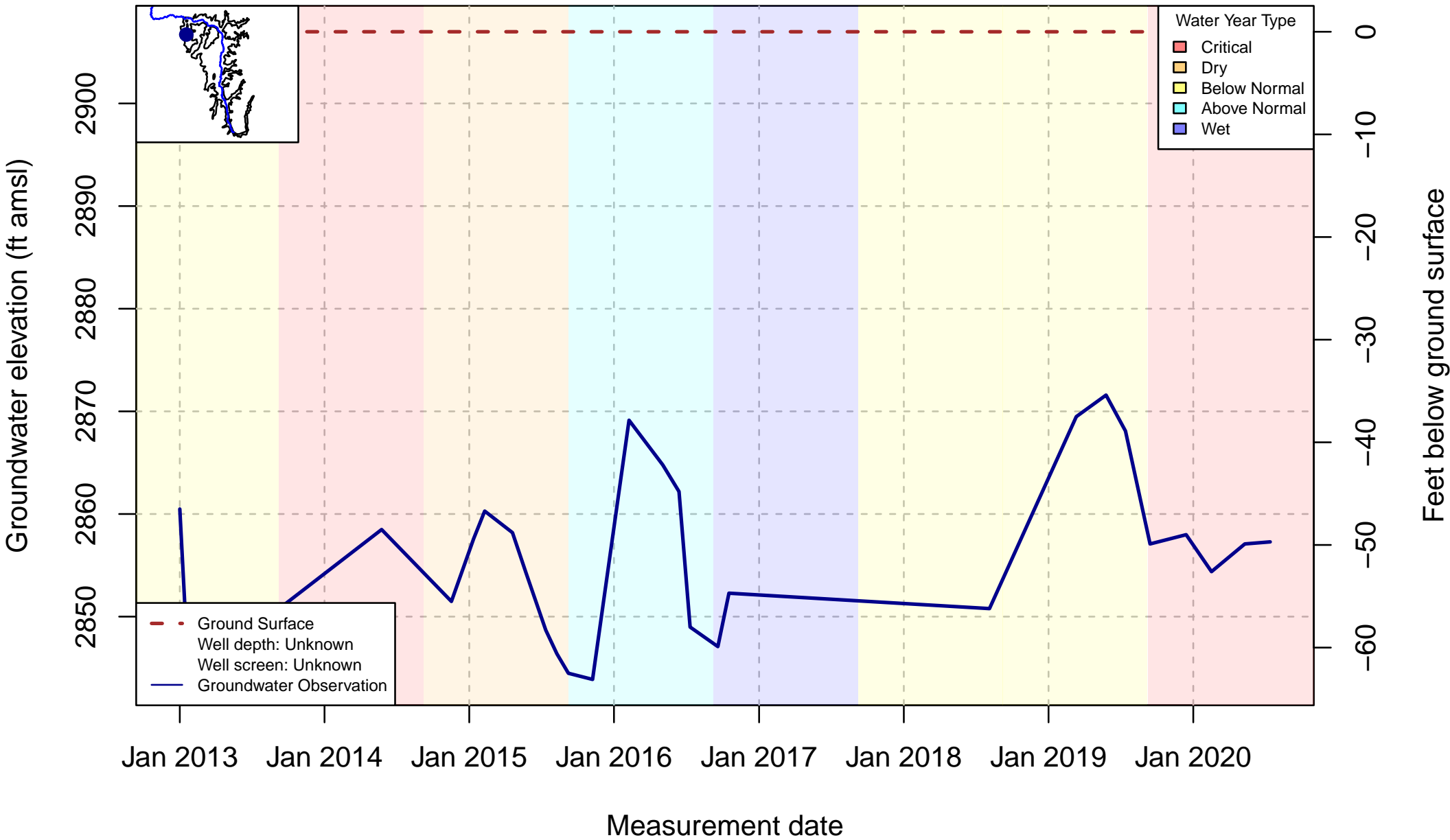
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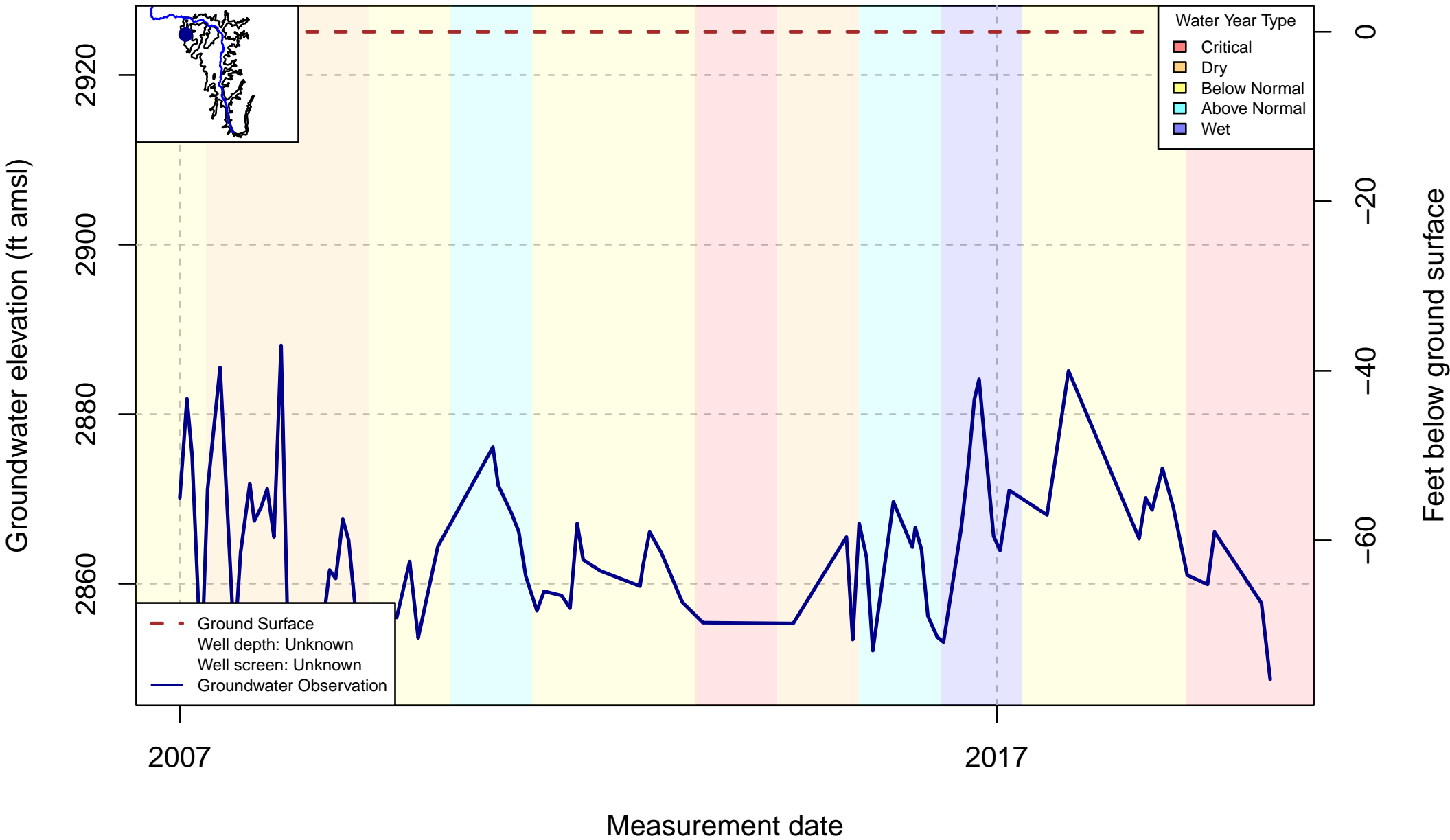
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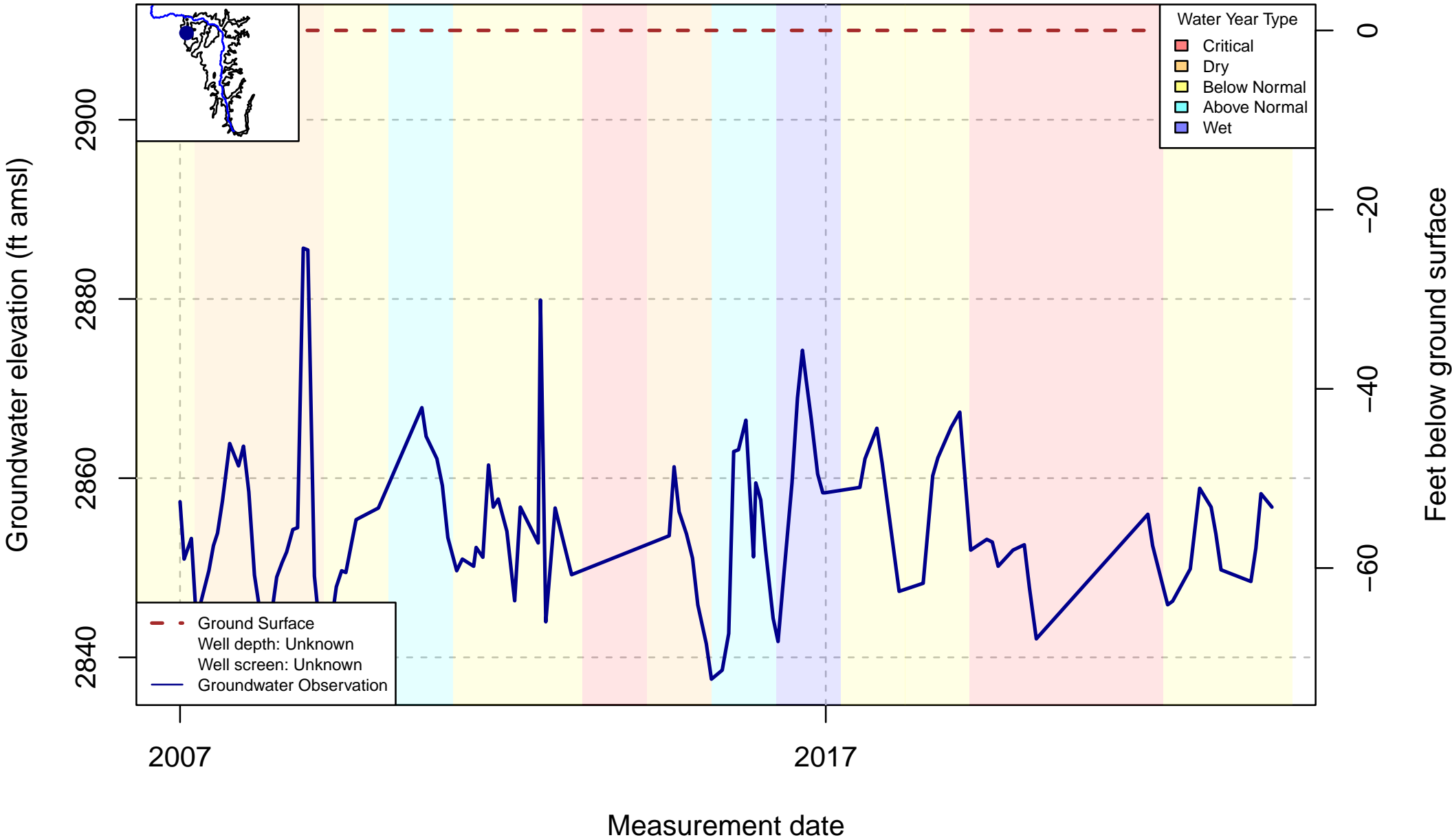
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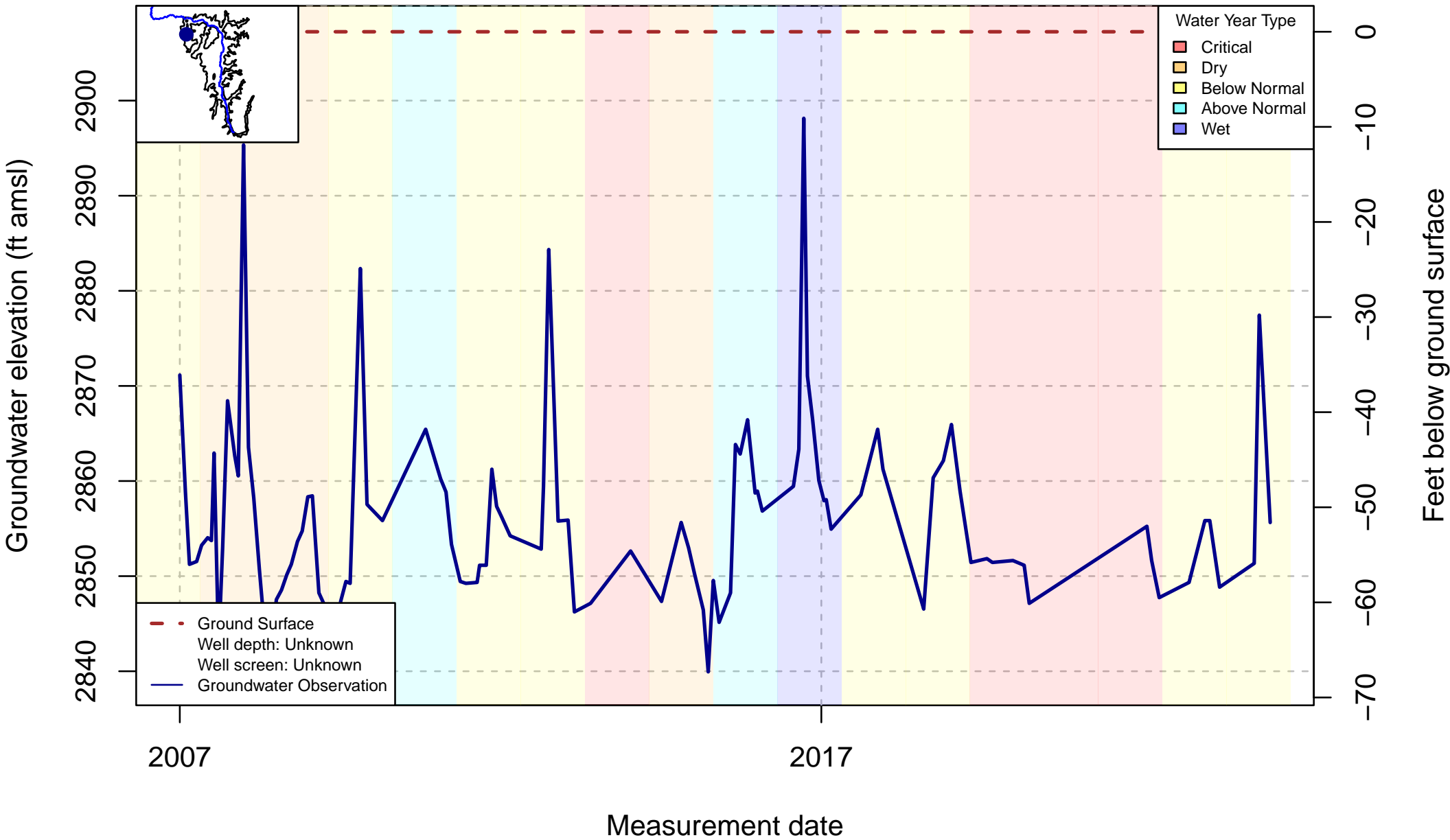
