



SE Boise Ground Water Monitoring – Fall 2017 Update

Presented by Dennis Owsley, P.G.

September 27, 2017



Overview

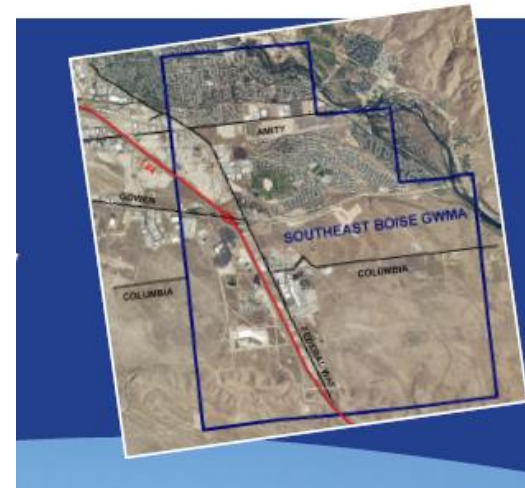
- SEB Ground Water Monitoring Network
- Hydrographs
- Ground Water Level Change Maps

SEB Ground Water Monitoring Network

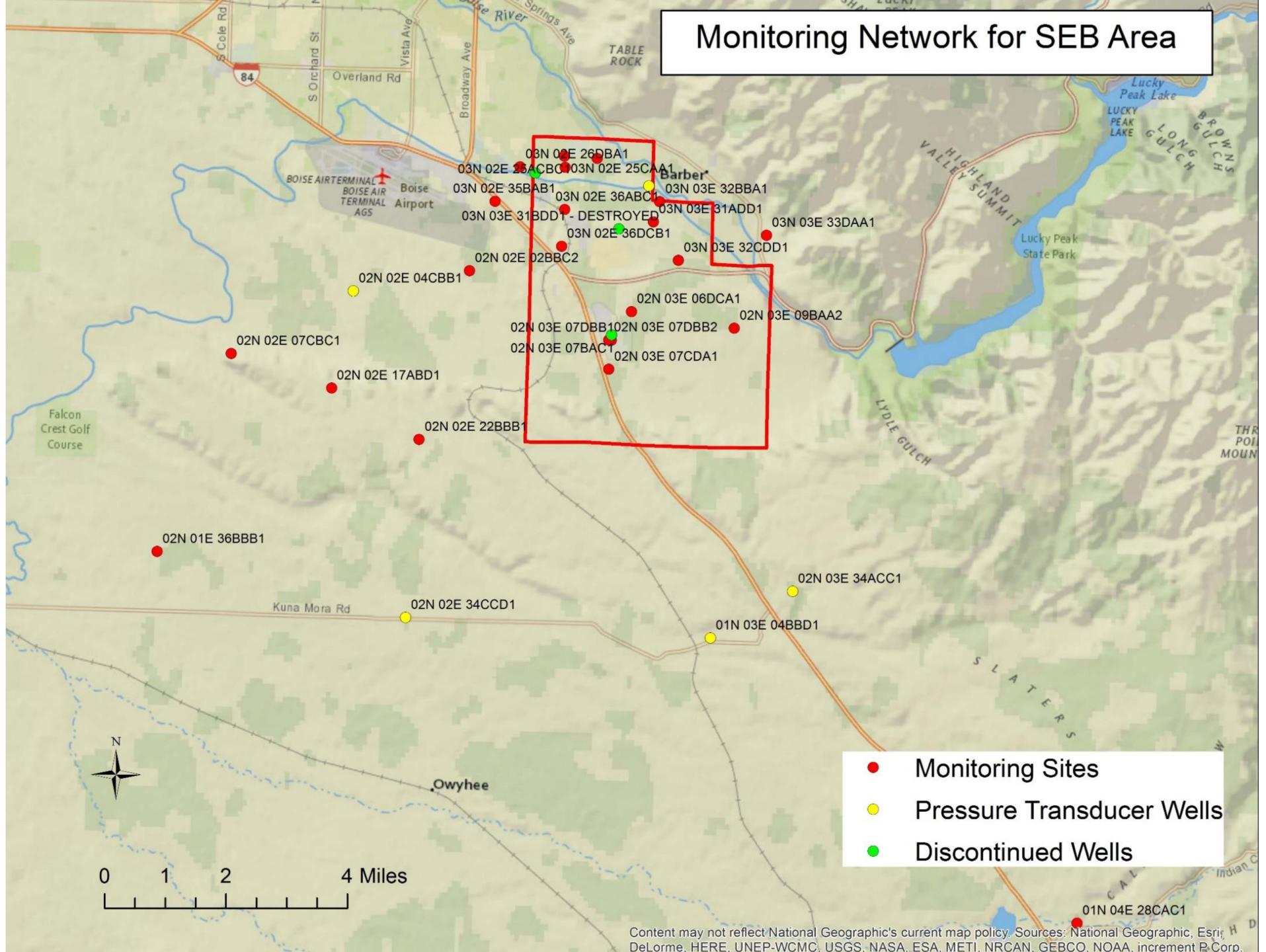
- 27 wells measured bi-monthly, both inside and outside the GWMA
- 5 wells with transducers
- Mixture of irrigation, municipal, domestic, and monitoring wells.
- Water levels are measured in the regional system and range from depths of 48 to 1,180 feet.
- Monitoring requirements associated with permit approvals.

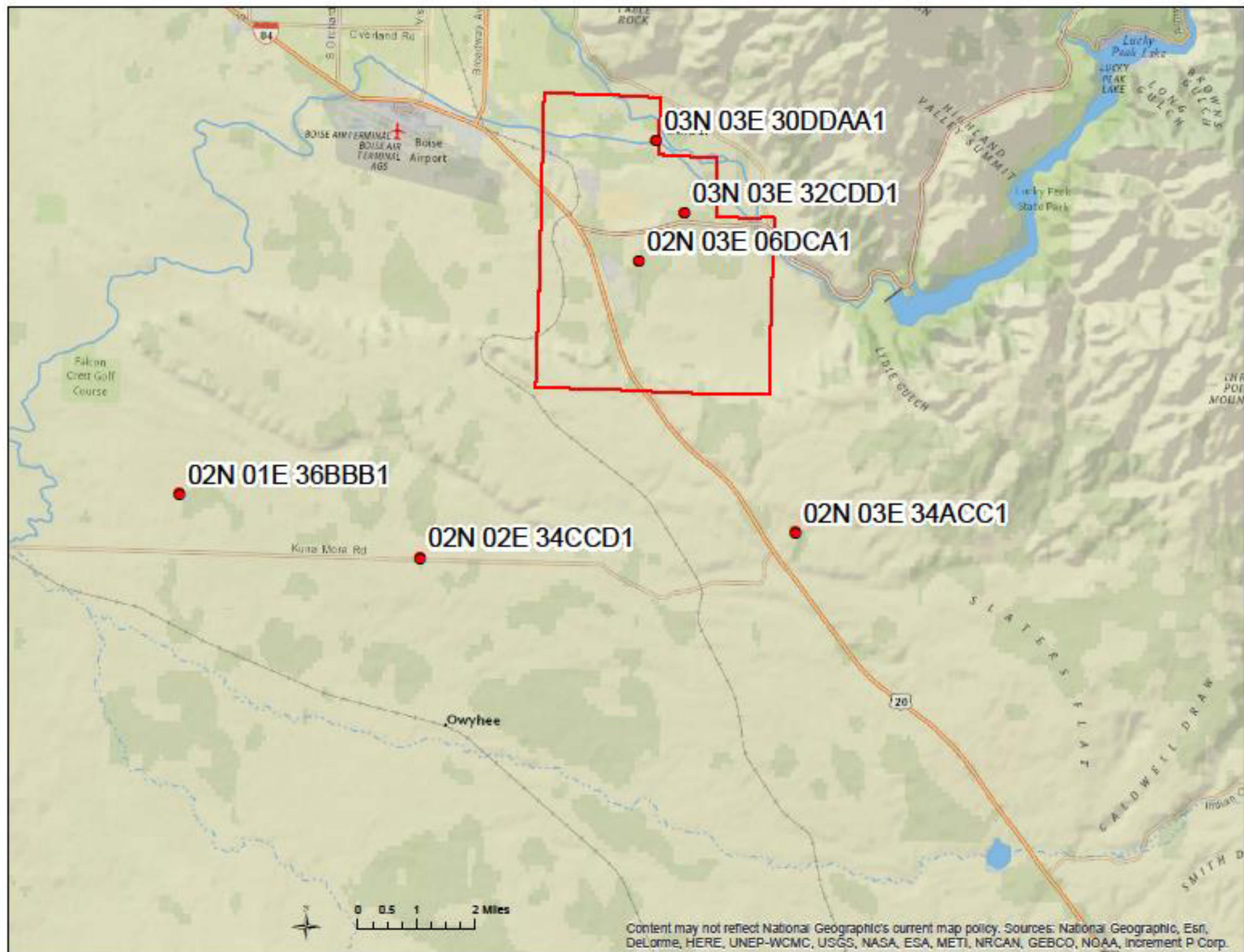
SOUTHEAST BOISE
GROUND WATER
MANAGEMENT AREA

DOMESTIC
WELLS



Monitoring Network for SEB Area





Site ID: 03N 03E 30DDAA1

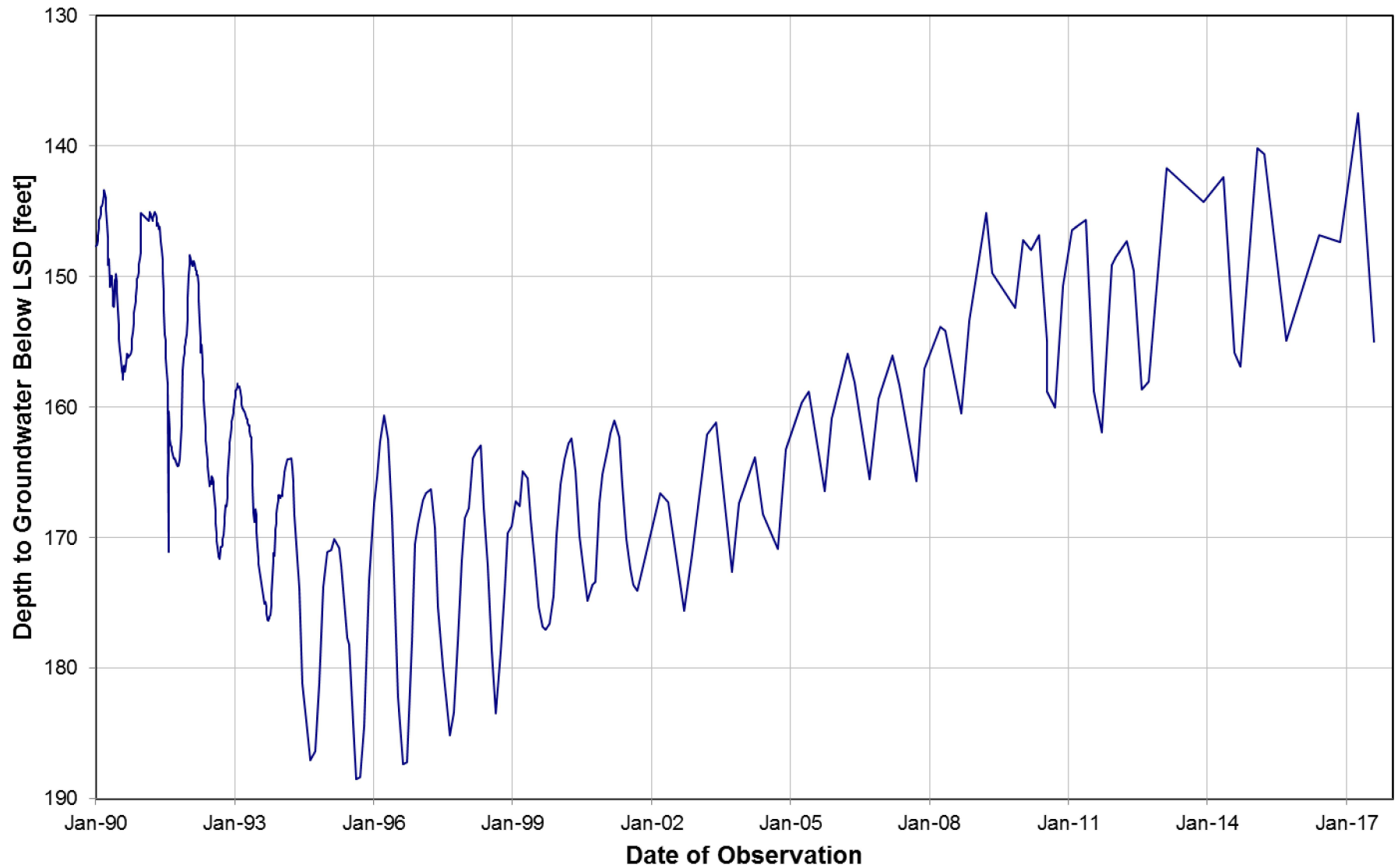
IDTM Easting: 1375870.09

Altitude of Land Surface: 2800 [ft AMSL]

Well Name: E Boise Ave

IDTM Northing: 2327562.19

Well Depth: 940 [ft]



