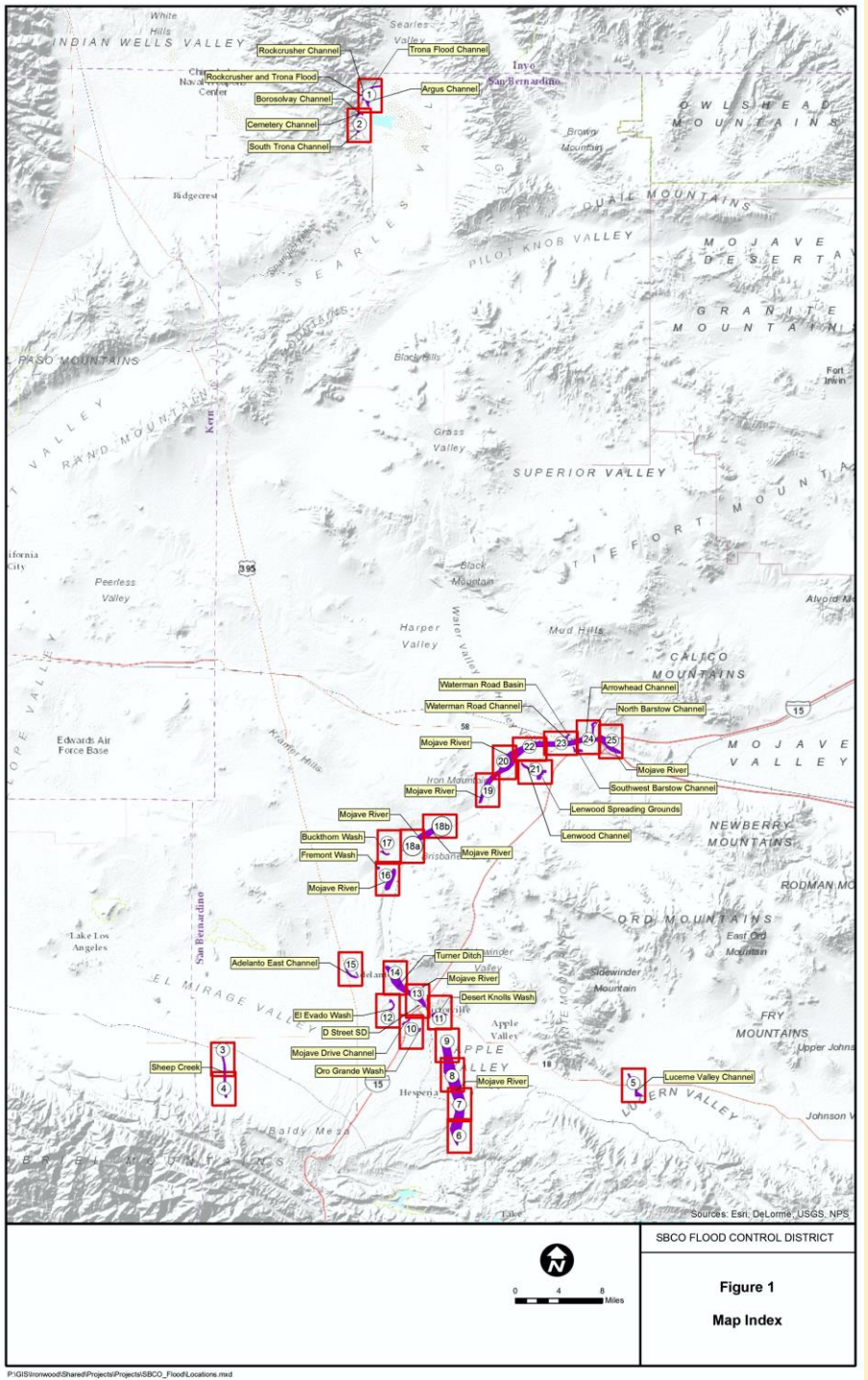
2016 MGS Habitat Assessments

SAN BERNARDINO COUNTY FLOOD CONTROL DISTRICT

Methods

Throughout the desert regions of San Bernardino County wherever these facilities overlap with existing Mohave ground squirrel range maps (Leitner, 2008) and/or recent efforts by the U.S. Geological Survey (USGS) to model habitat for this species



4 Criteria

1. appropriate vegetation for this species,
2. appropriate soils for this species,
3. distance to recent record or known location (less than 20 years old and within 10 miles), and
4. supporting a low level of human disturbance

These assessments were made independent of USGS modeling.