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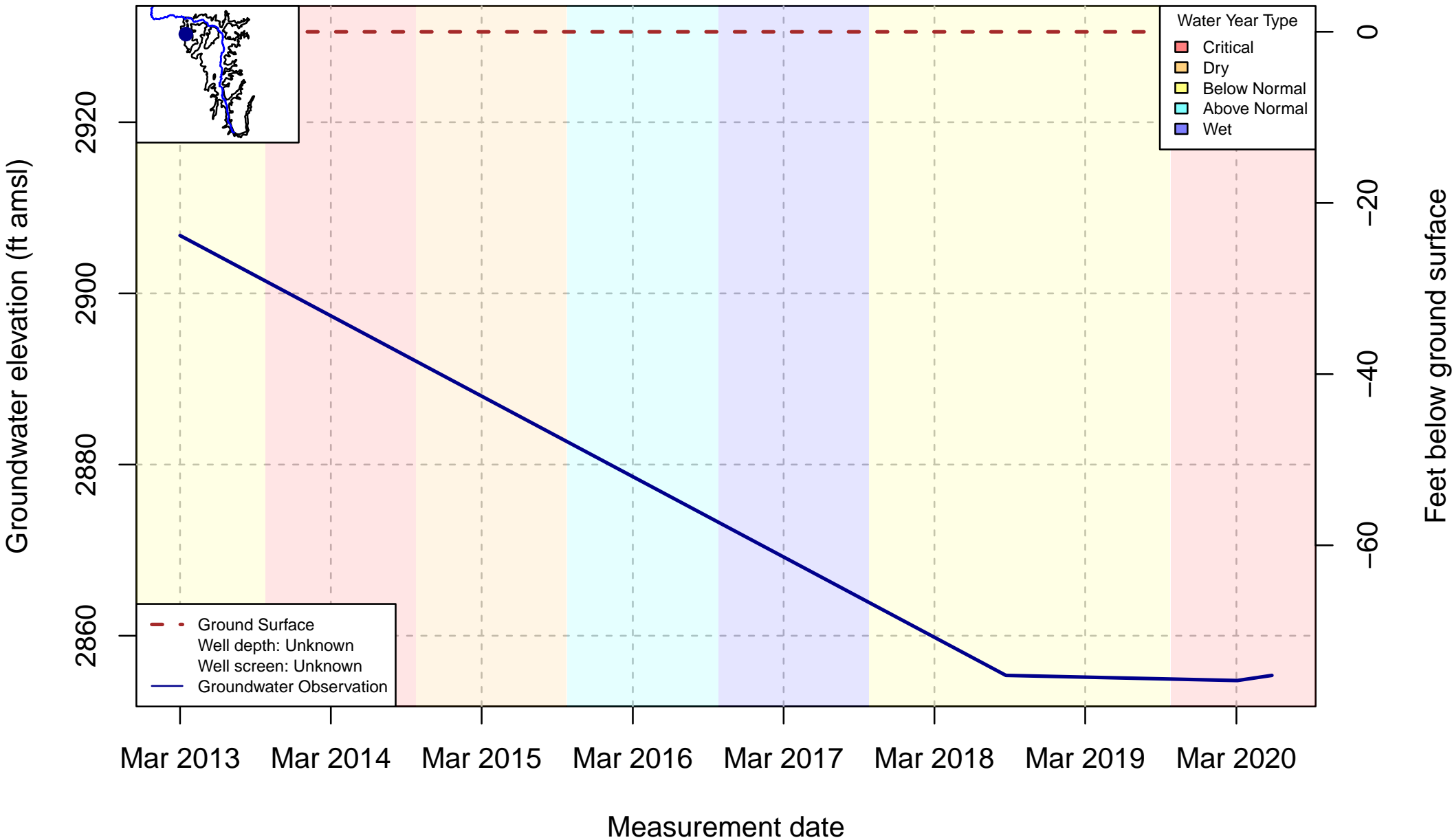
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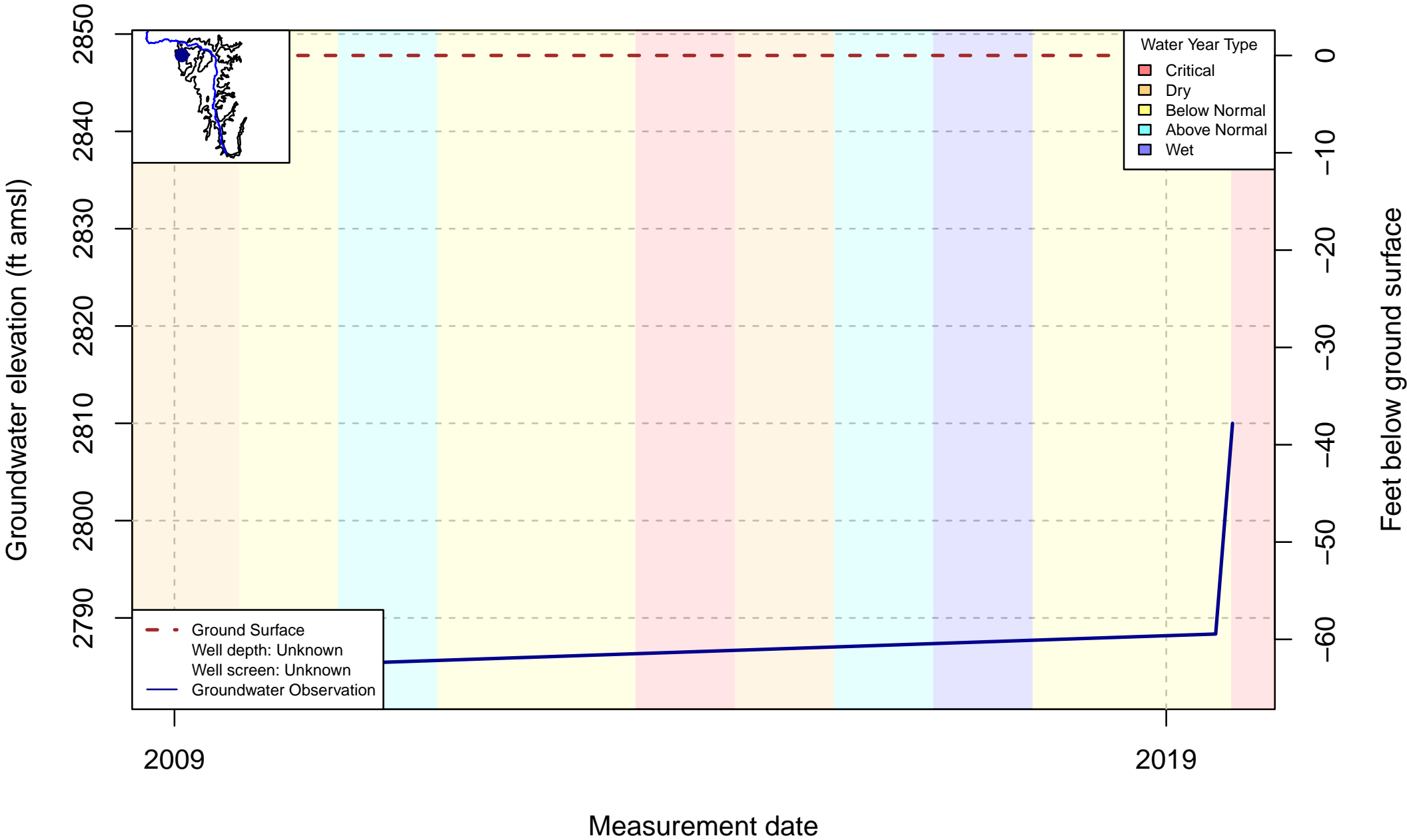
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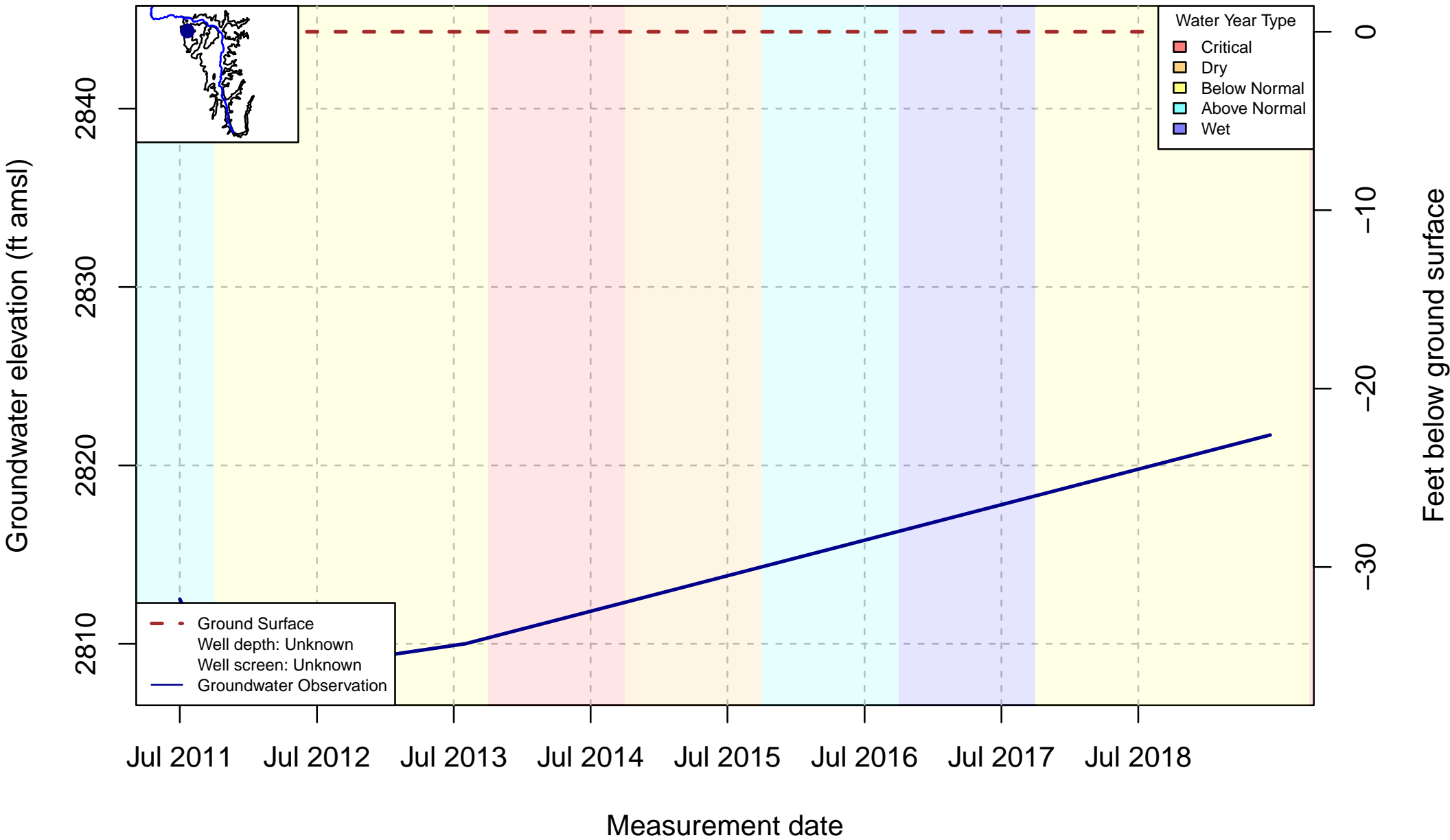
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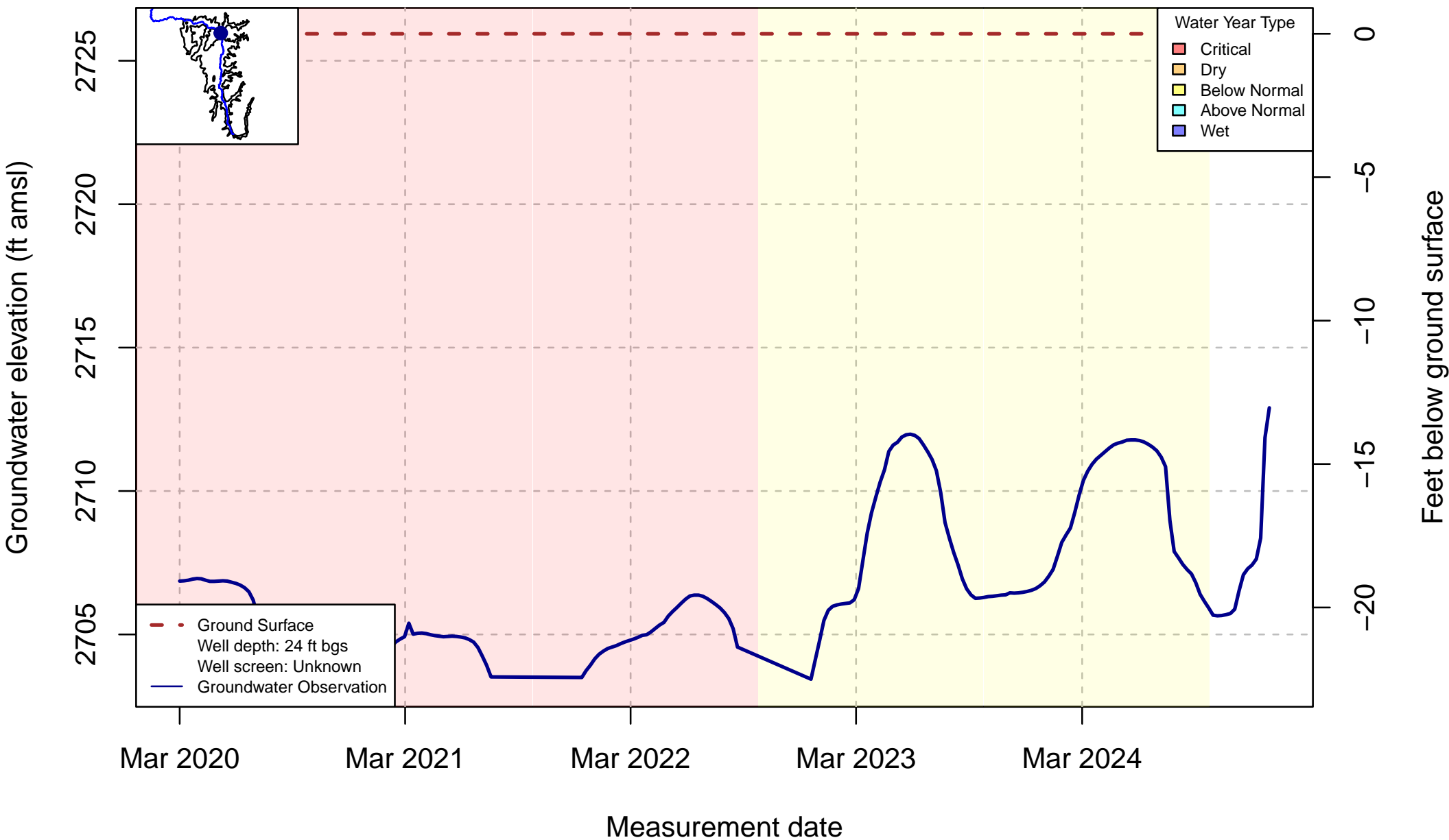