— Water Level Observations

Site ID: 02N 03E 06DCA1

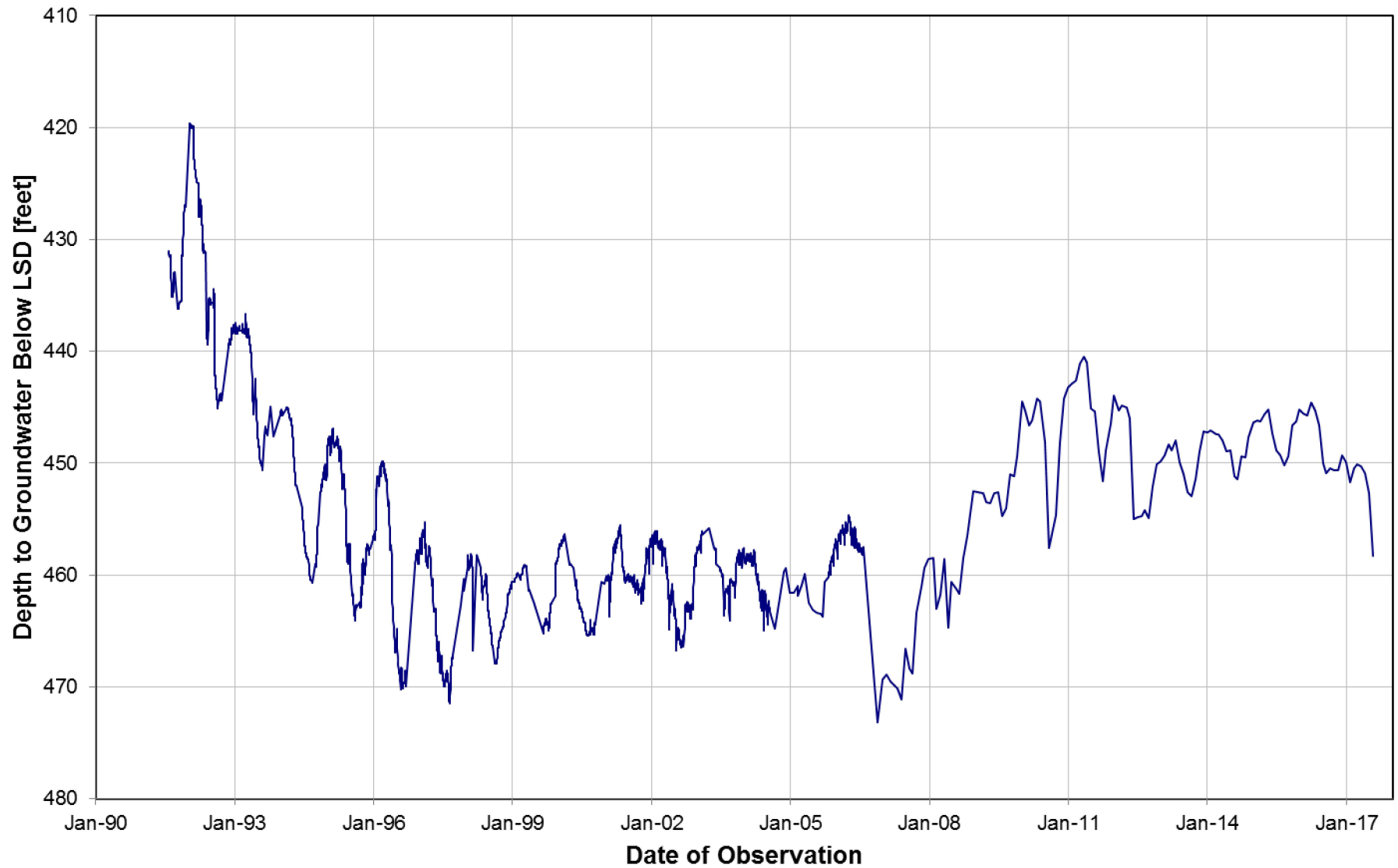
IDTM Easting: 1372540.98

Altitude of Land Surface: 3068 [ft AMSL]

Well Name: Micron Test#1

IDTM Northing: 2327100.83

Well Depth: 855 [ft]



— Water Level Observations

Site ID: 03N 03E 32CDD1

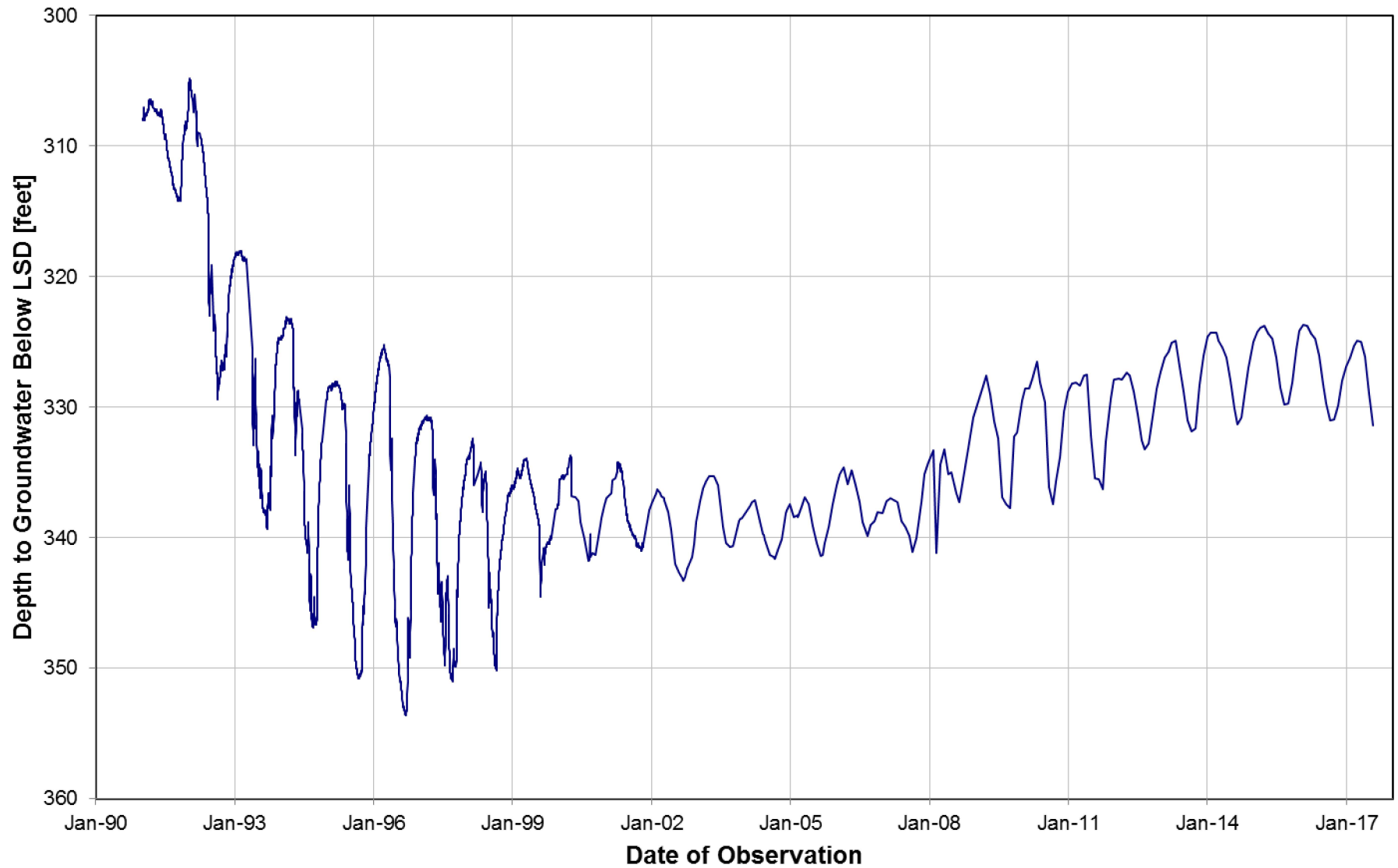
IDTM Easting: 1373898.2

Altitude of Land Surface: 2968 [ft AMSL]

Well Name: Columbia

IDTM Northing: 2328348.37

Well Depth: 802 [ft]



— Water Level Observations

Site ID: 02N 01E 36BBB1

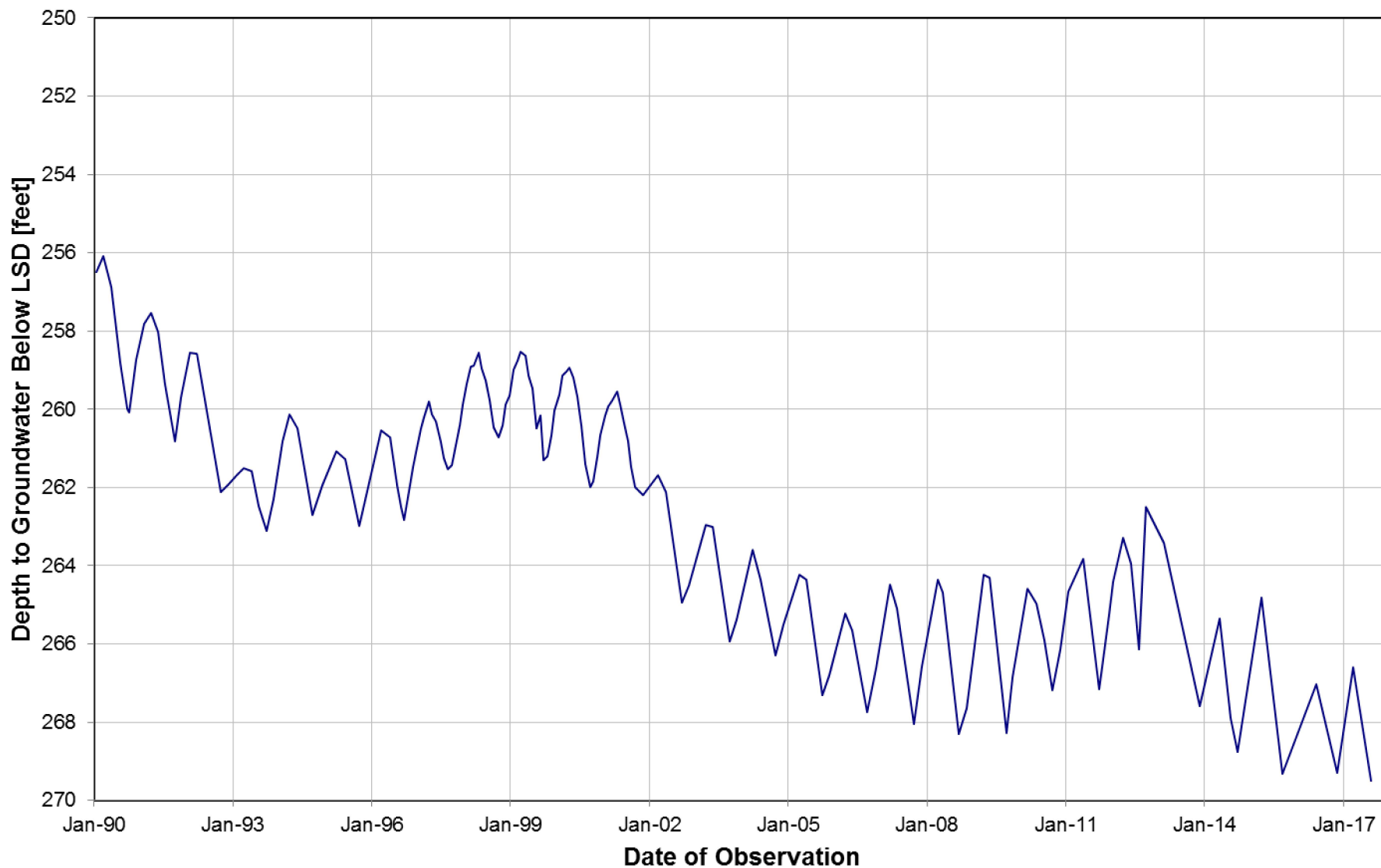
IDTM Easting: 1366177.06

Altitude of Land Surface: 2867 [ft AMSL]

Well Name: Harris S Cole

IDTM Northing: 2314506.46

Well Depth: 305 [ft]