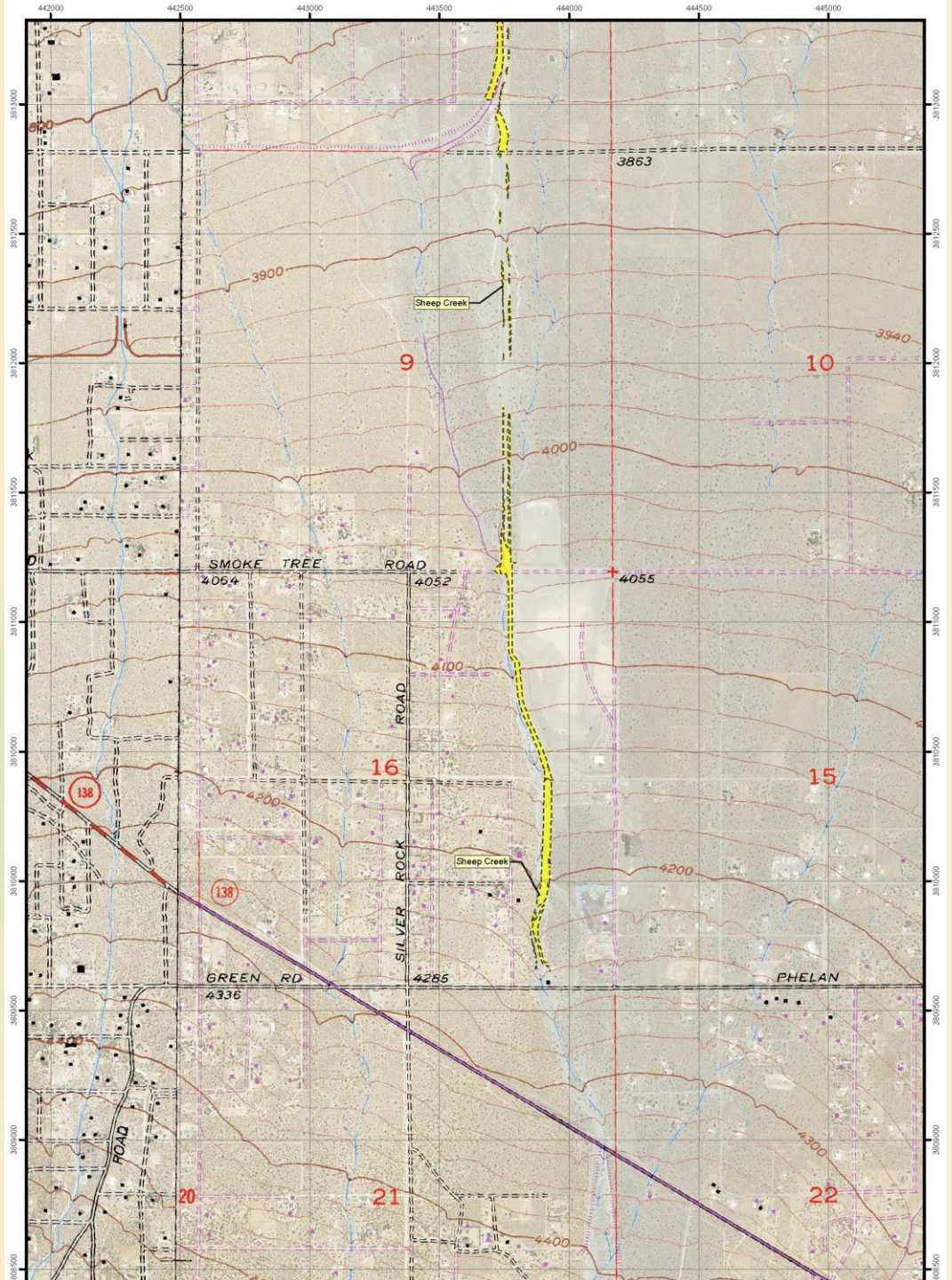
Each area was given an assessment as follows based on these criteria:

<u>Areas Likely to support MGS</u>

Excellent	meets all 4 criteria
Good	meets 3 of the 4 criteria

<u>Areas Unlikely to support MGS</u>

Fair	meets 2 of the 4 criteria
Poor	meets 0 or 1 of the 4 criteria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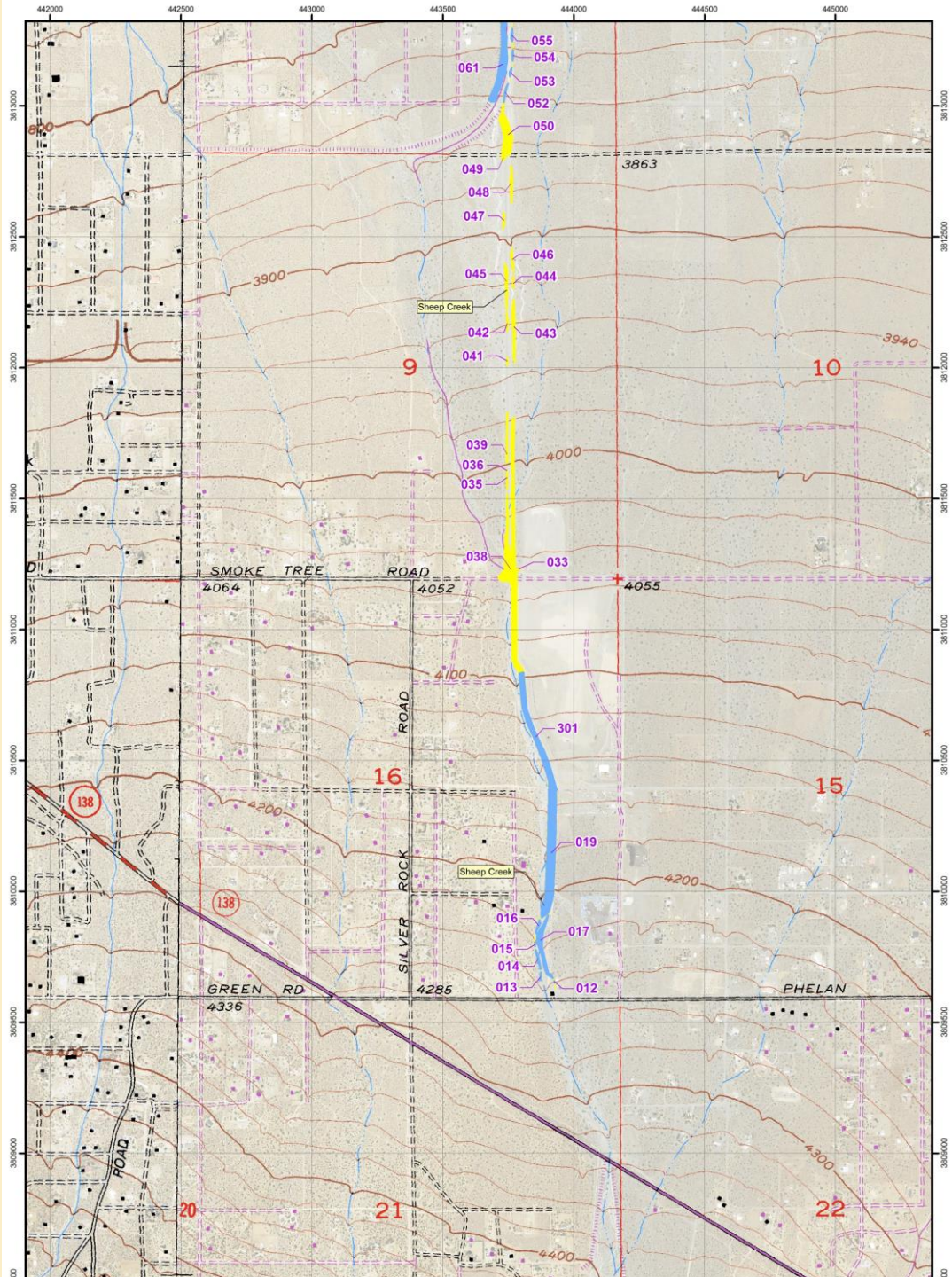