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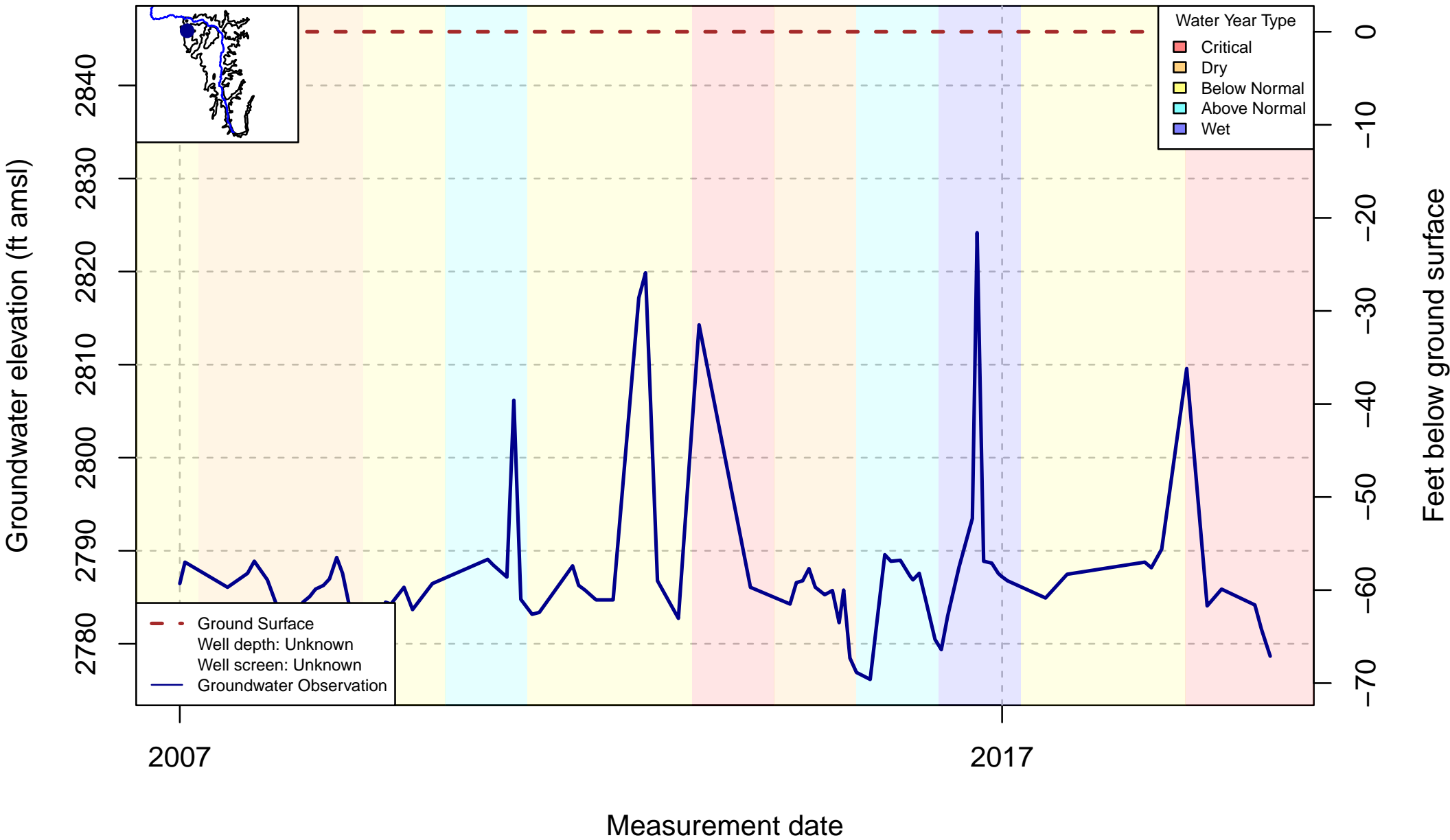
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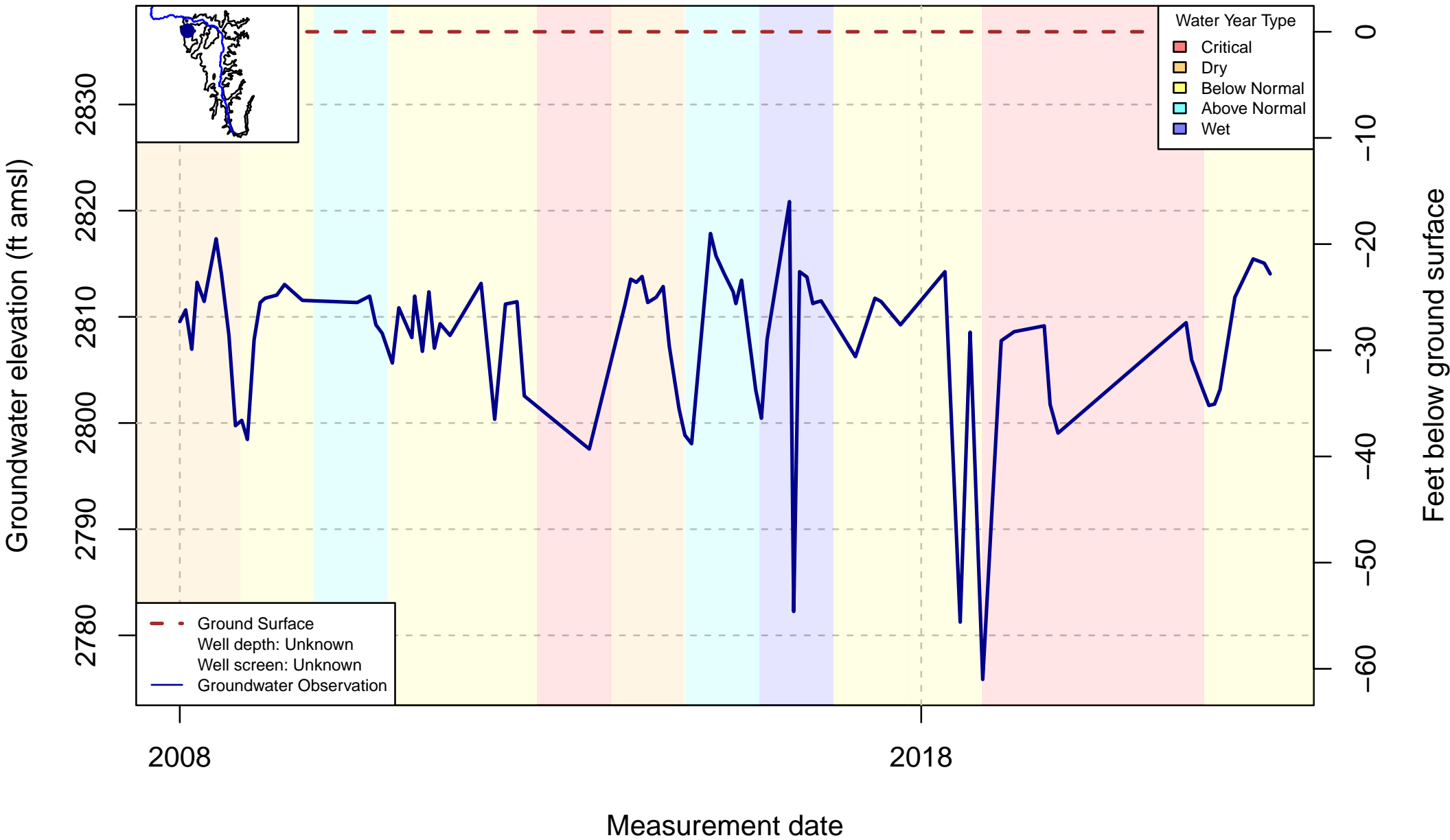
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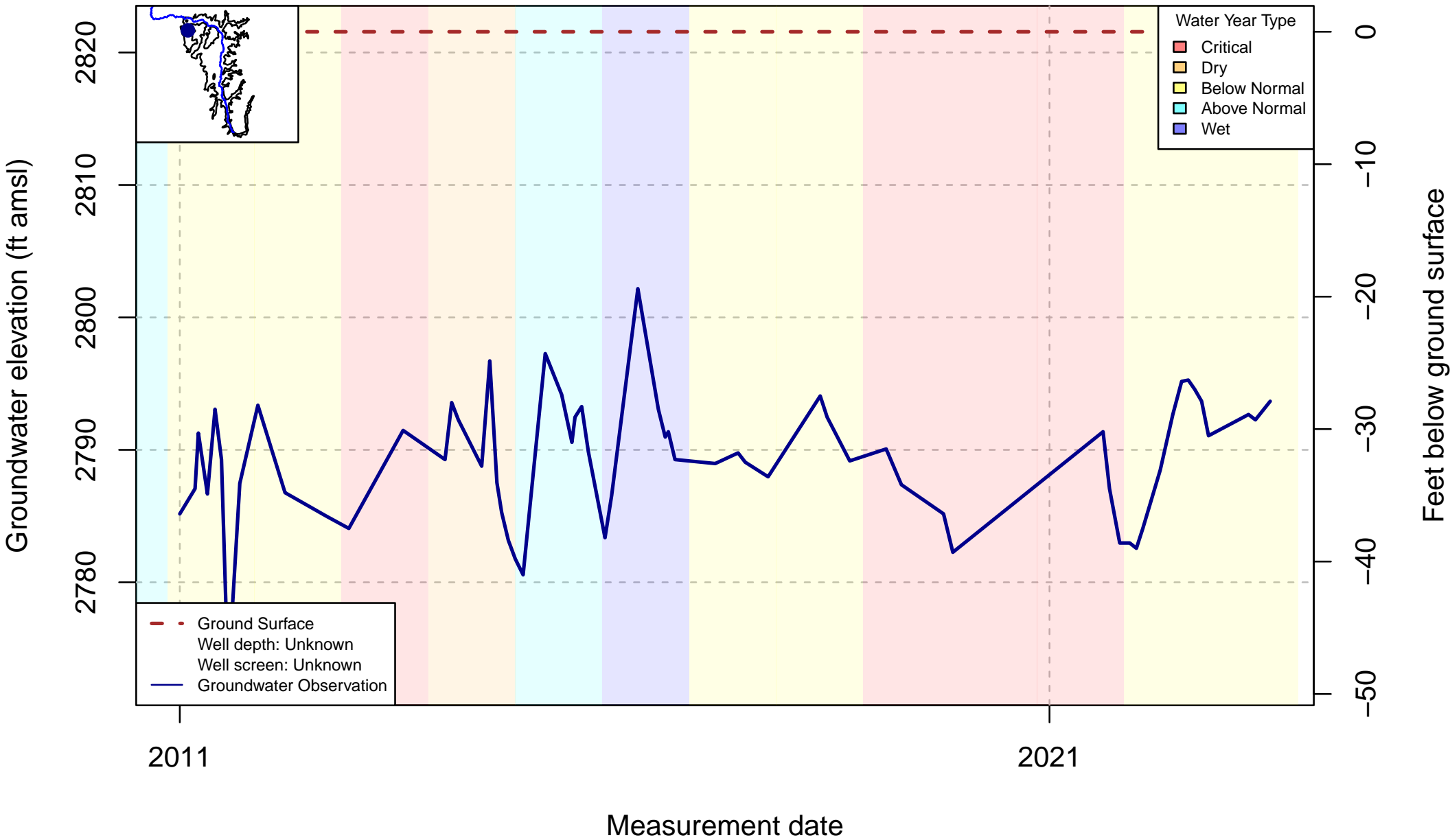
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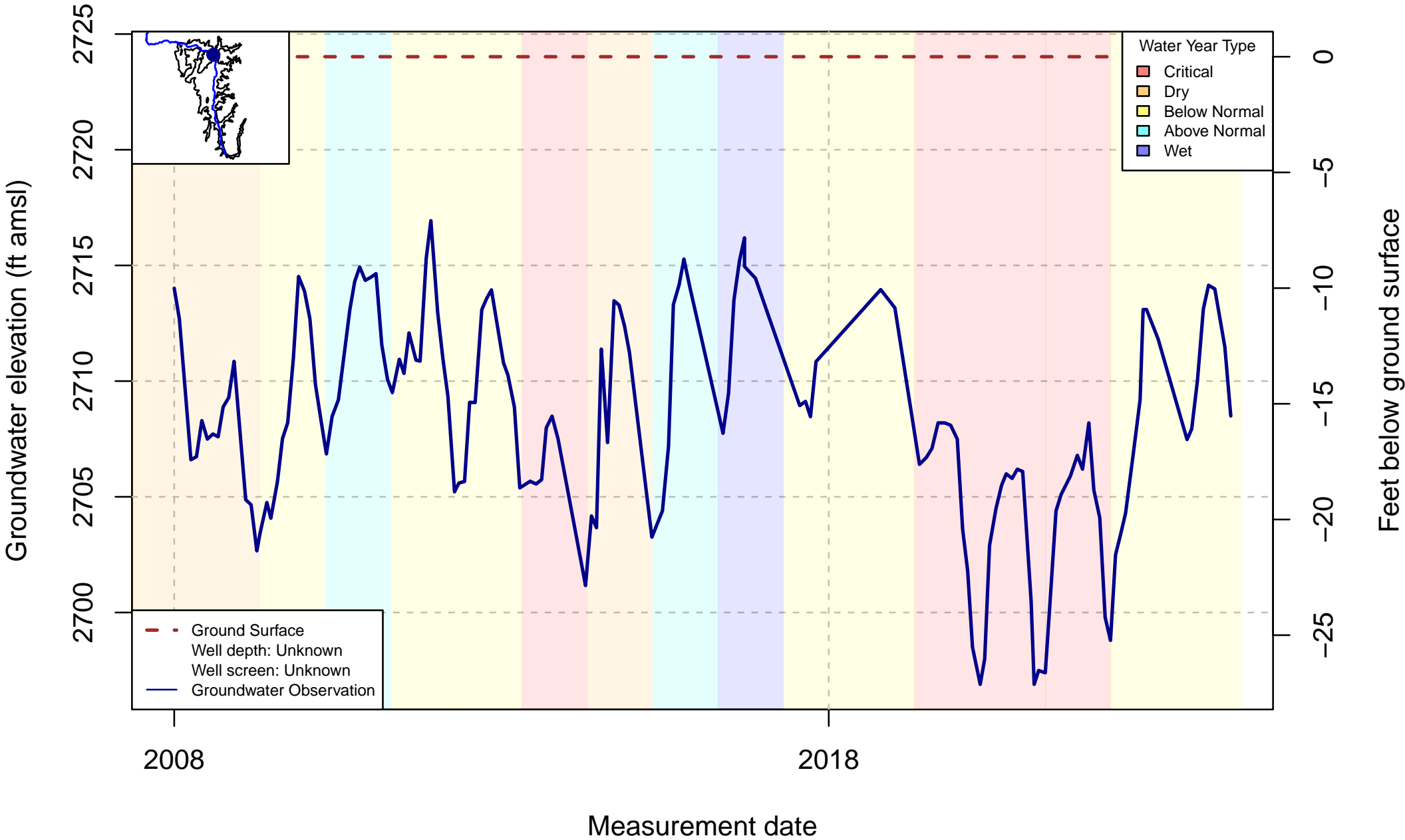