— Water Level Observations

Site ID: 02N 02E 34CCD1

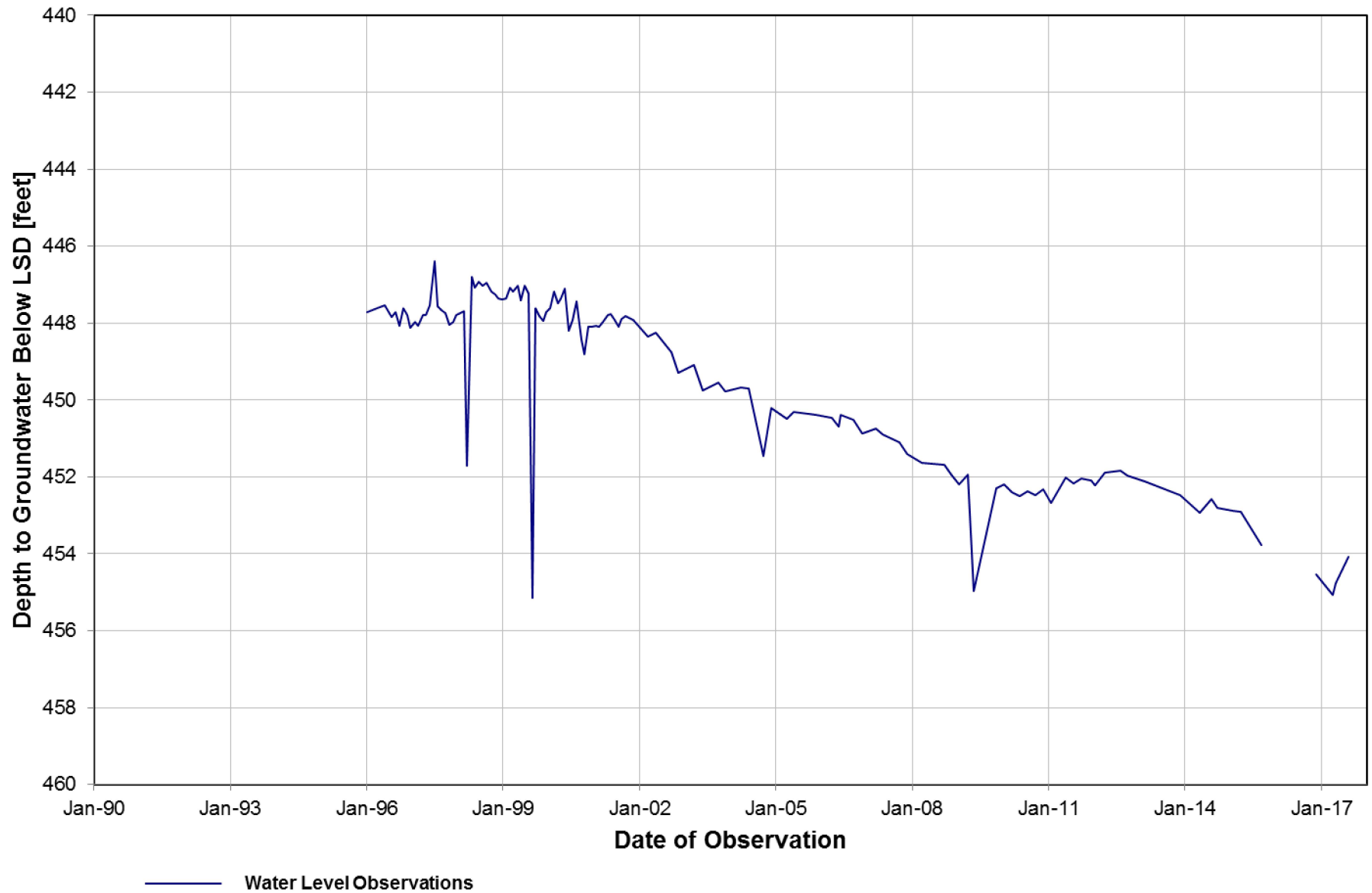
IDTM Easting: 1364424.07

Altitude of Land Surface: 3045 [ft AMSL]

Well Name: Boise Gun Club

IDTM Northing: 2321101.59

Well Depth: 504 [ft]



Site ID: 02N 03E 34ACC1

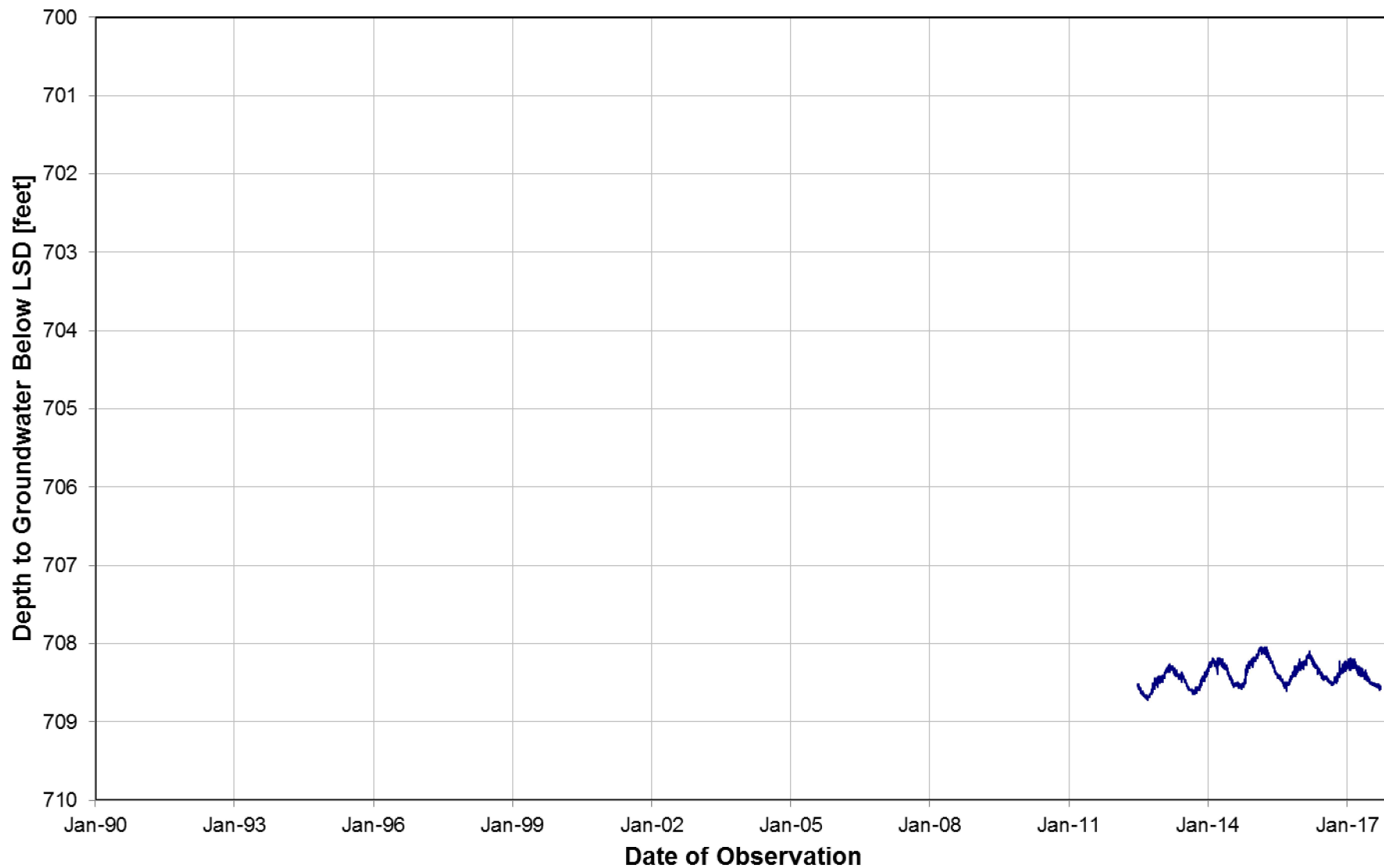
IDTM Easting: 1365118.3

Altitude of Land Surface: 3415 [ft AMSL]

Well Name: Blacks Creek ITD

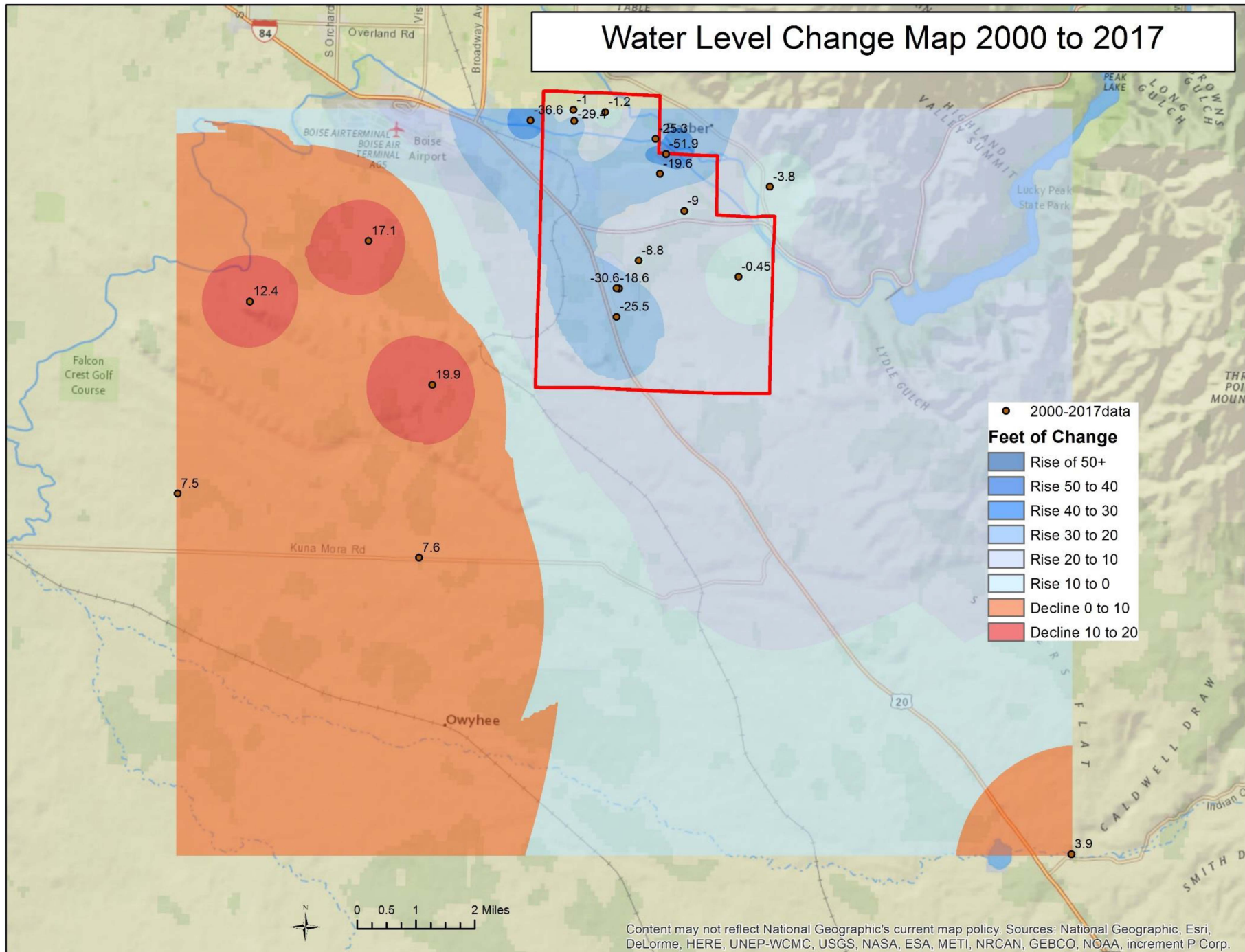
IDTM Northing: 2331382.14

Well Depth: 861 [ft]