4100
4200
4300
4400
4055
4064
4052
4336
4285
SMOKE TREE ROAD
SILVER ROCK ROAD
GREEN RD
PHELAN
ROAD
Sheep Creek
9
10
16
15
20
21
22
138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SMOKE TREE ROAD
SILVER ROCK ROAD
GREEN RD
PHELAN
ROAD
Sheep Creek
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055
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038
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301
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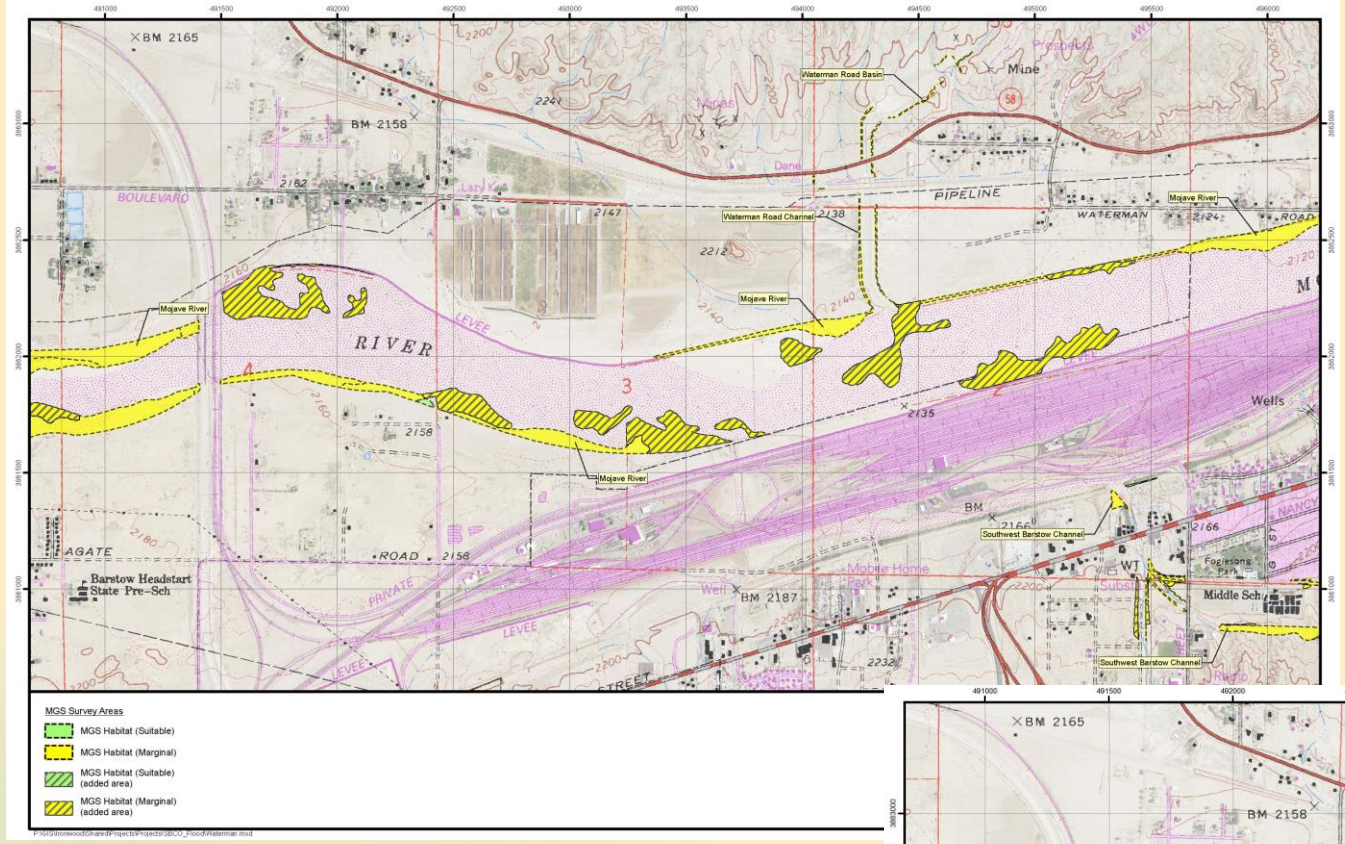
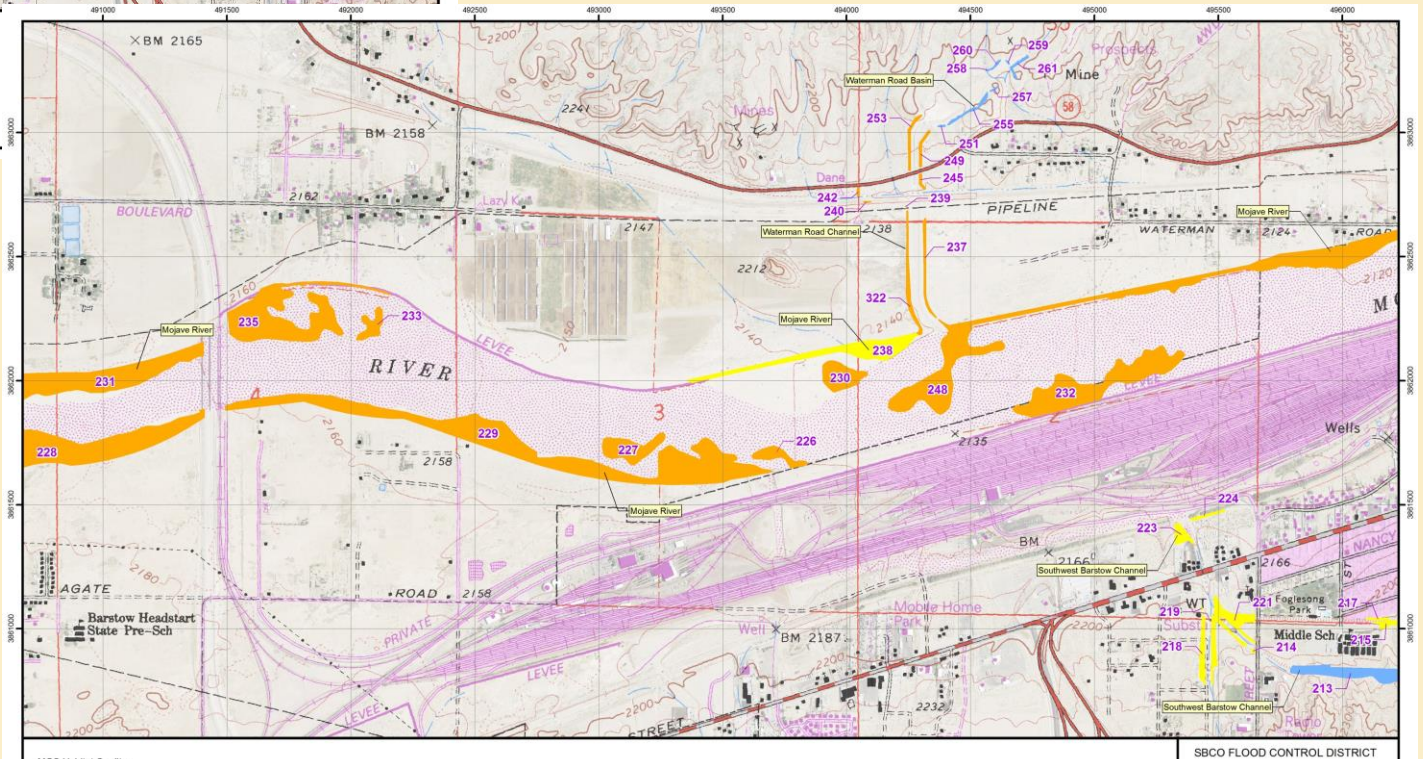