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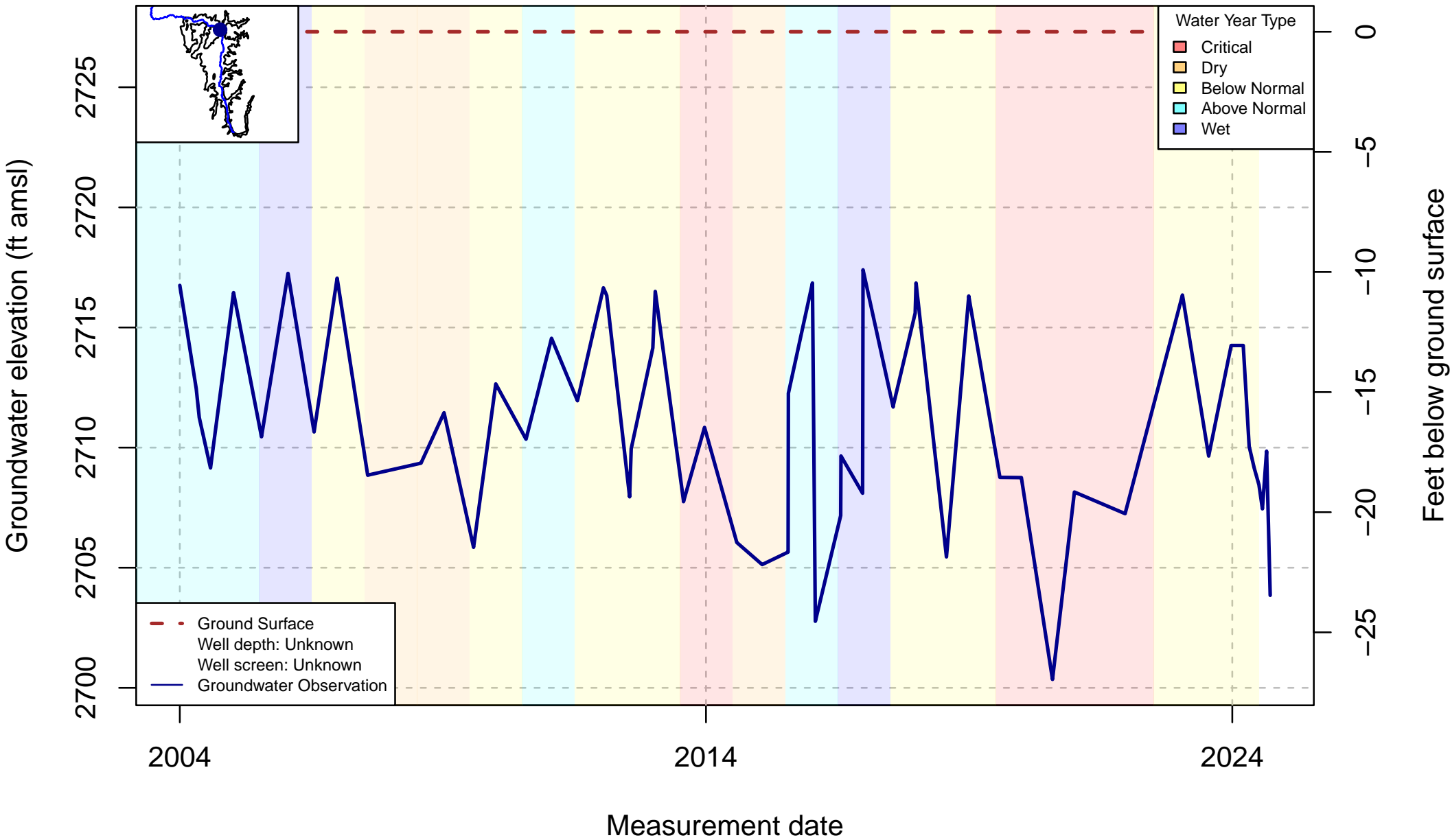
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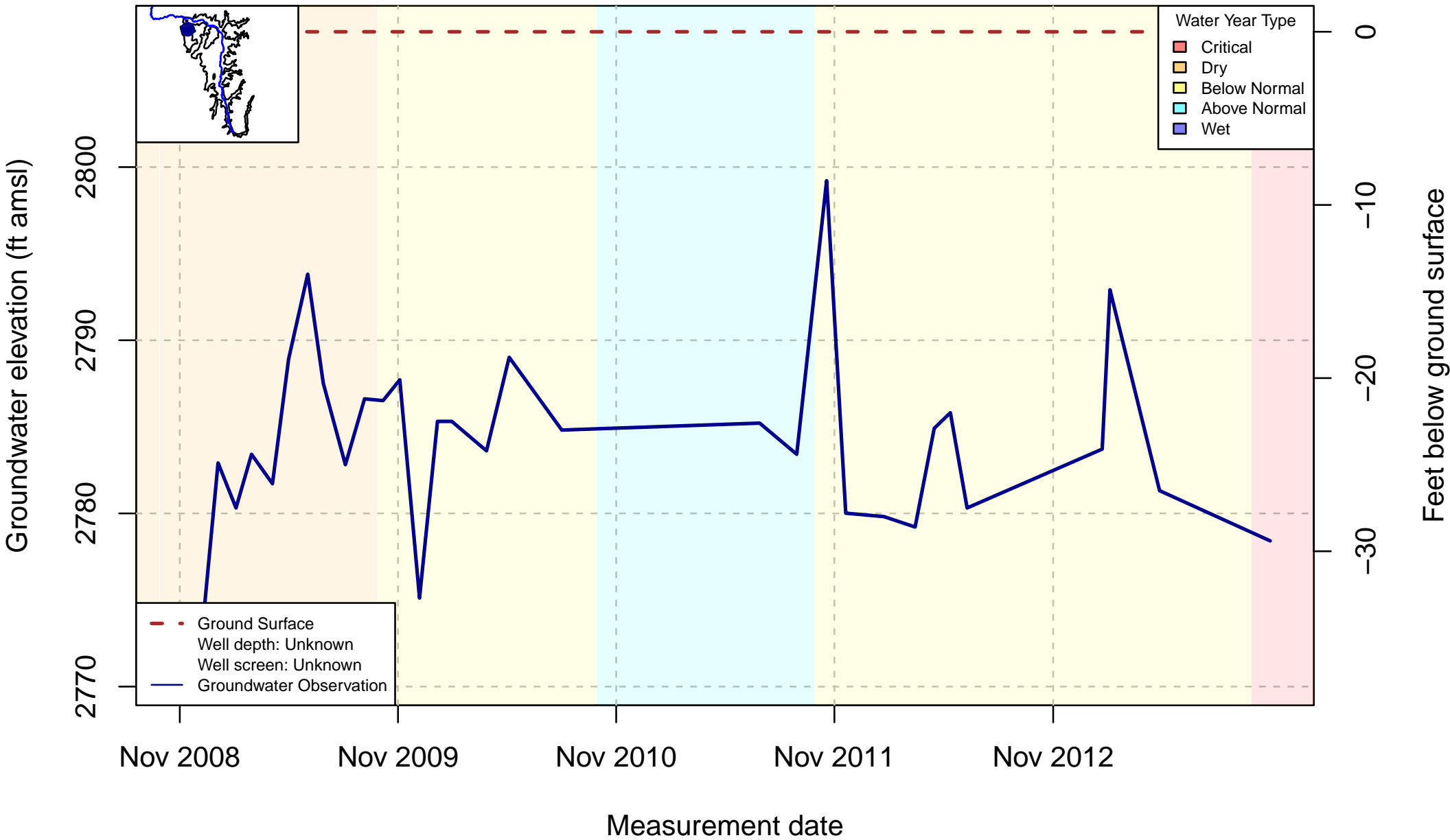
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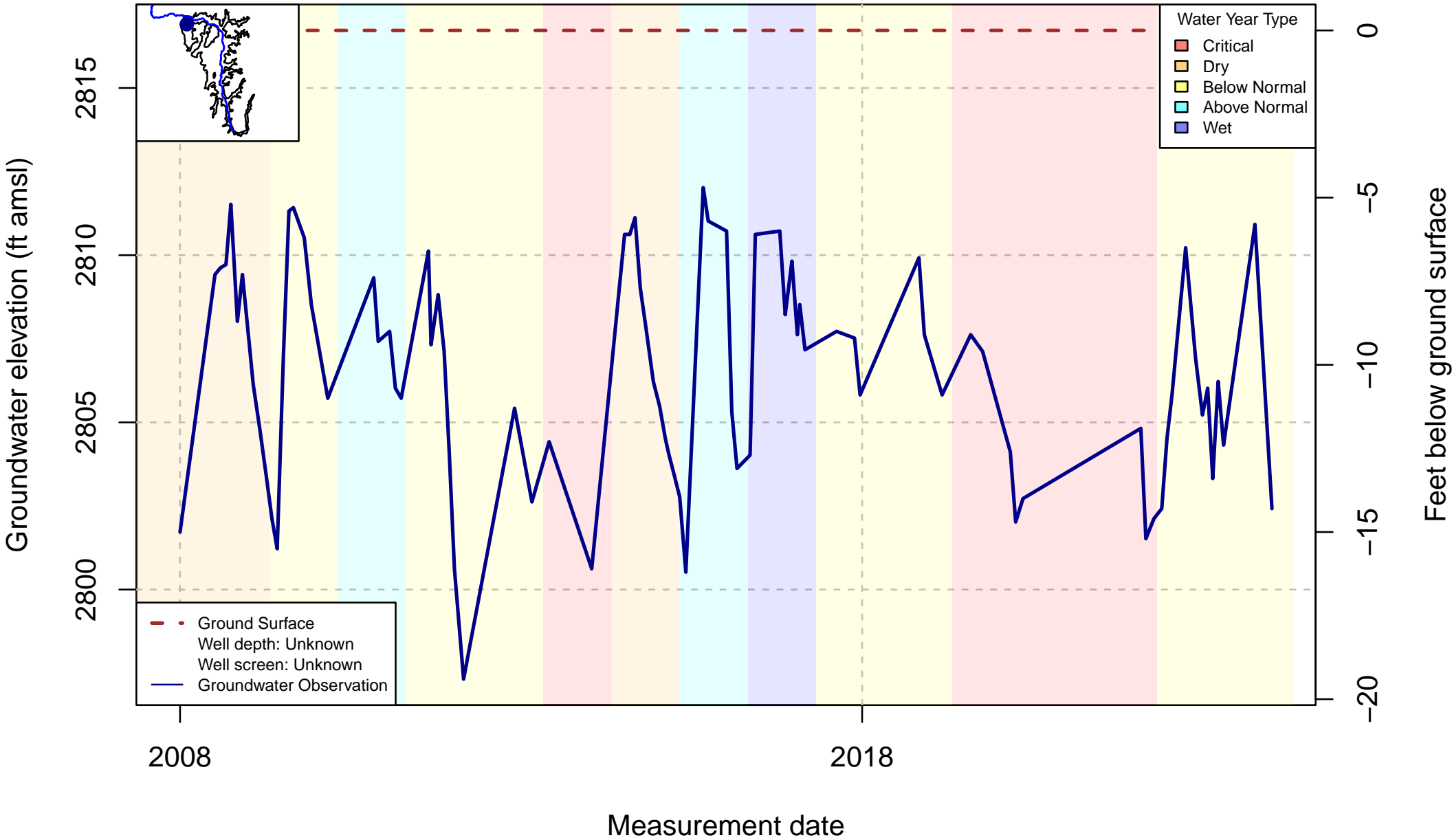