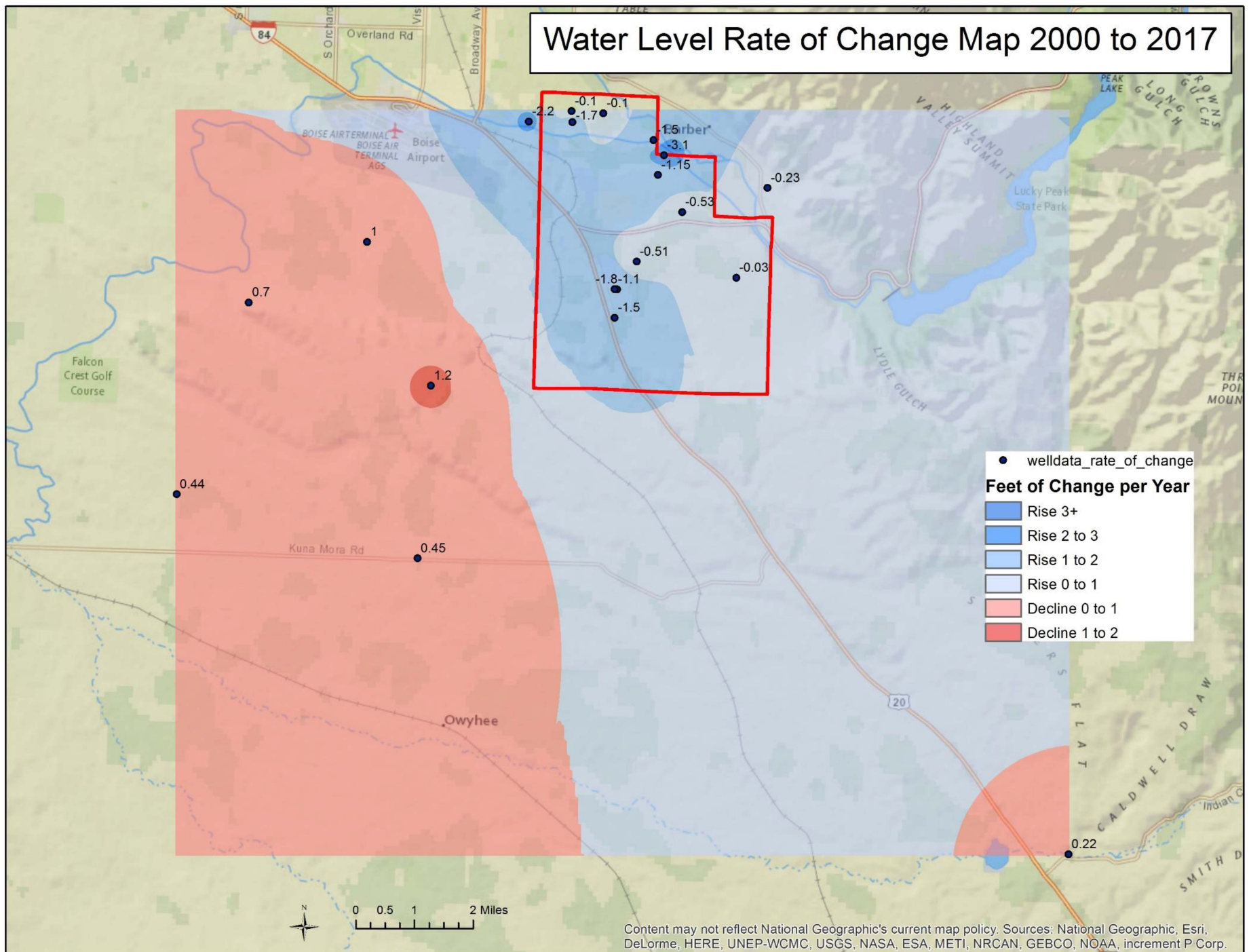


— Water Level Observations

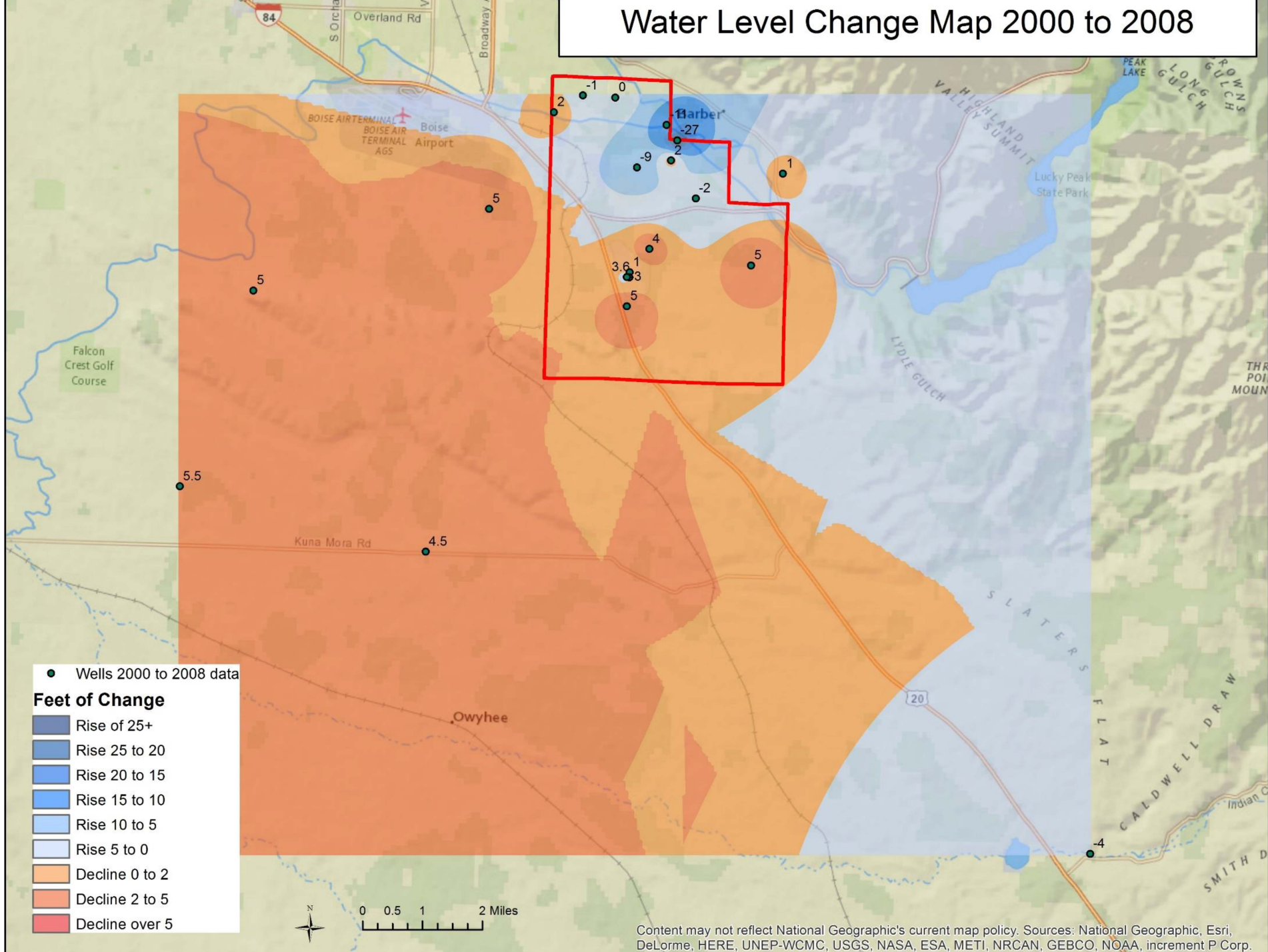
Water Level Change Map 2000 to 2017



Water Level Rate of Change Map 2000 to 2017



Water Level Change Map 2000 to 2008



Water Level Change Map 2008 to 2017

● 2008_2017_Change_Data

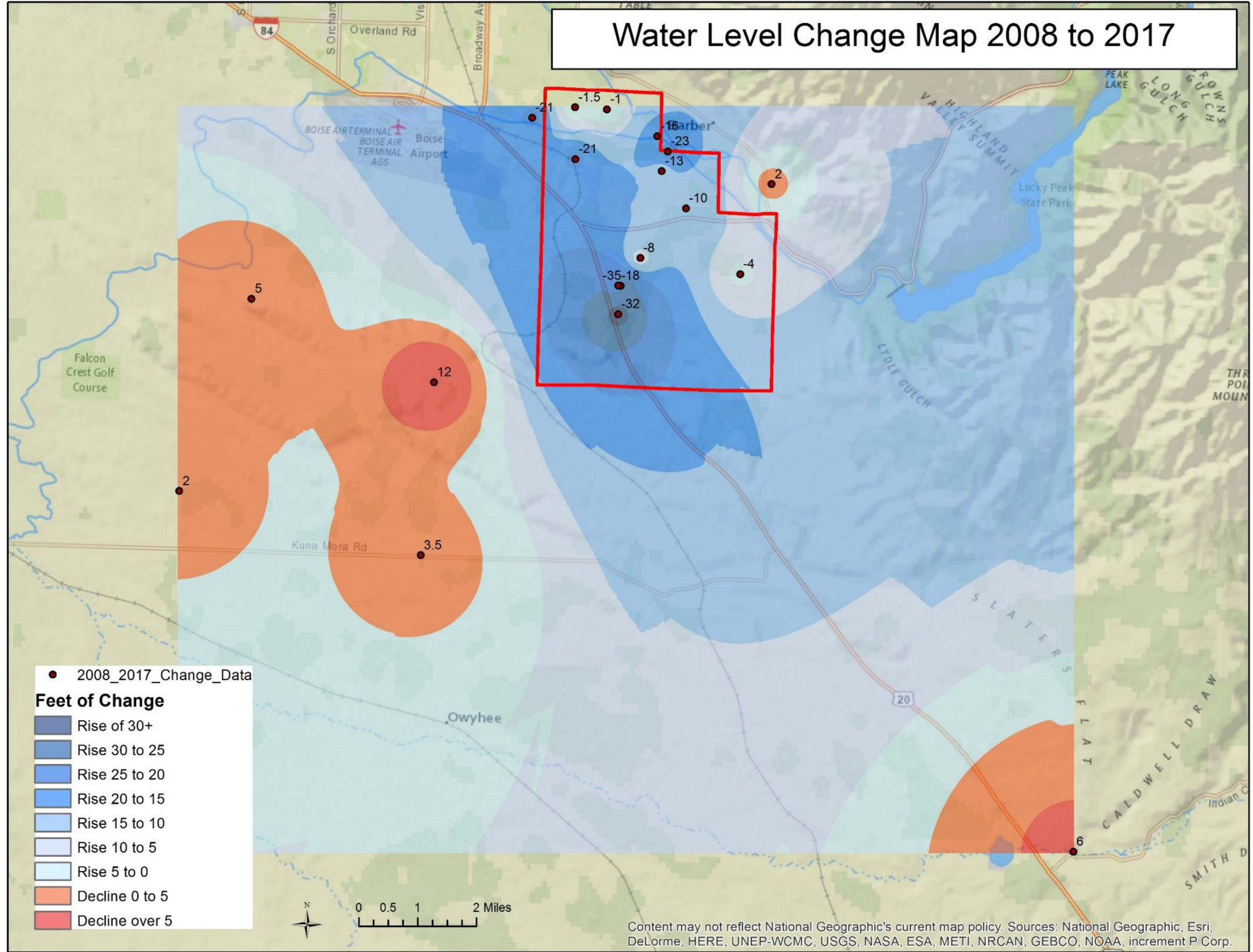
Feet of Change

- Rise of 30+
- Rise 30 to 25
- Rise 25 to 20
- Rise 20 to 15
- Rise 15 to 10
- Rise 10 to 5
- Rise 5 to 0
- Decline 0 to 5
- Decline over 5