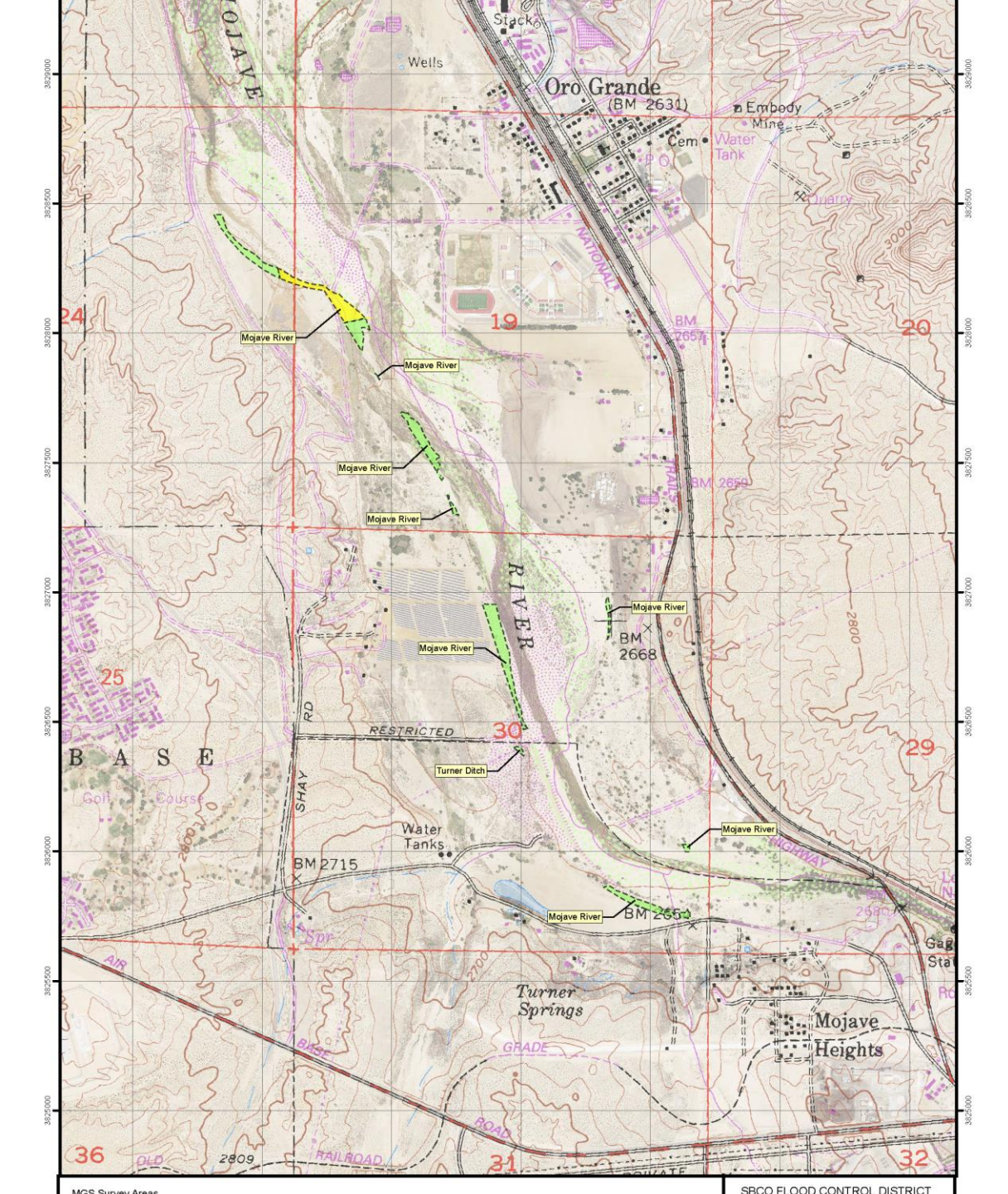
MGS Survey Areas

- MGS Habitat (Suitable)
- MGS Habitat (Marginal)
- MGS Habitat (Suitable) (added area)
- MGS Habitat (Marginal) (added area)