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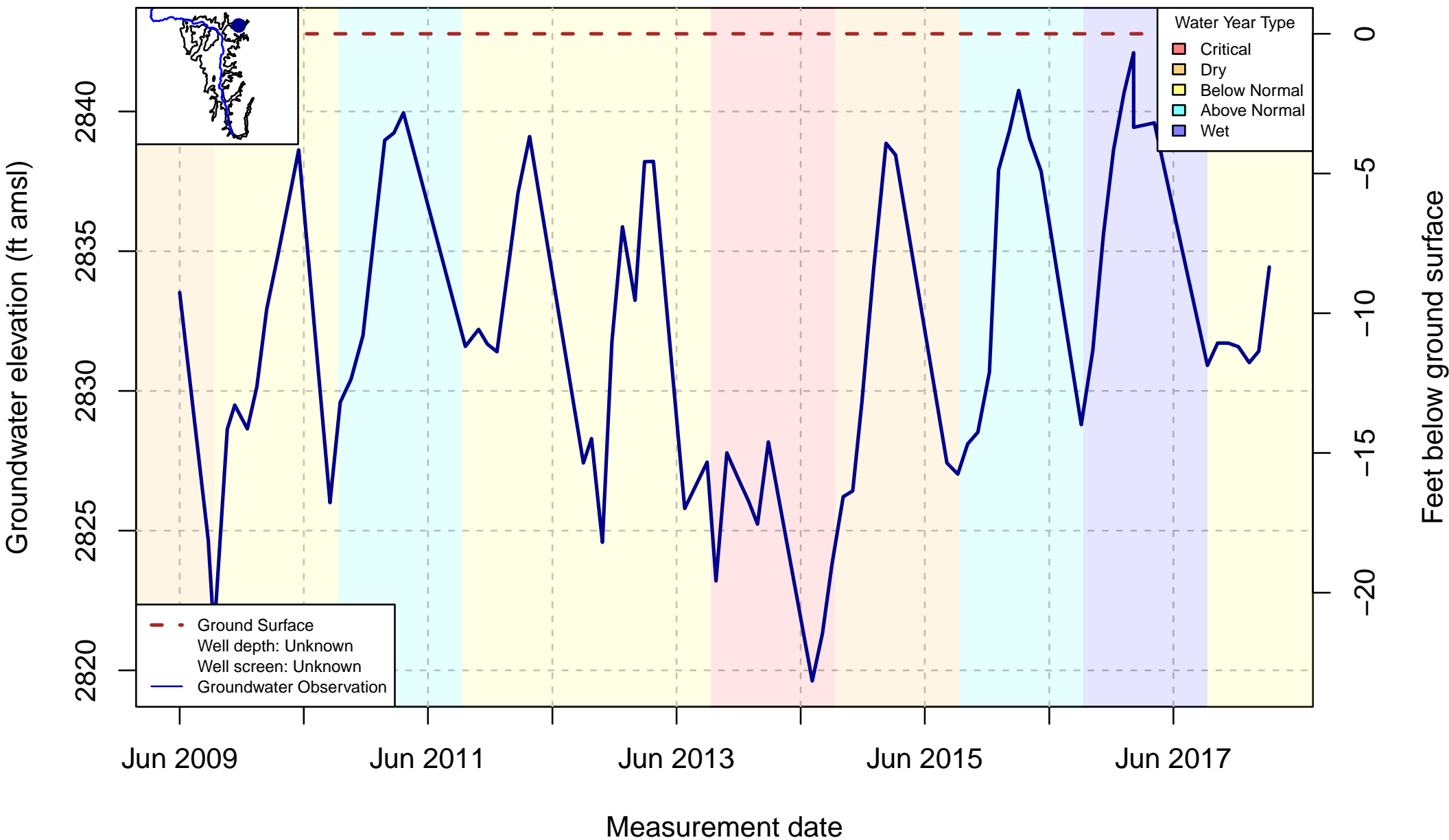
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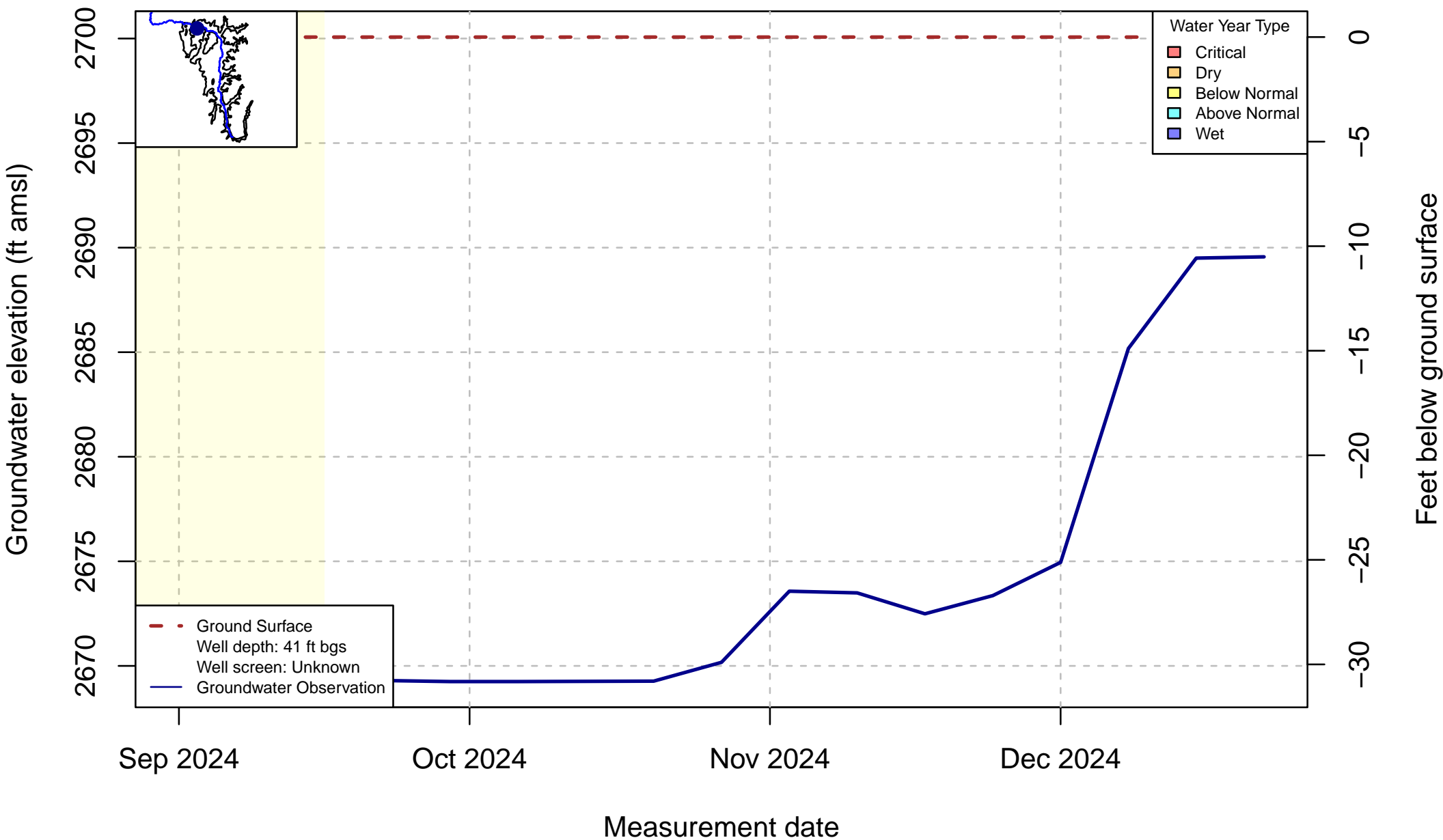
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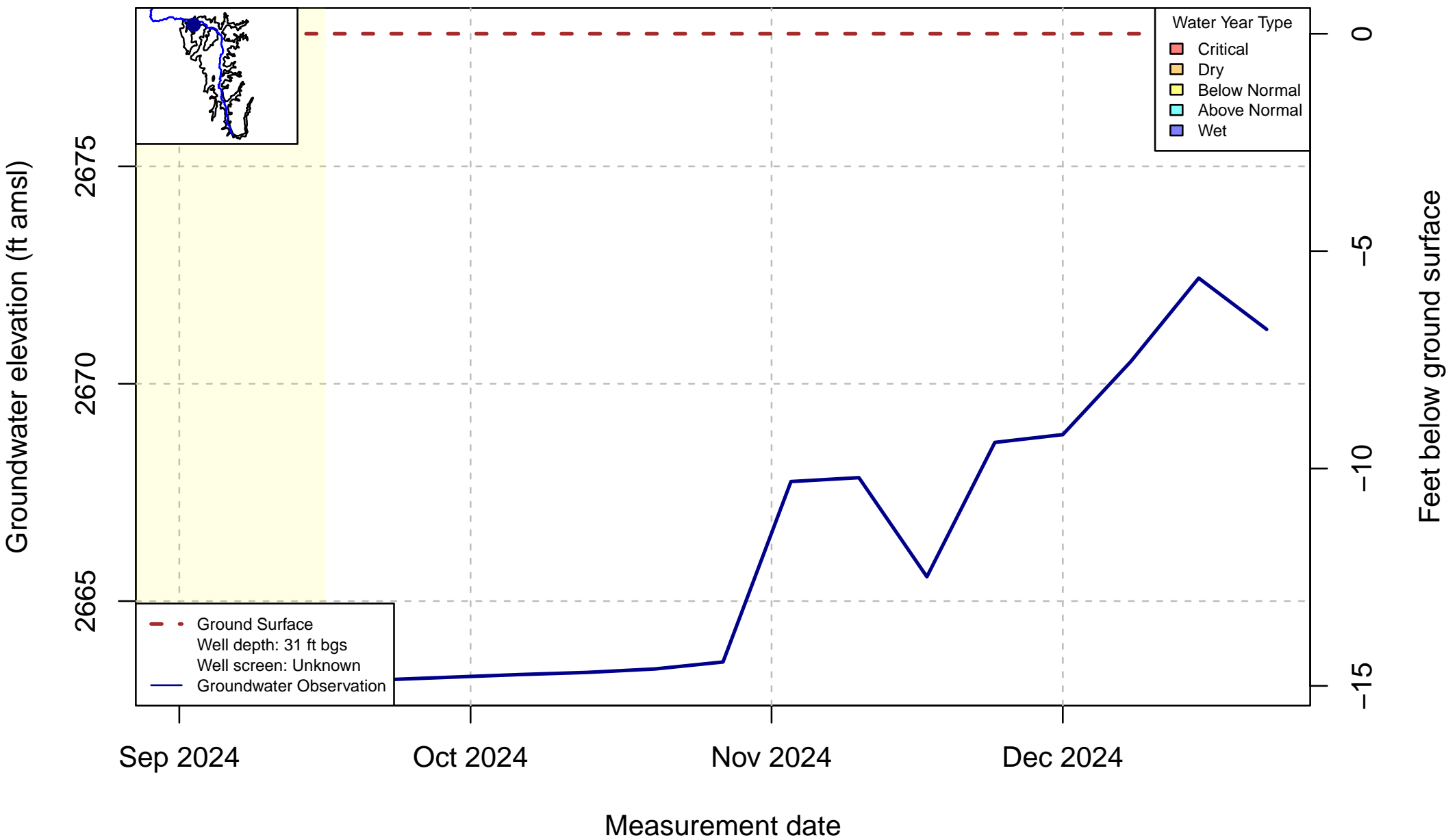
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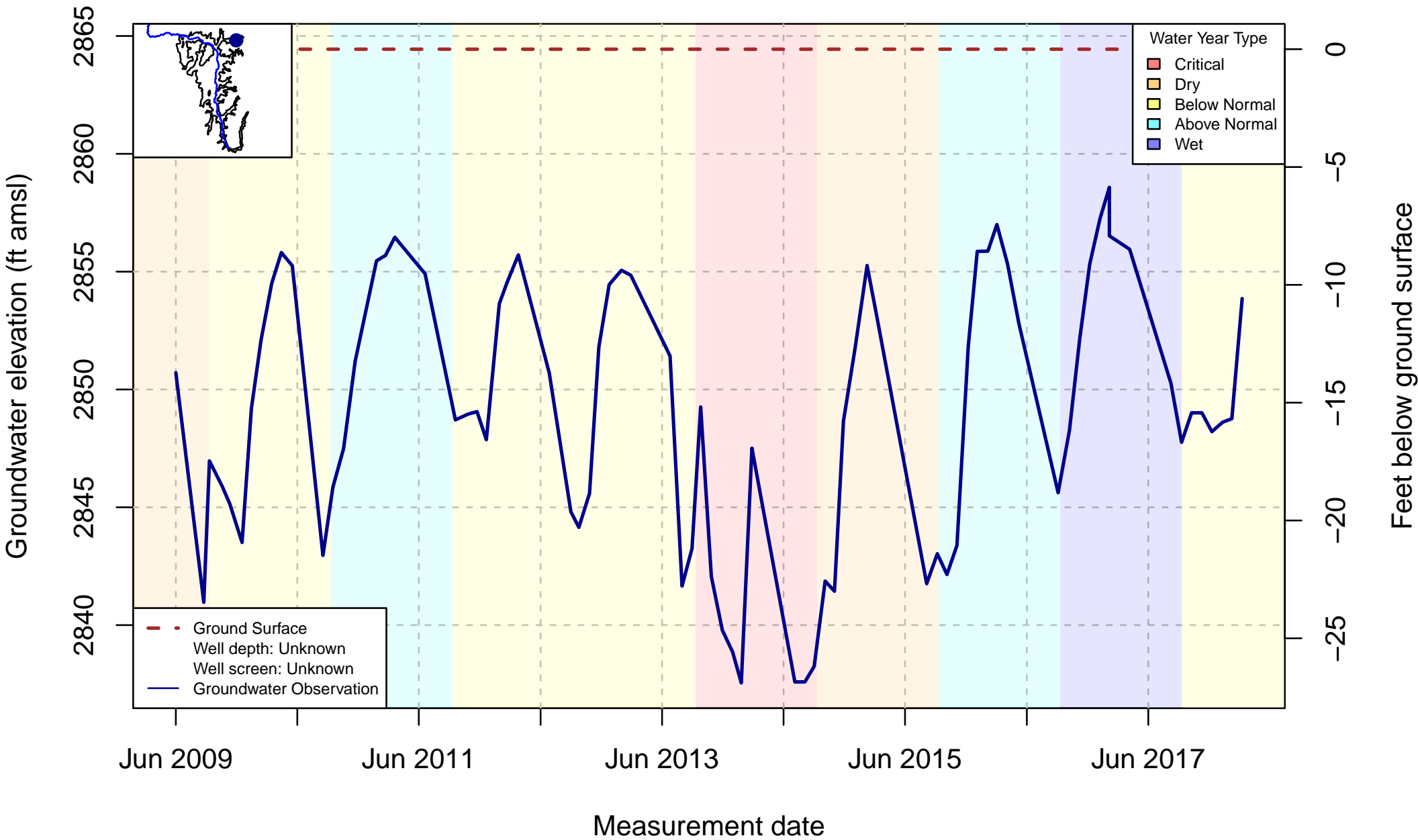