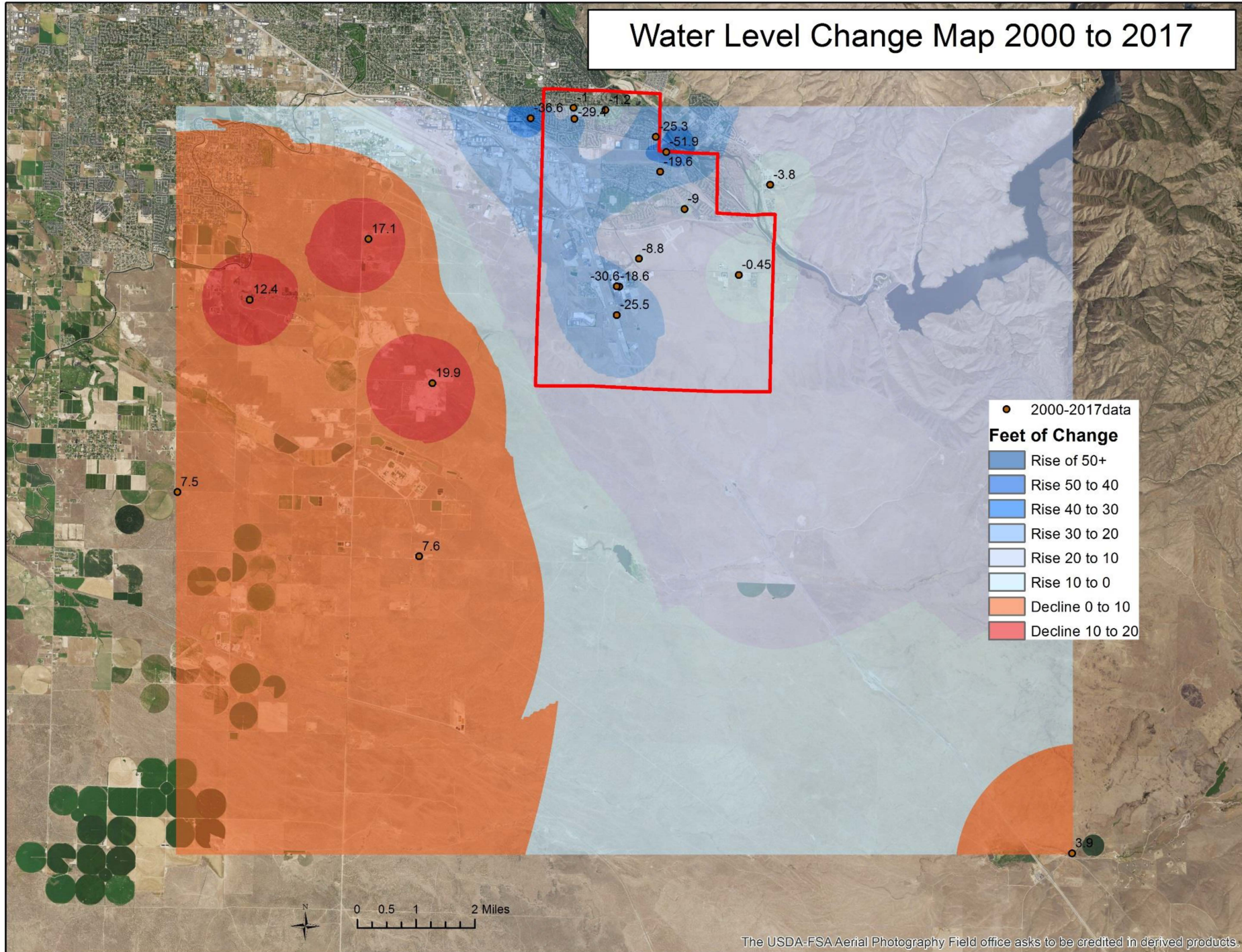


0 0.5 1 2 Miles

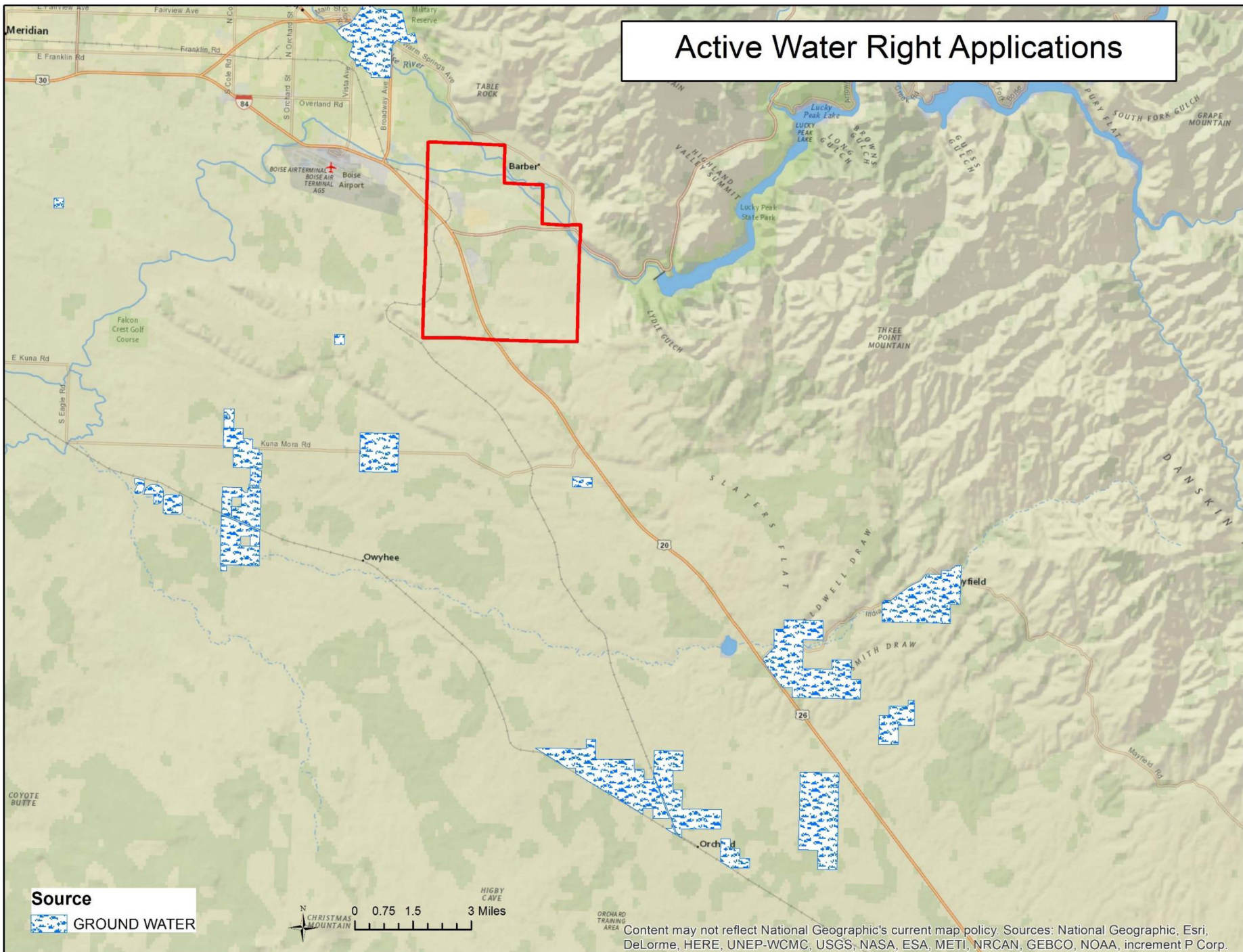
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Water Level Change Map 2000 to 2017



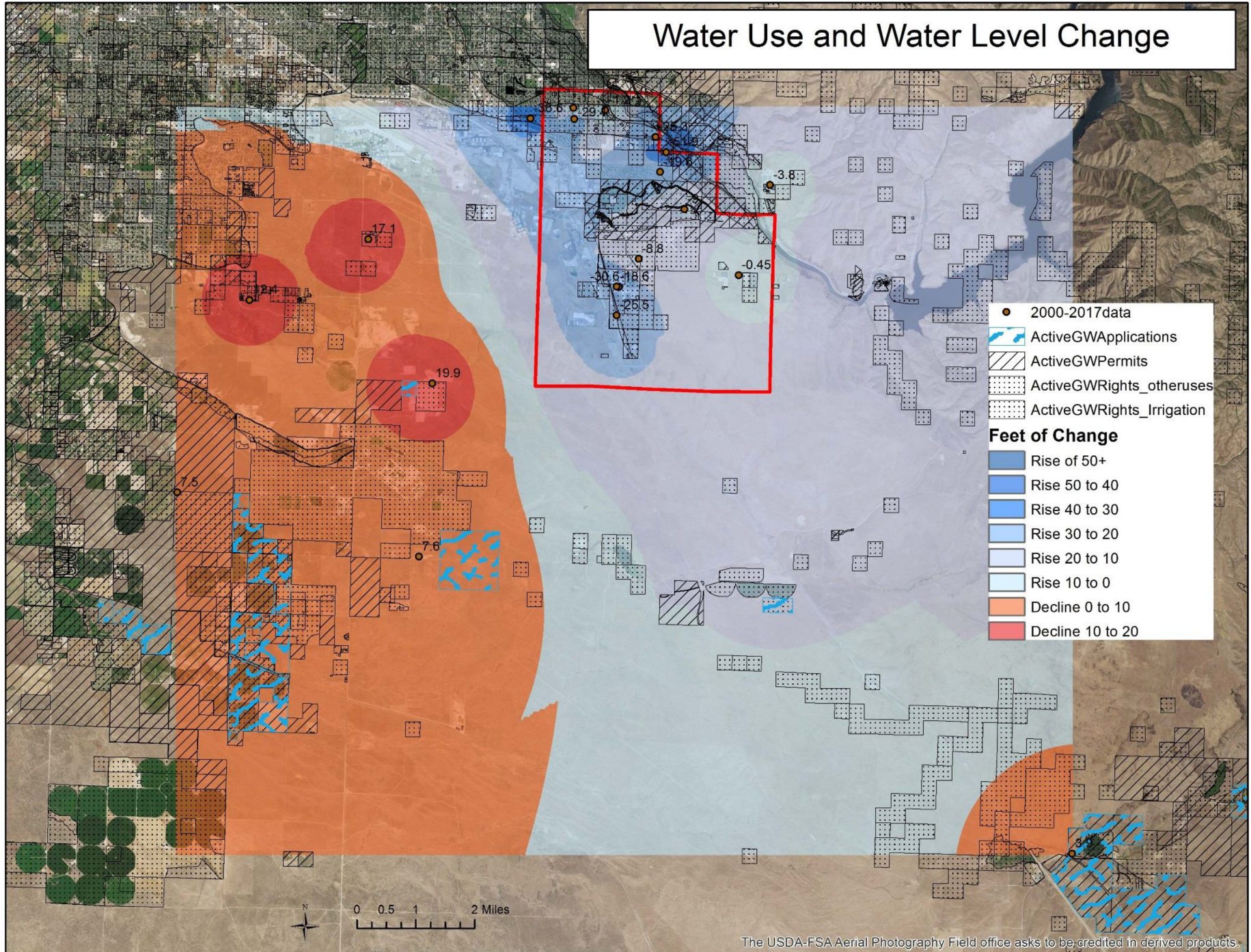
Active Water Right Applications



Applications....

WaterRight	PriorityDate	Owner	WaterUse	TotalAcres	Source	GISAcres
61-12095	4/3/2007	CLEVELAND CORDER LLC; NEVID LLC	MUNICIPAL	0	GROUND WATER	423.3
63-32703	6/21/2007	ORCHARD RANCH LLC	IRRIGATION	2752	GROUND WATER	2757.2
63-33344	1/20/2011	ARK PROPERTIES LLC; MAYFIELD TOWNSITE LLC	IRRIGATION	1284	GROUND WATER	1279.4
61-12307	6/15/2016	PARS HOLDINGS LC	MUNICIPAL	0	GROUND WATER	1801.3
63-34245	6/16/2016	PARS HOLDINGS LC	MUNICIPAL	0	GROUND WATER	1801.3
61-12308	6/21/2016	PARS HOLDINGS LC	MUNICIPAL	0	GROUND WATER	1801.3
63-34266	9/7/2016	DEWEY, DON L; PAUL D AND RAE LEVIE TRUST	IRRIGATION	80	GROUND WATER	80.6
63-34336	1/30/2017	DEWEY, DON L	STOCKWATER STORAGE	0	BRYANS RUN	3.2
63-34336	1/30/2017	DEWEY, DON L	WILDLIFE STORAGE	0	BRYANS RUN	3.2
63-34336	1/30/2017	DEWEY, DON L	RECREATION STORAGE	0	BRYANS RUN	3.2
63-34343	3/29/2017	KNIFE RIVER	COMMERCIAL	0	GROUND WATER	39.8
63-34352	3/27/2017	COLLIAS, STEPHEN	IRRIGATION	640	GROUND WATER	636.2
63-34365	4/20/2017	MONTIERTH, RAY; MONTIERTH, SUSAN	IRRIGATION	81	GROUND WATER	77.3
63-34373	4/20/2017	MONTIERTH, RAY; MONTIERTH, SUSAN	IRRIGATION FROM STORAGE	1675	GROUND WATER	1688.4
63-34373	4/20/2017	MONTIERTH, RAY; MONTIERTH, SUSAN	IRRIGATION STORAGE	0	GROUND WATER	13.5
63-34374	4/20/2017	MONTIERTH, RAY; MONTIERTH, SUSAN	IRRIGATION	300	GROUND WATER	302.0
61-12319	8/3/2017	JUNIPER STATION FARM LLC	IRRIGATION	1437	GROUND WATER	1432.7

Water Use and Water Level Change



Previous Studies

- IDWR Internal Memo “SE Kuna/S Boise Significant Water Right Development Proposals.” Owsley, 2010.
- IDWR Technical Report “East Ada County Comprehensive Hydrogeologic Investigation.” Tesch, 2013.
- IDWR Internal Memo “Review of Water Availability in southern Ada and Canyon Counties.” Owsley, 2016.
- Technical Memo “Review of JBD Draft Water Right and Proposed Recommendations.” Brockway Engineering 2017.
- Annual status reports for SEB Committee IDWR 1994-2017.

Questions?



Site ID: 02N 02E 04CBB1

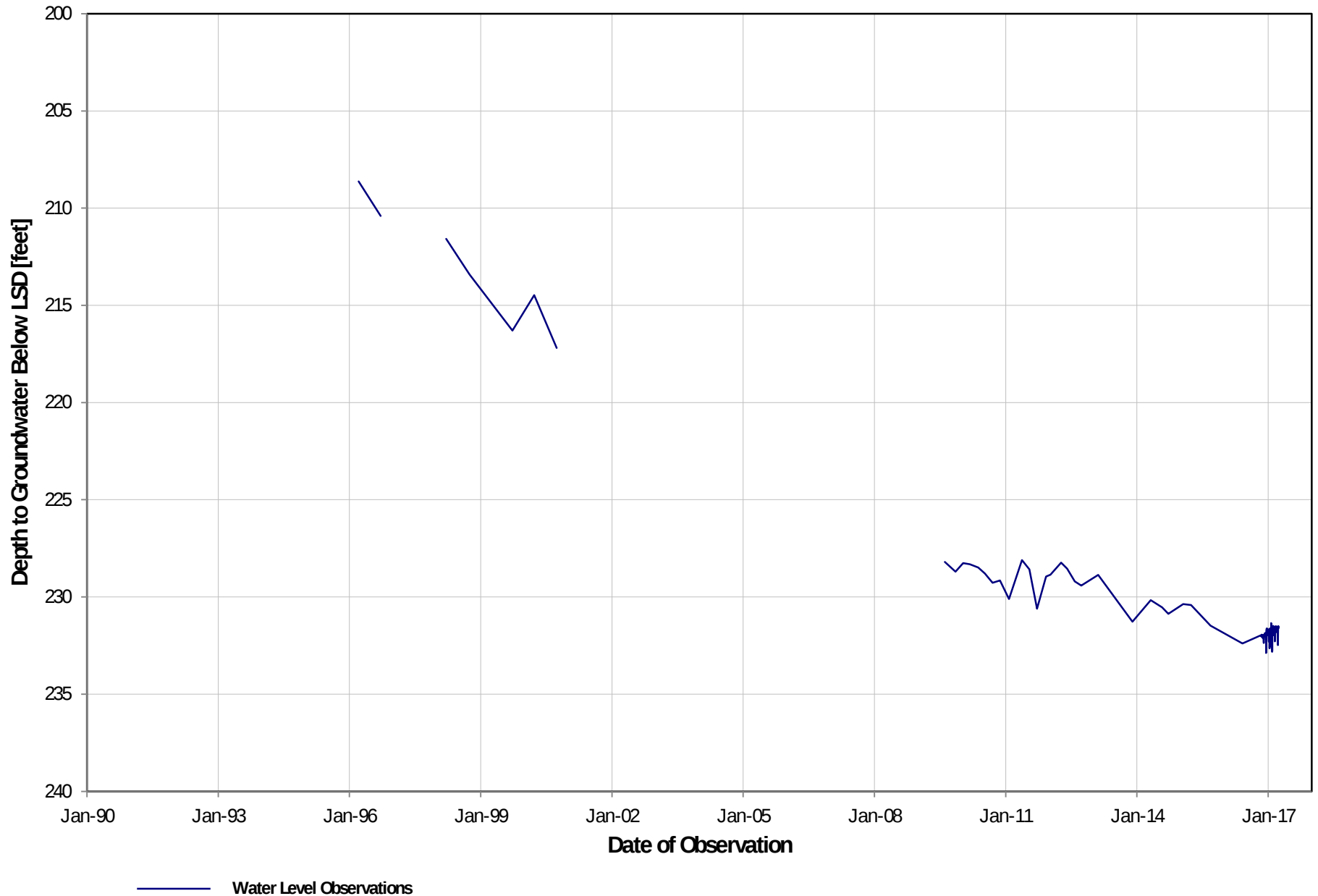
IDTM Easting: 1373083.73

Altitude of Land Surface: 2880 [ft AMSL]

Well Name: IDL House

IDTM Northing: 2319719.14

Well Depth: 353 [ft]



Site ID: 02N 02E 07CBC1

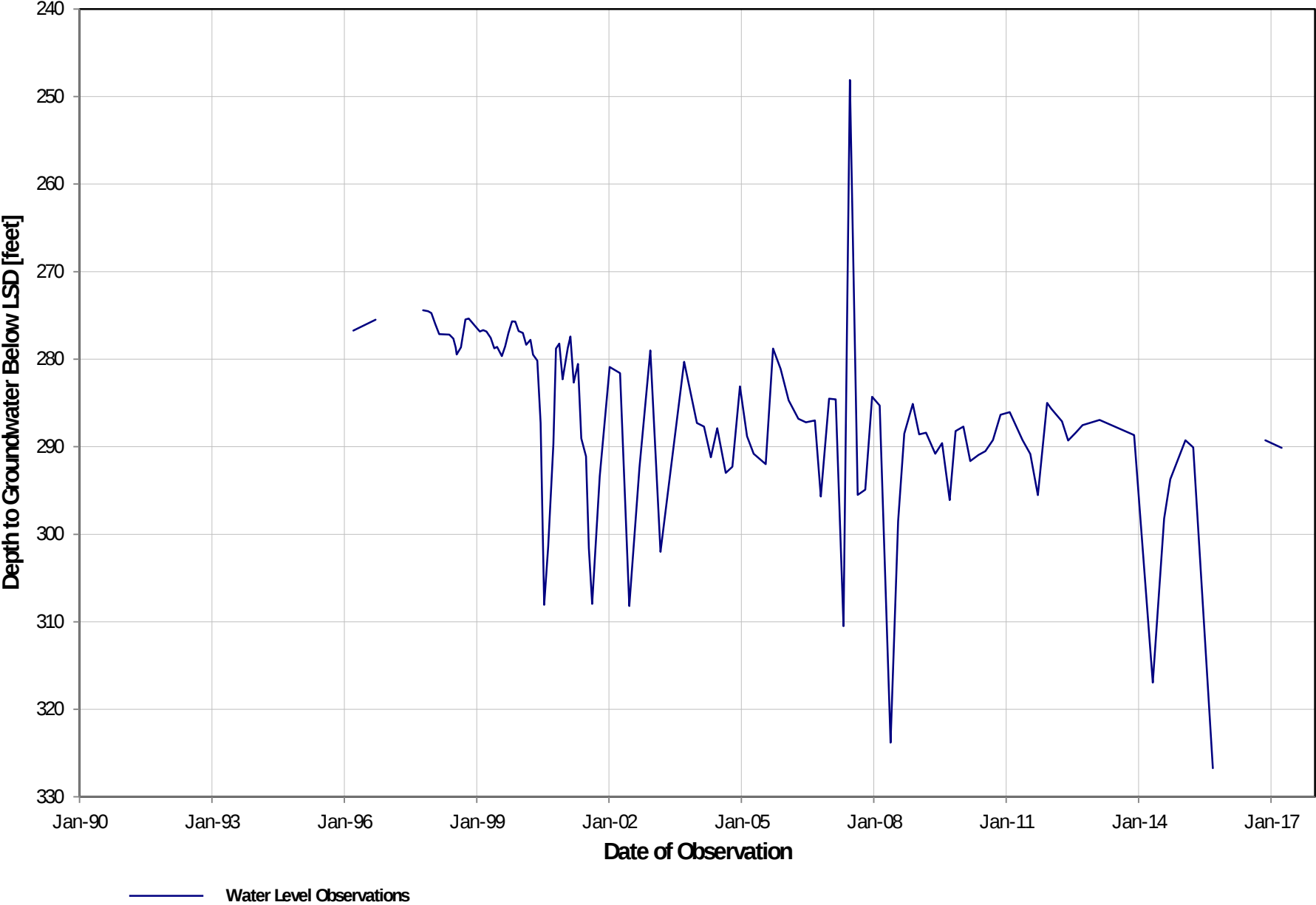
Well Name: Hollilynn

IDTM Easting: 1371427.07

IDTM Northing: 2316480

Altitude of Land Surface: 2920 [ft AMSL]

Well Depth: 460 [ft]



Site ID: 02N 02E 22BBB1

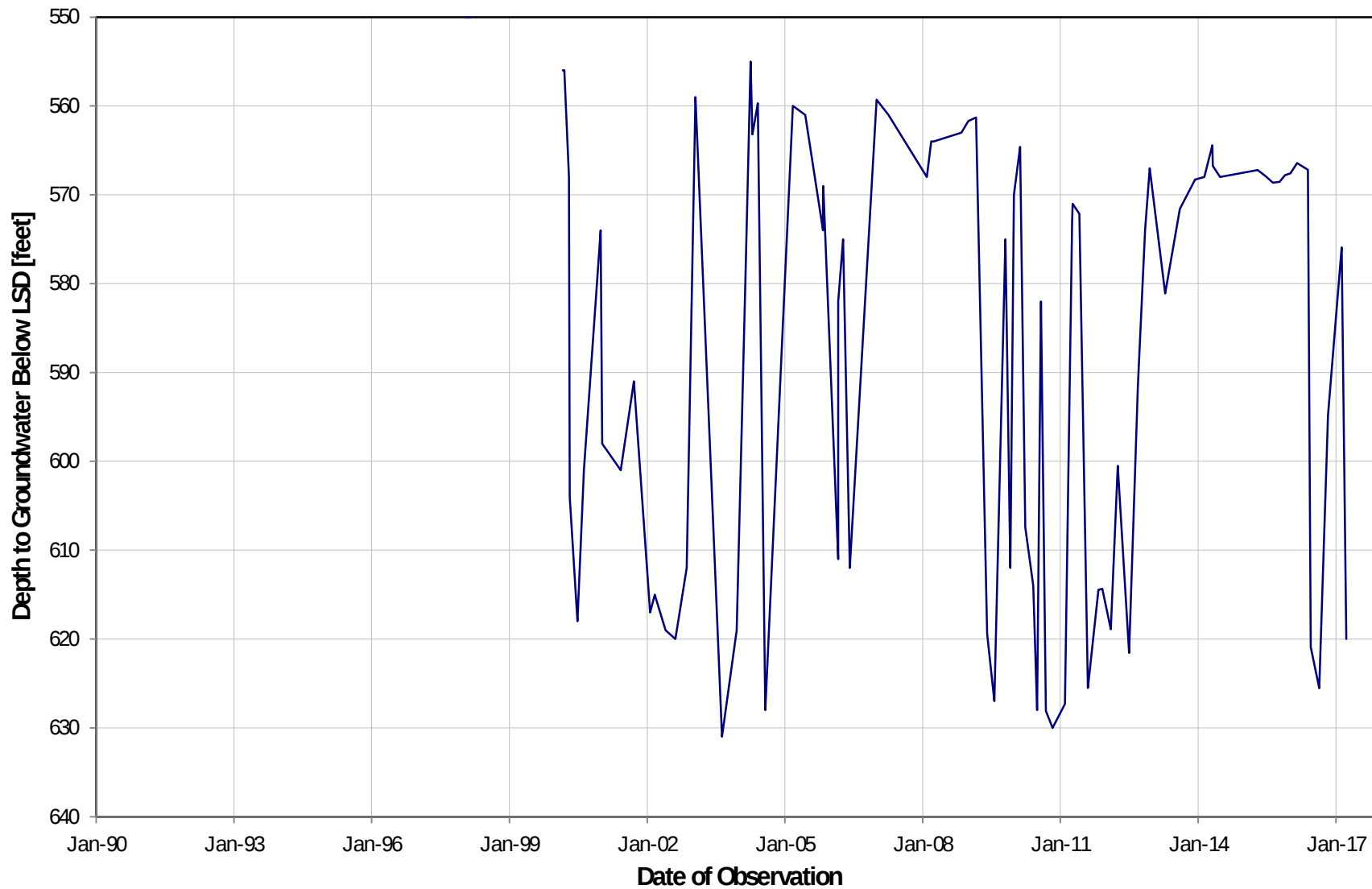
IDTM Easting: 1369153.1

Altitude of Land Surface: 3175 [ft AMSL]

Well Name: Pioneer

IDTM Northing: 2321464.39

Well Depth: 930 [ft]



— Water Level Observations

Site ID: 02N 02E 17ABD1

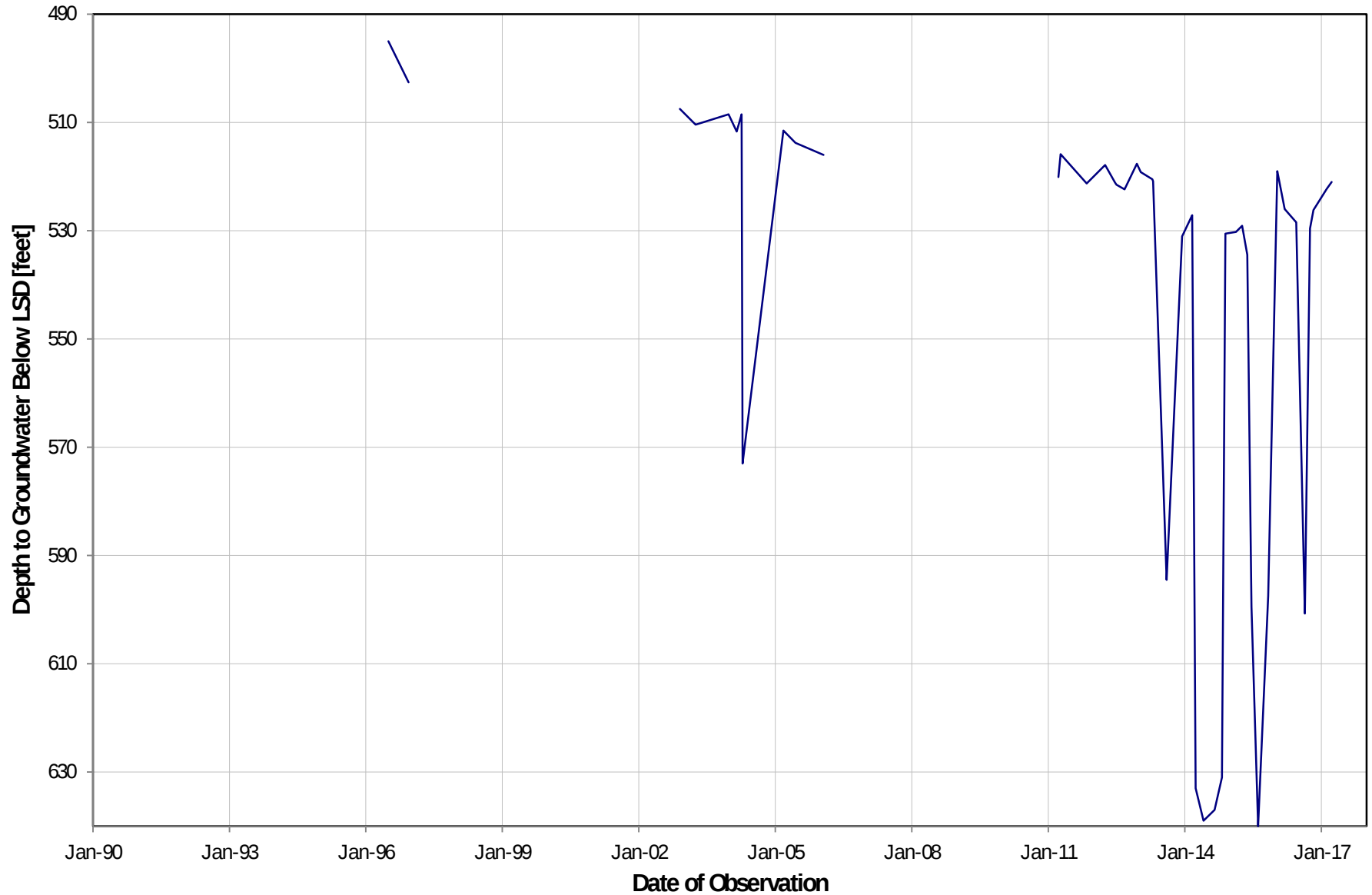
IDTM Easting: 1370509.98

Altitude of Land Surface: 3153 [ft AMSL]

Well Name: Ten Mile

IDTM Northing: 2319141.75

Well Depth: 904 [ft]