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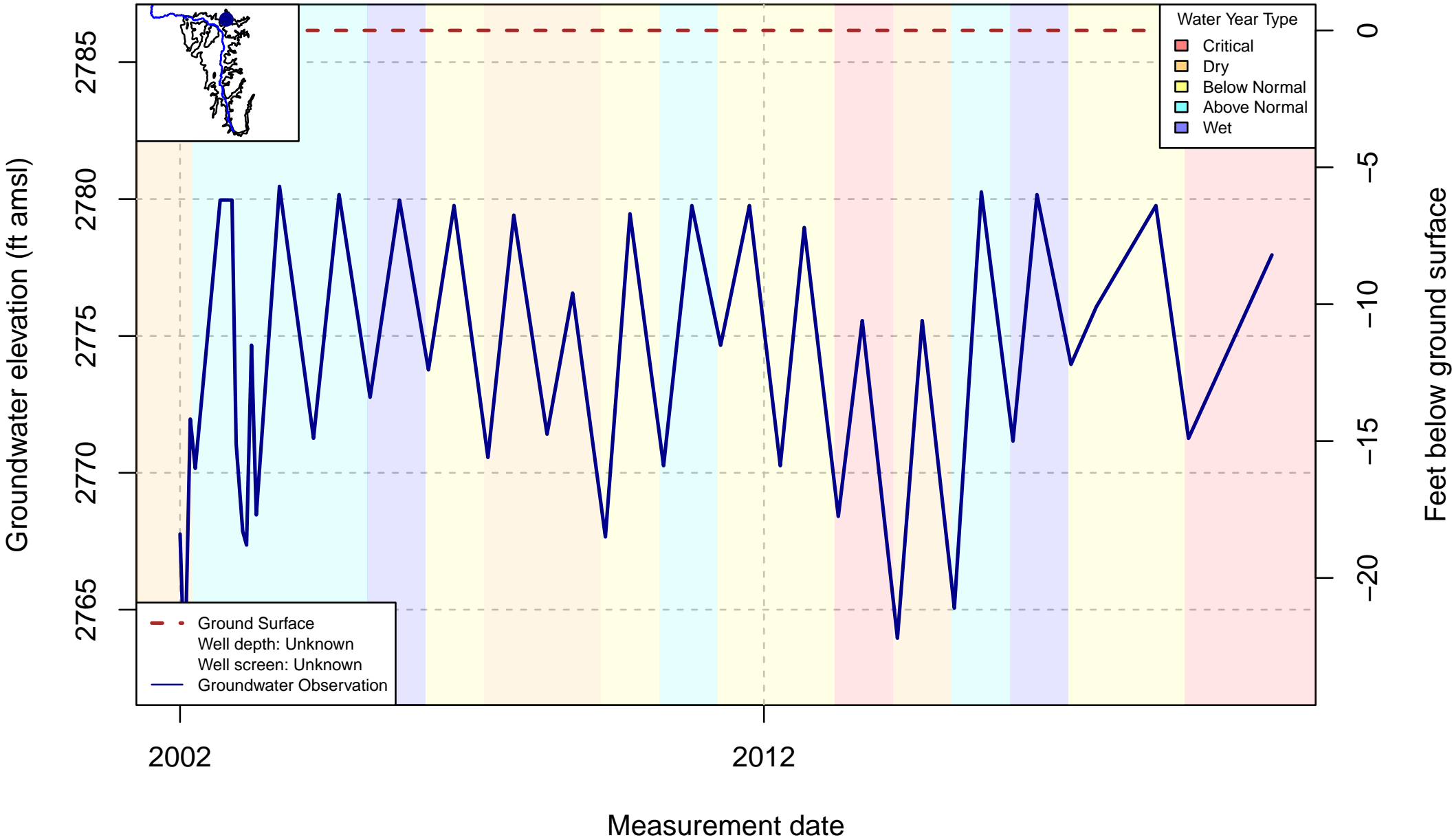
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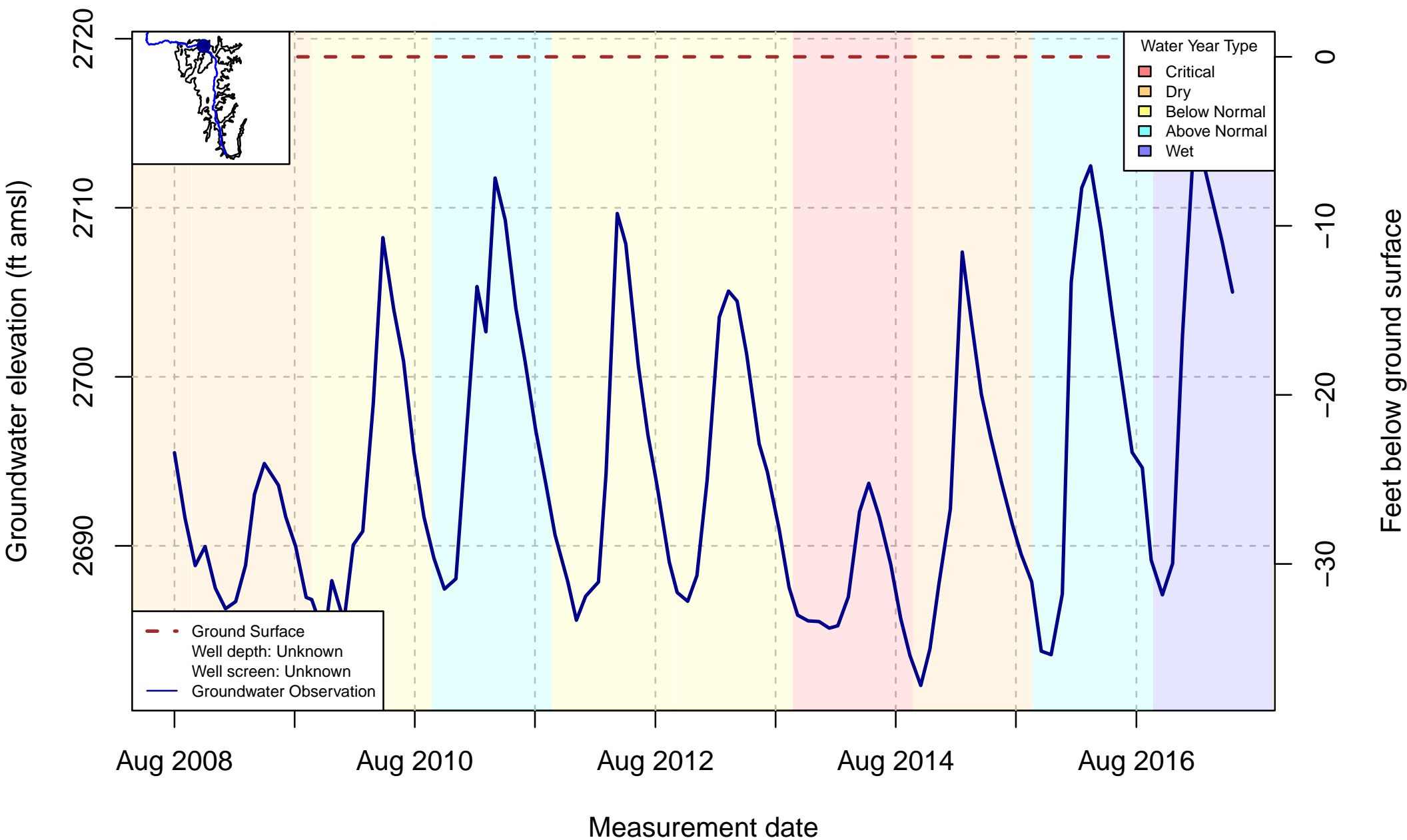
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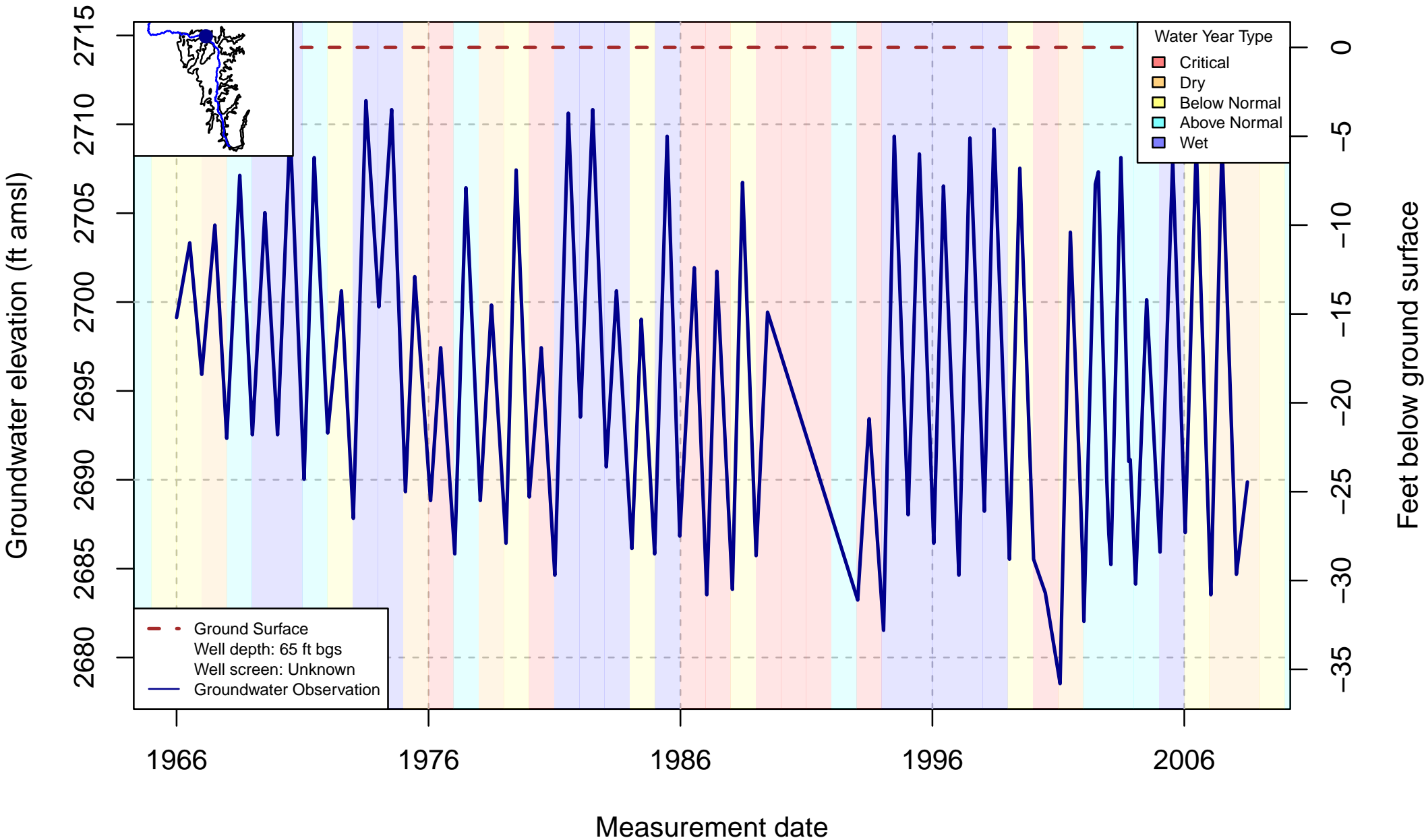