Water Level Observations

Site ID: 02N 03E 09BAA2

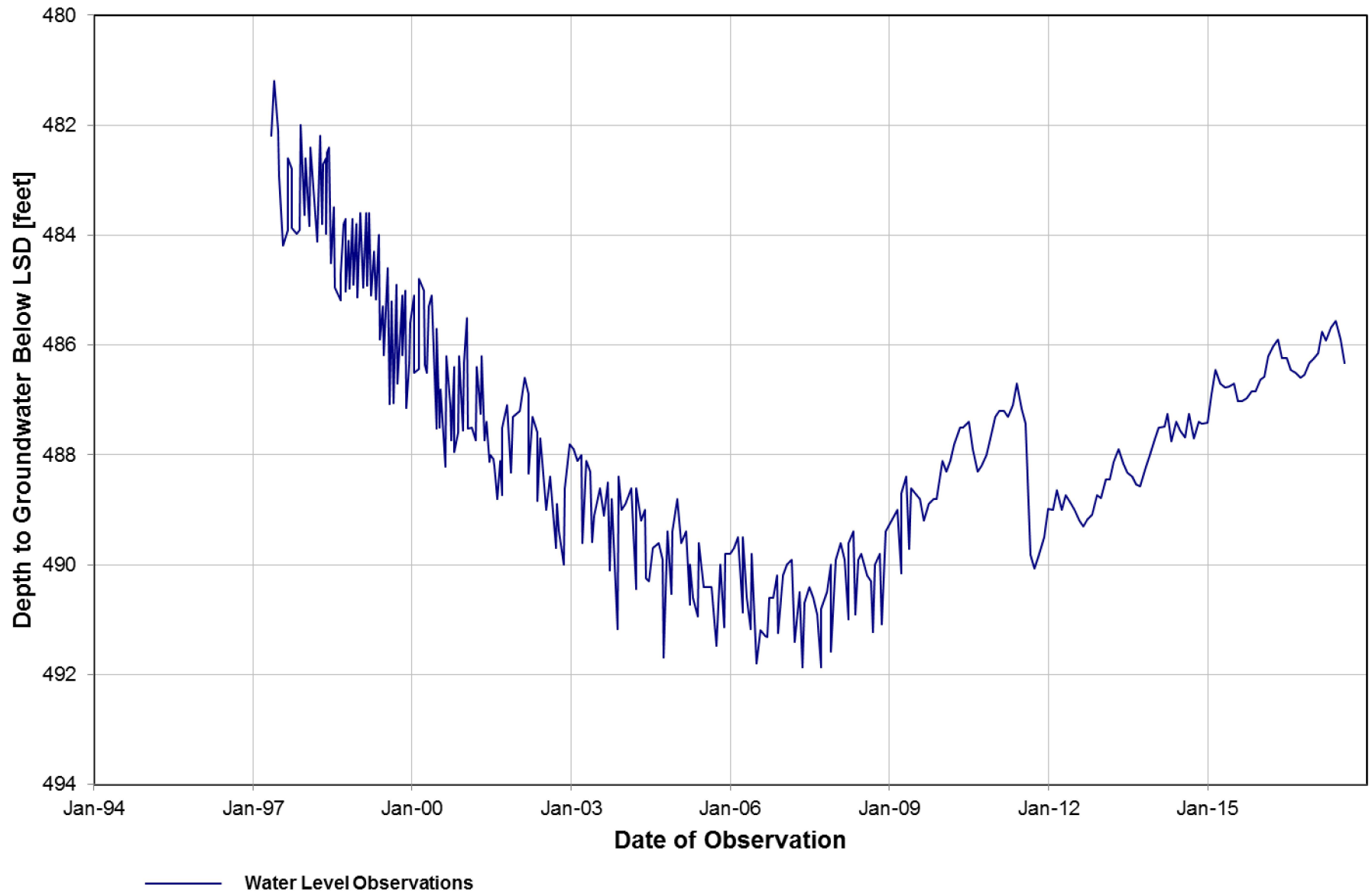
IDTM Easting: 1372100.9

Altitude of Land Surface: 3173 [ft AMSL]

Well Name: Christensen

IDTM Northing: 2329829.86

Well Depth: 522 [ft]



Site ID: 01N 03E 04BBD1

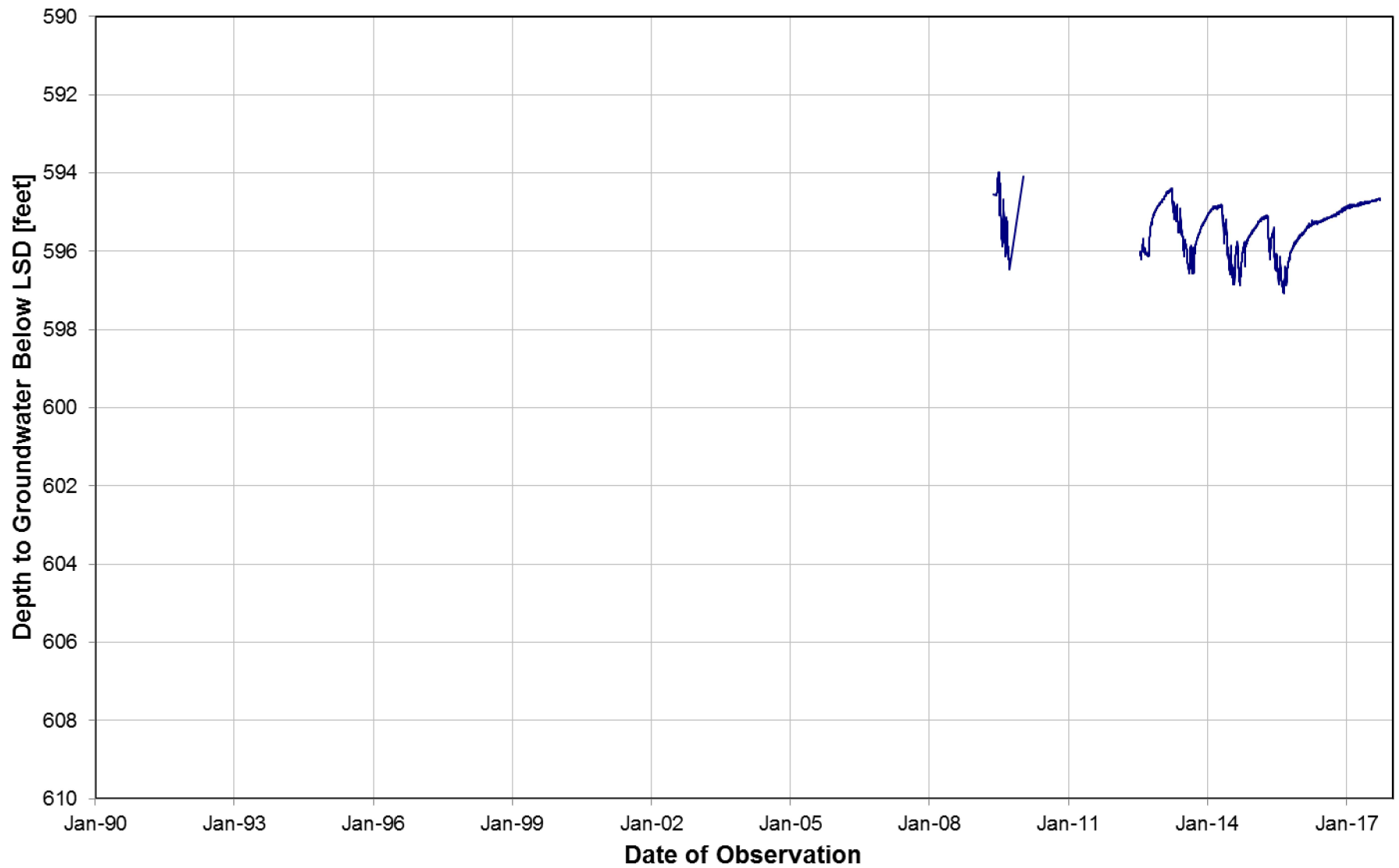
IDTM Easting: 1363880.8

Altitude of Land Surface: 3250 [ft AMSL]

Well Name: Prigge

IDTM Northing: 2329199.01

Well Depth: 735 [ft]



— Water Level Observations

Site ID: 01N 03E 04BBD1

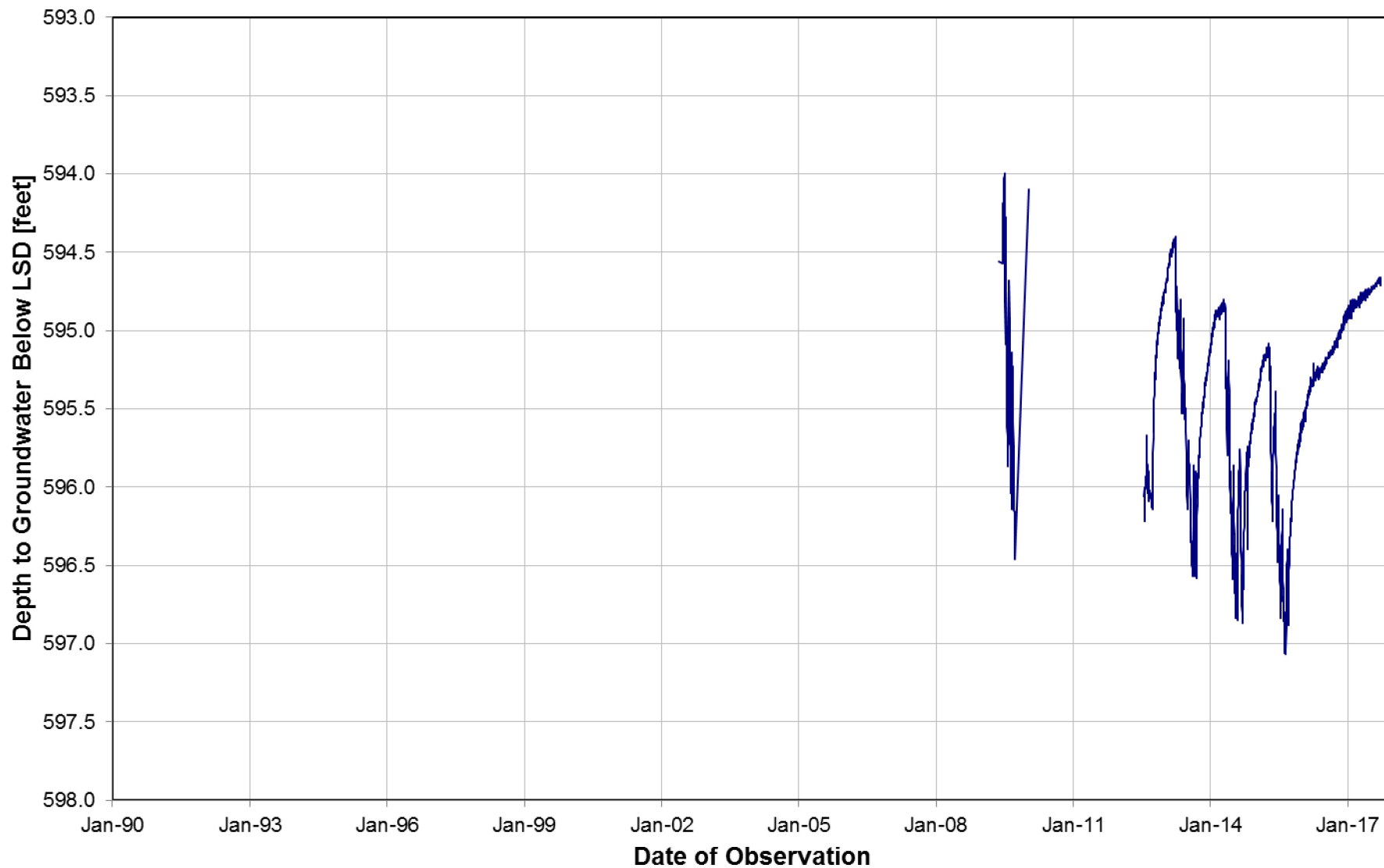
IDTM Easting: 1363880.8

Altitude of Land Surface: 3250 [ft AMSL]

Well Name: Prigge

IDTM Northing: 2329199.01

Well Depth: 735 [ft]



— Water Level Observations

Site ID: 02N 03E 34ACC1

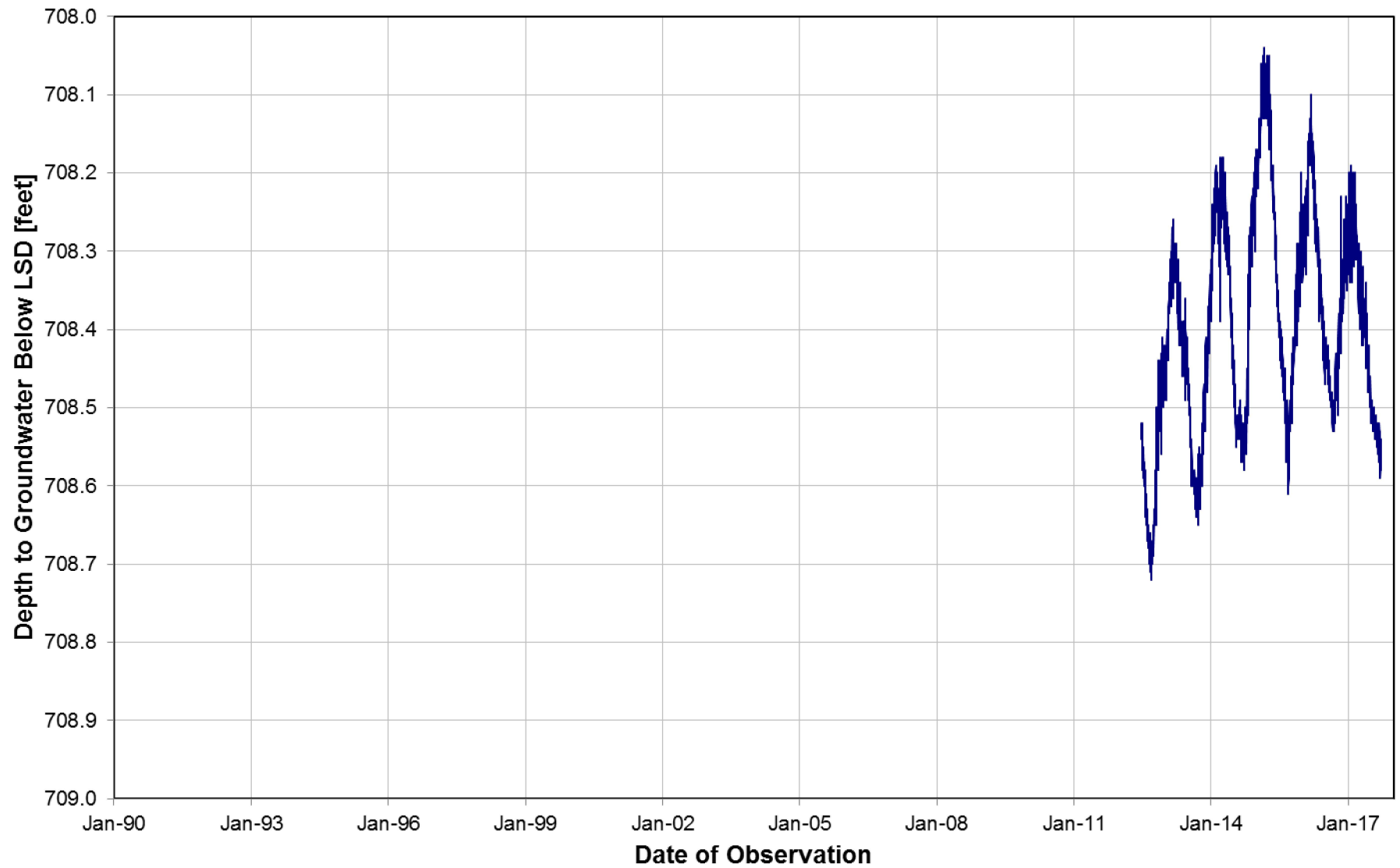
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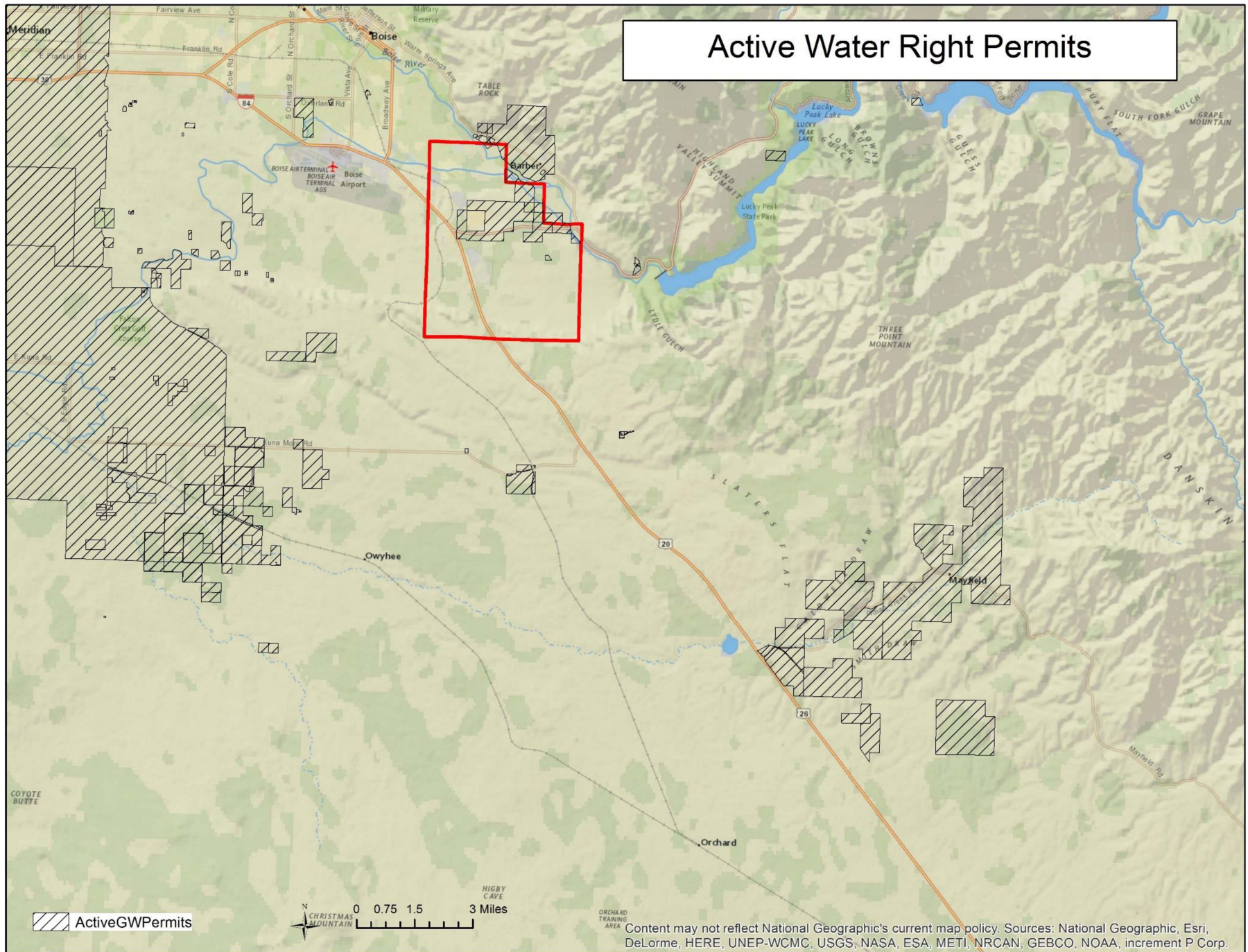
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Well Depth: 861 [ft]

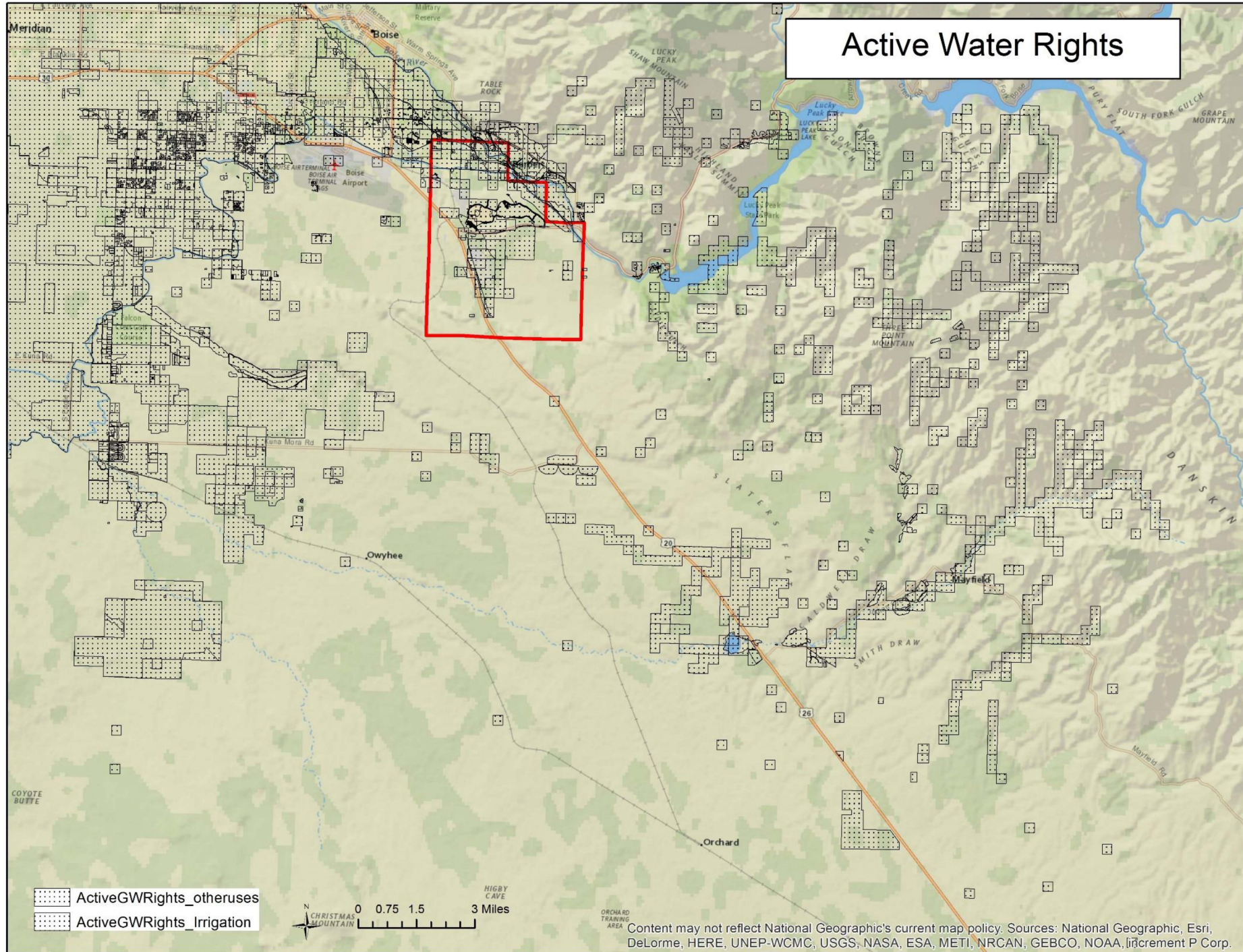


— Water Level Observations

Active Water Right Permits

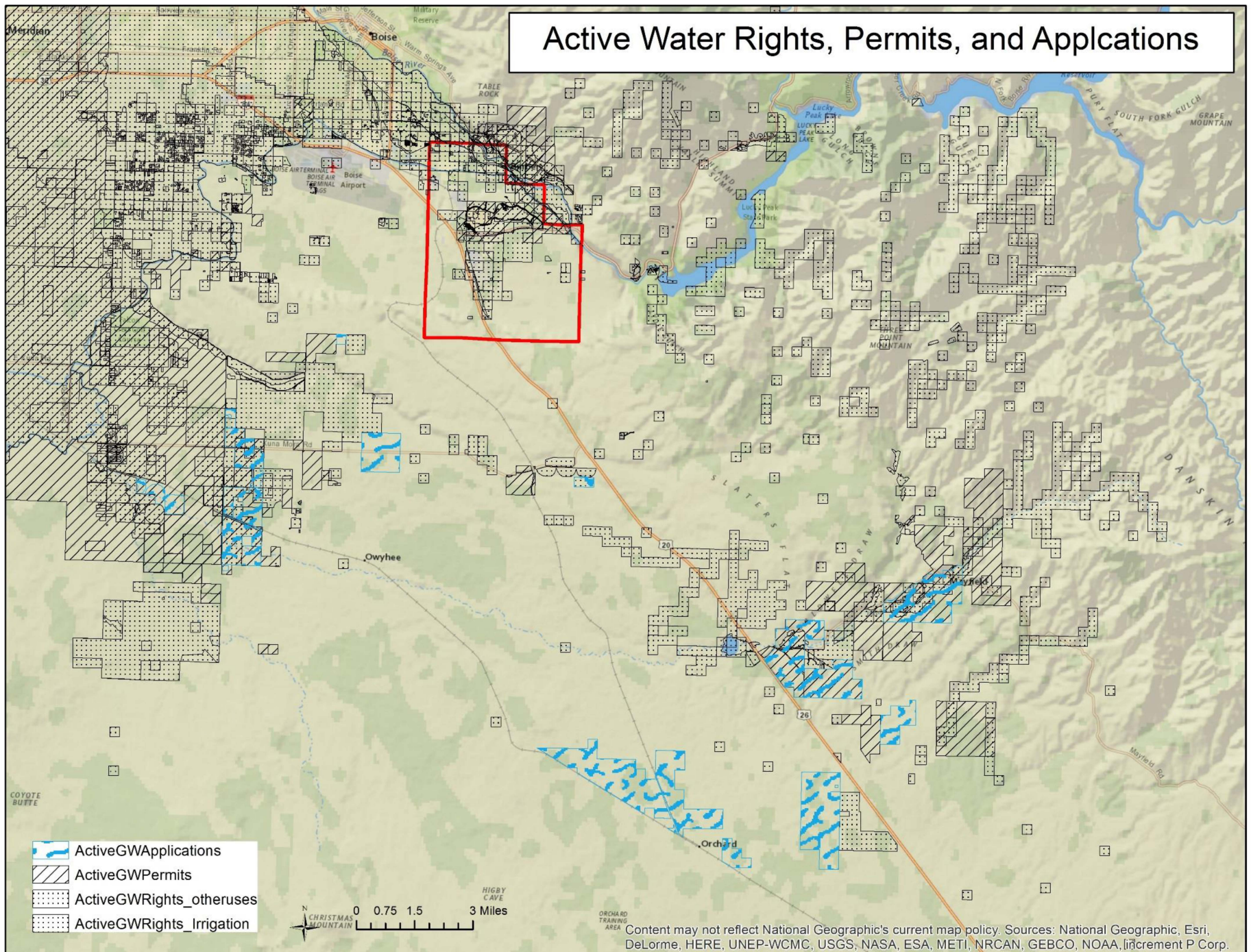


Active Water Rights



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Active Water Rights, Permits, and Applications



Southeast Boise Ground Water Management Area

- Established October 14, 1994
- Required the formation of an advisory committee
- Management plan adopted by IDWR in September 2002
- Significant conservation and recharge projects have been implemented
- IDWR maintains a monitoring network