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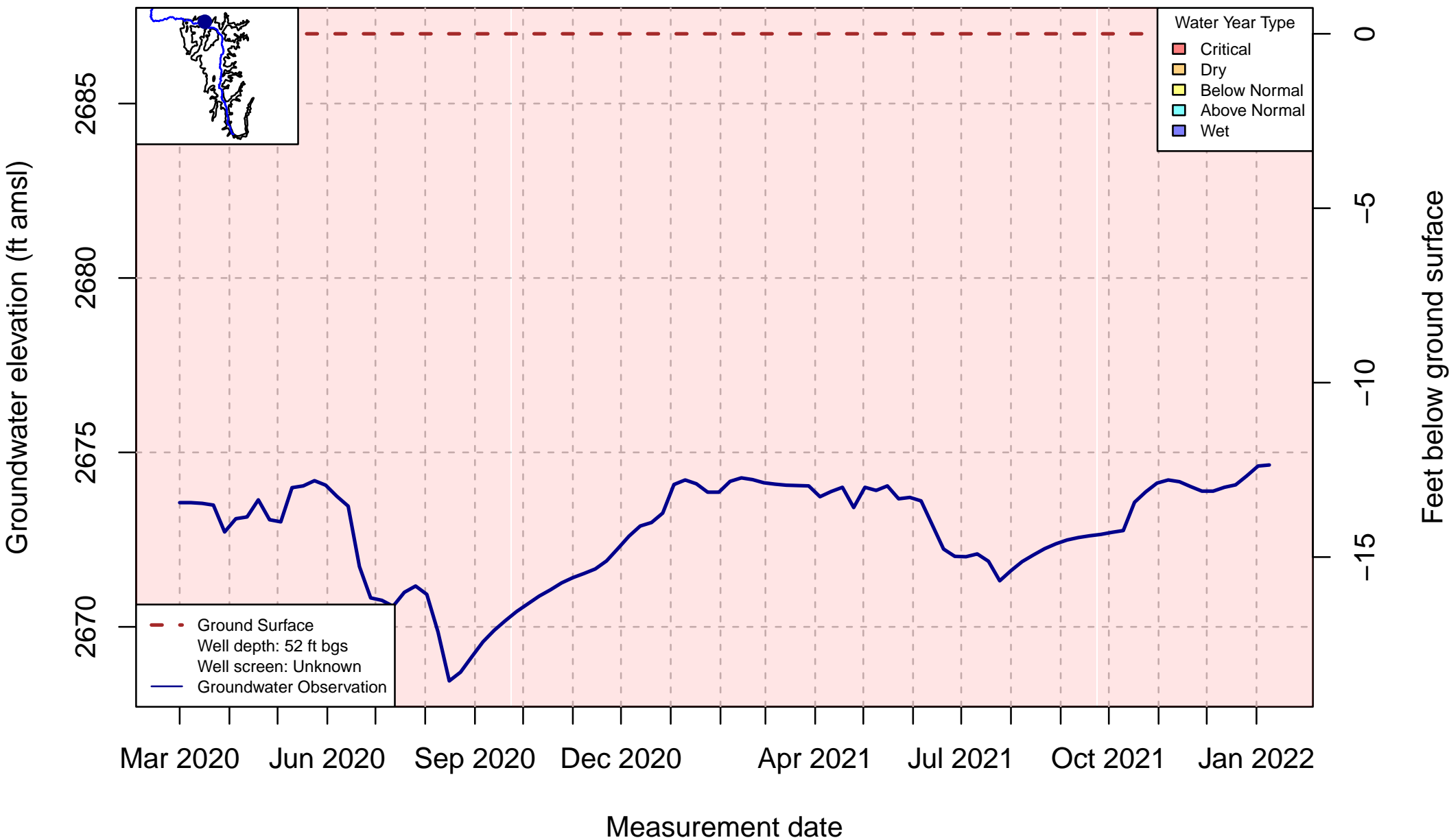
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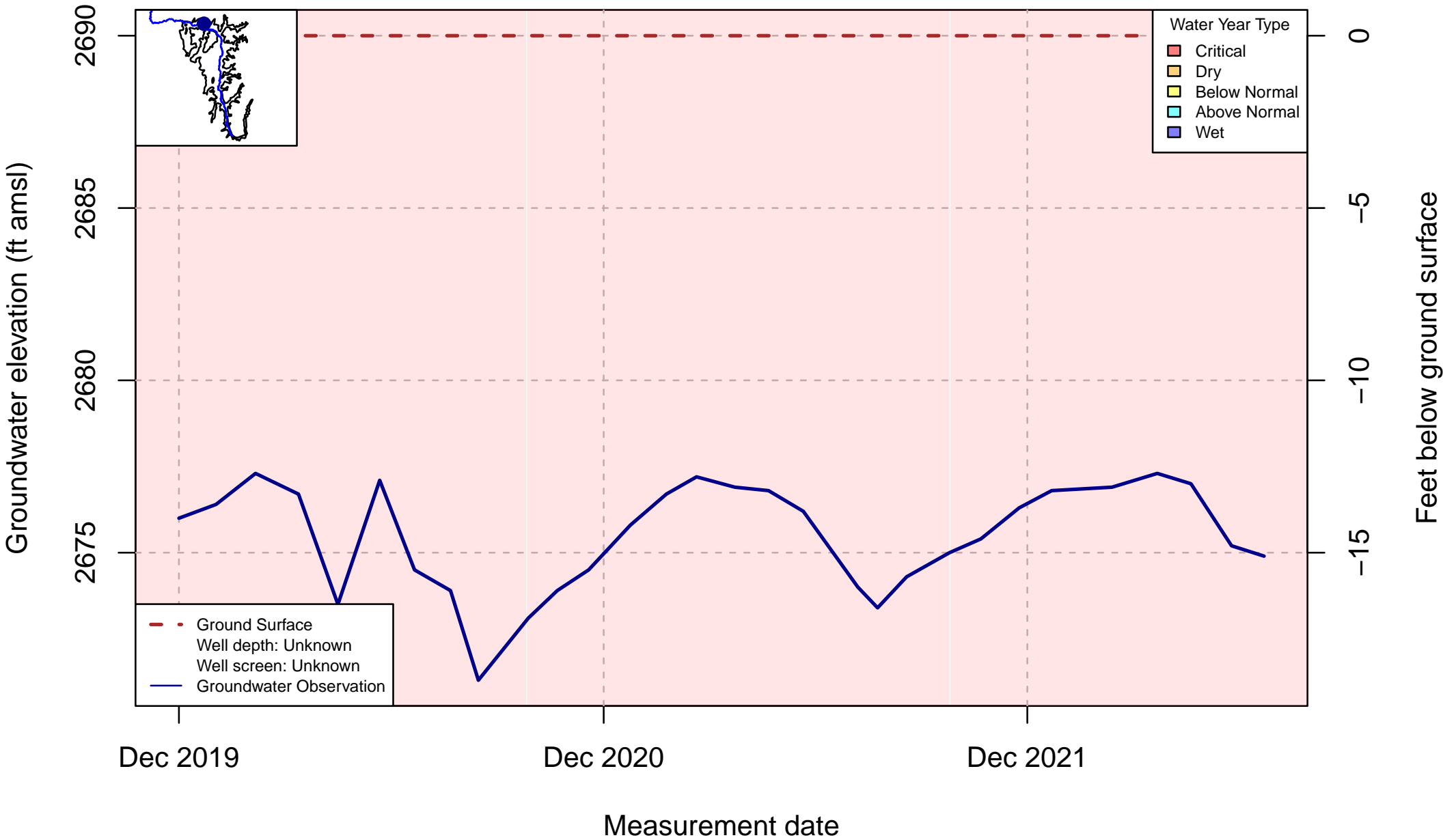
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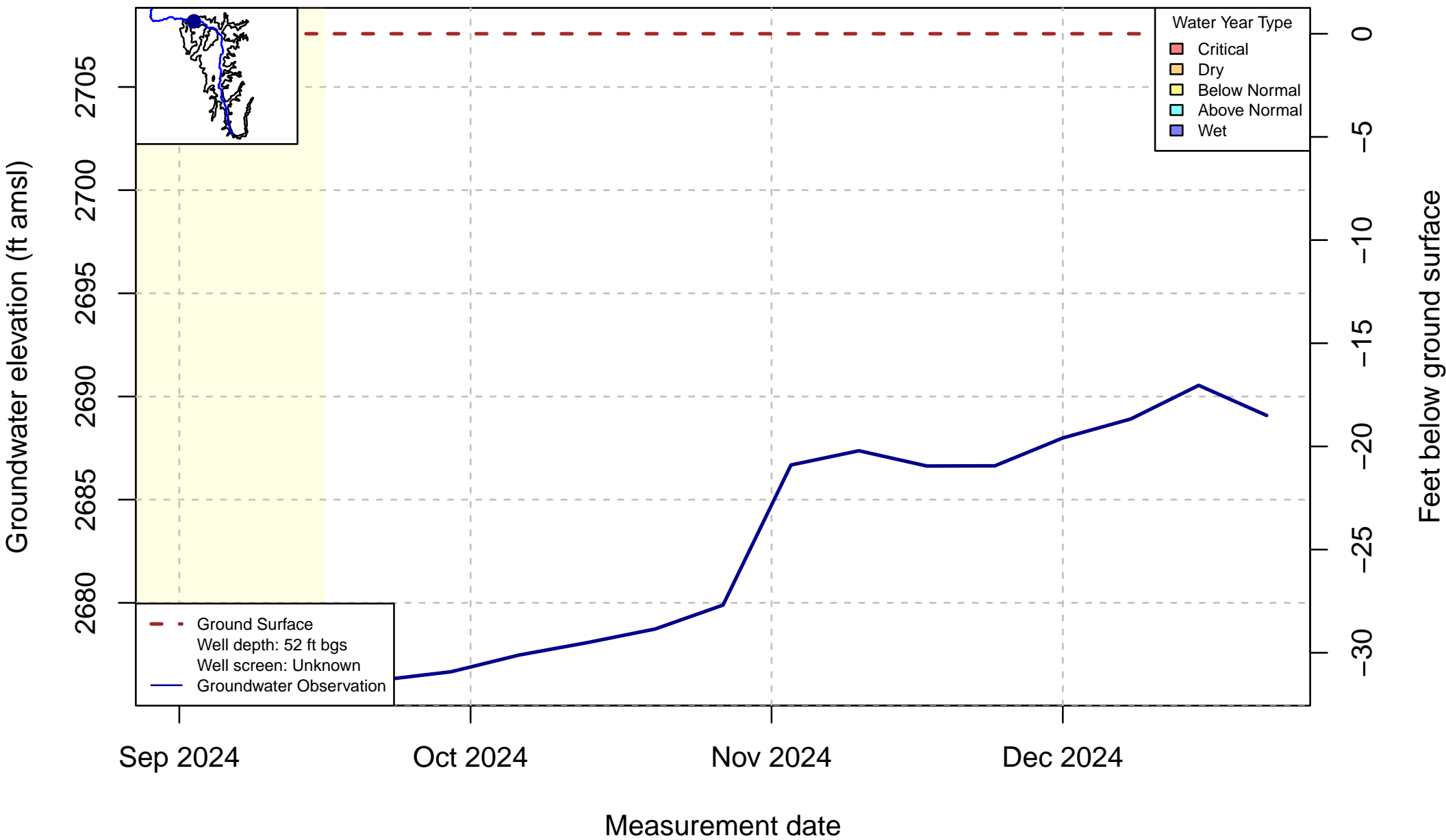
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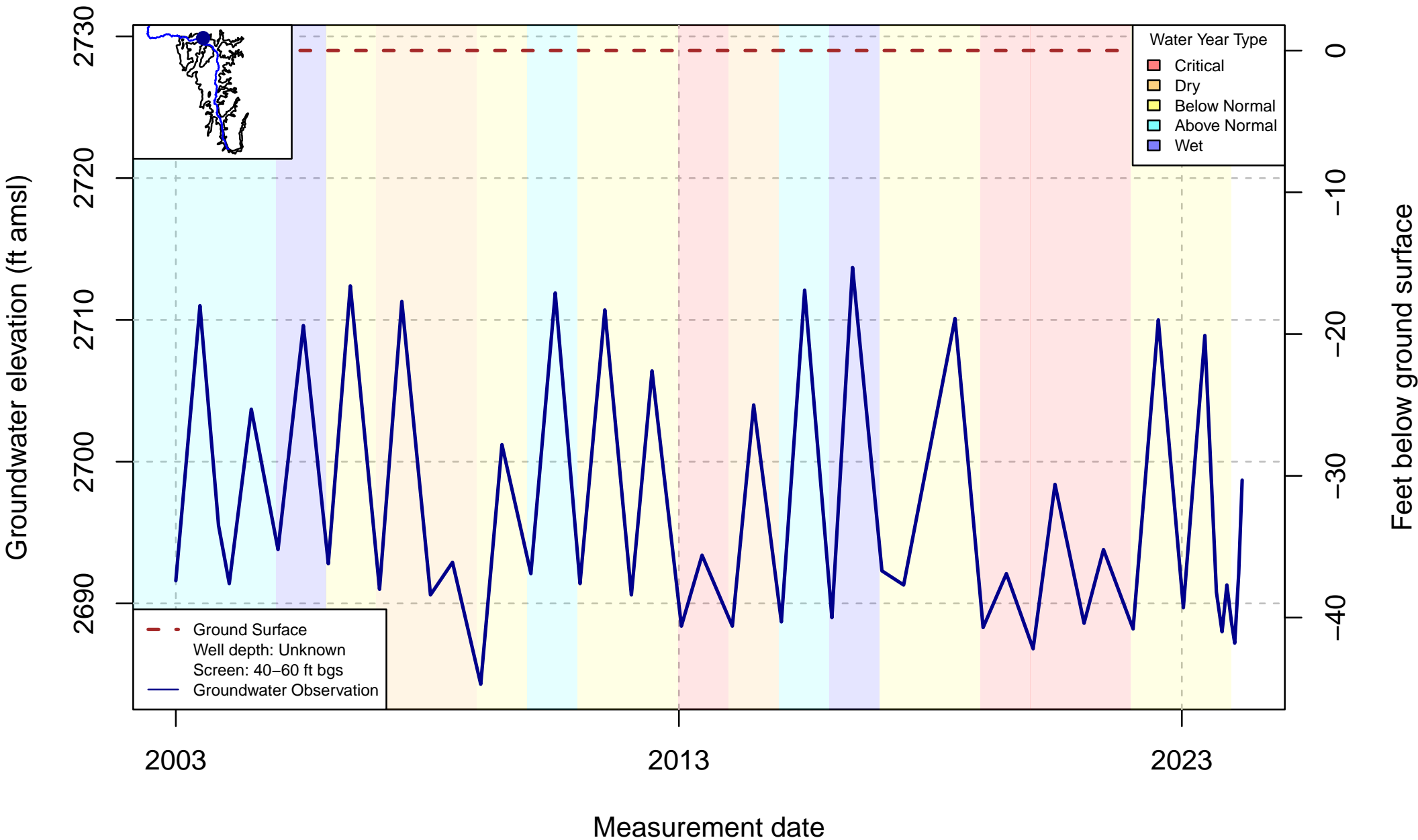
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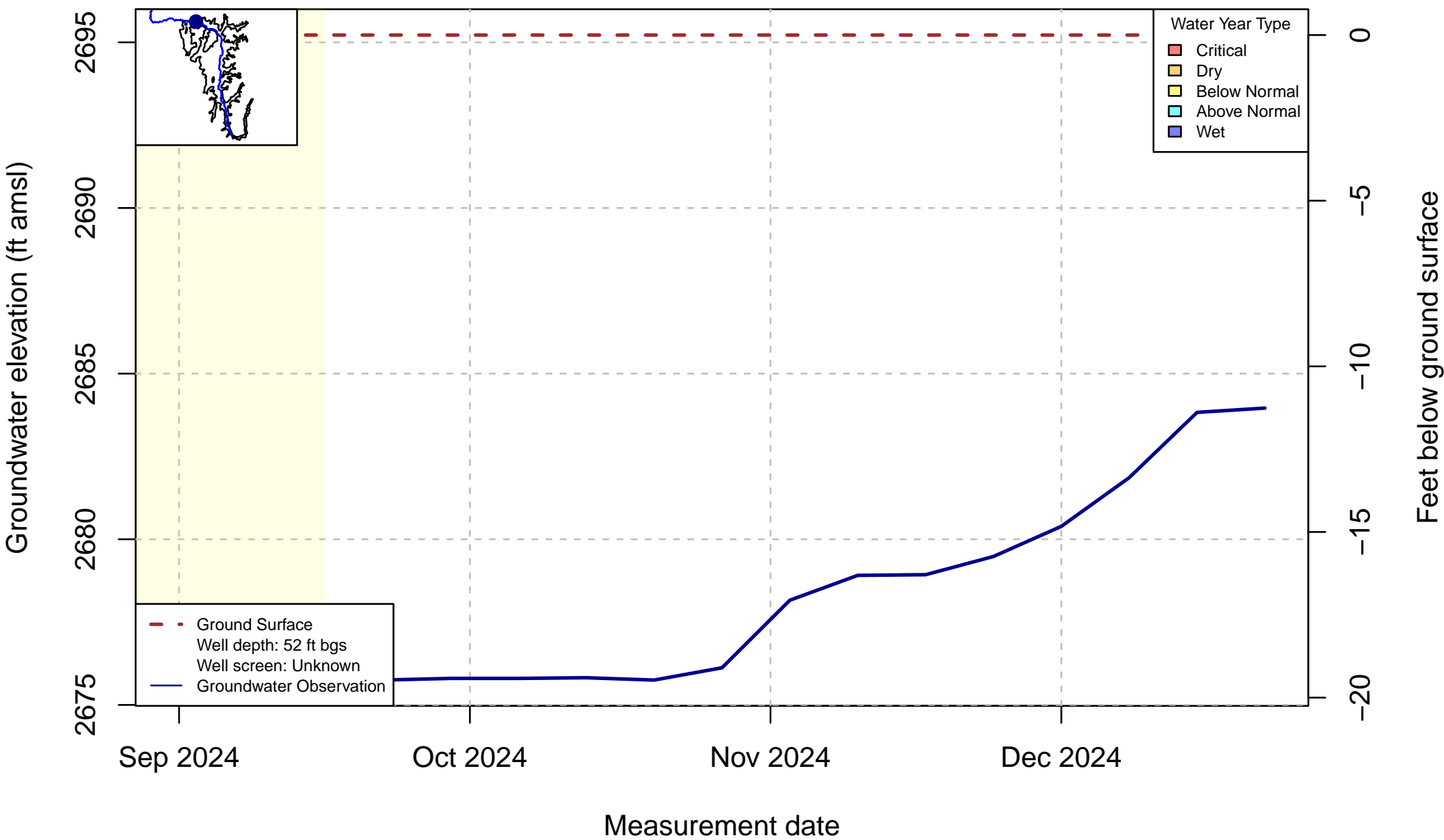
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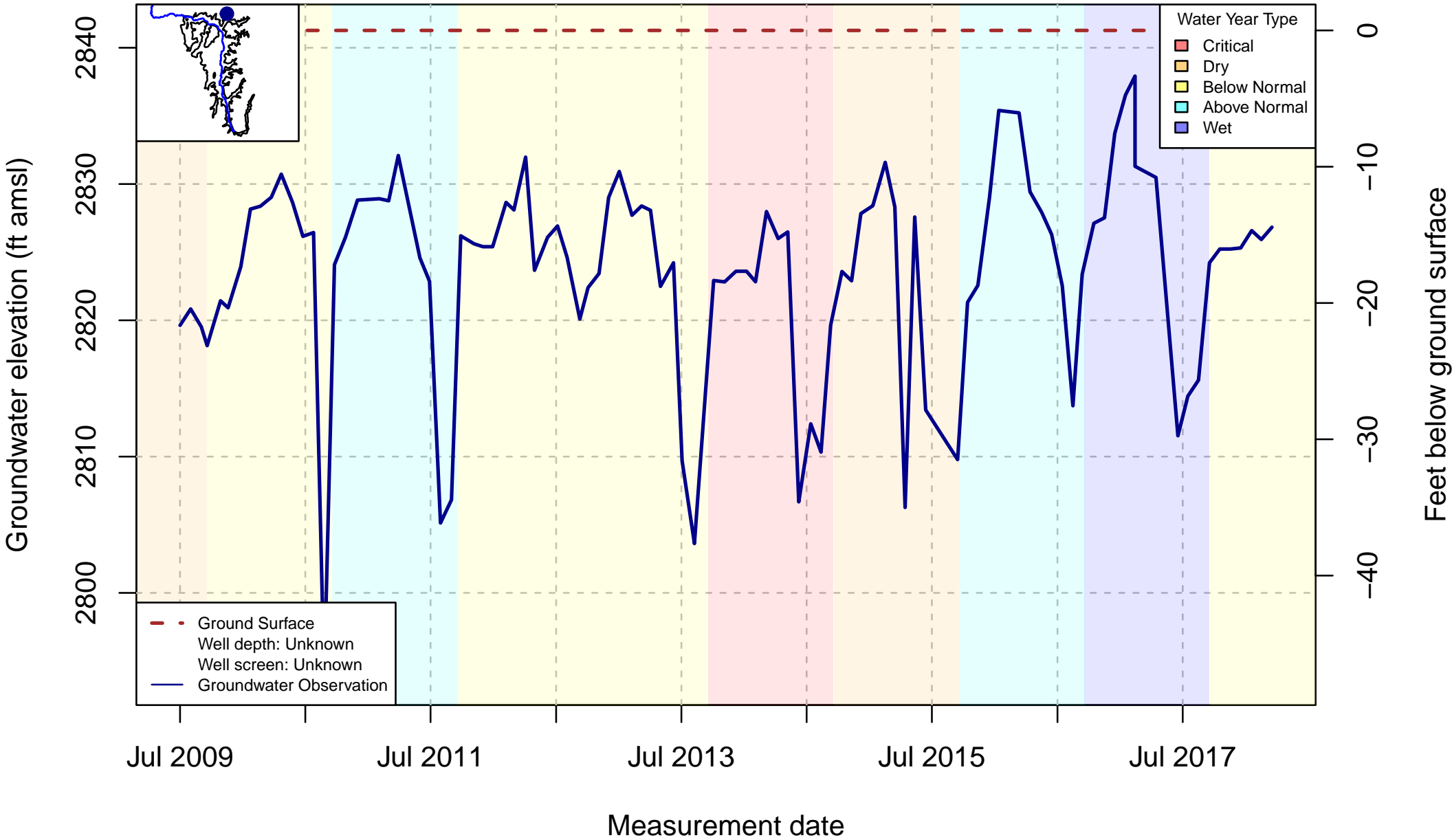
Well Code: 416335N1228997W001; SWN: 44N09W29J001M



Well Code: SCT_089; SWN: NA



Well Code: G40; SWN: NA



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