P:\GIS\Stonewood\Shared\Projects\Projects\SBCO_Flood\Waterman.mxd

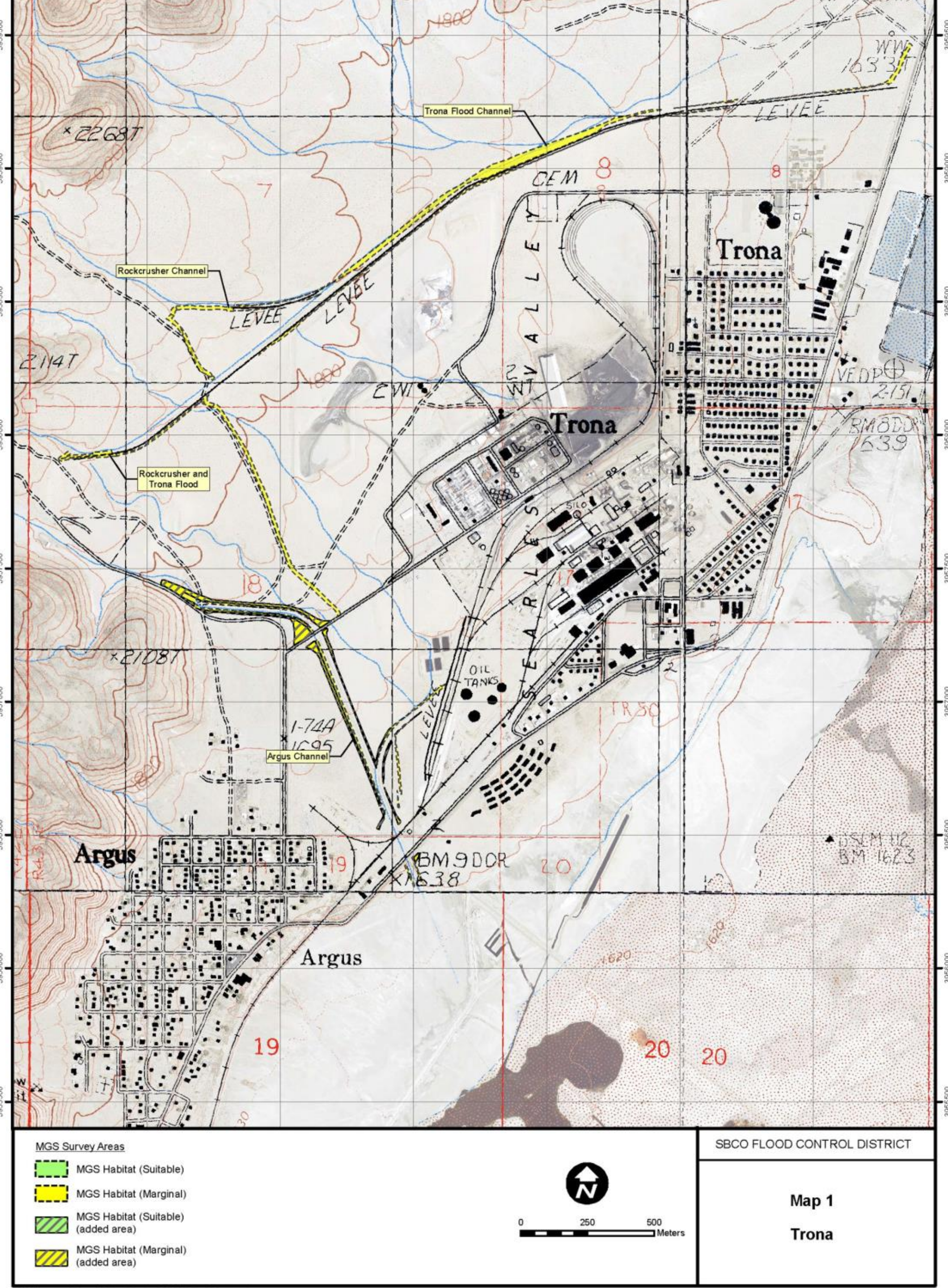


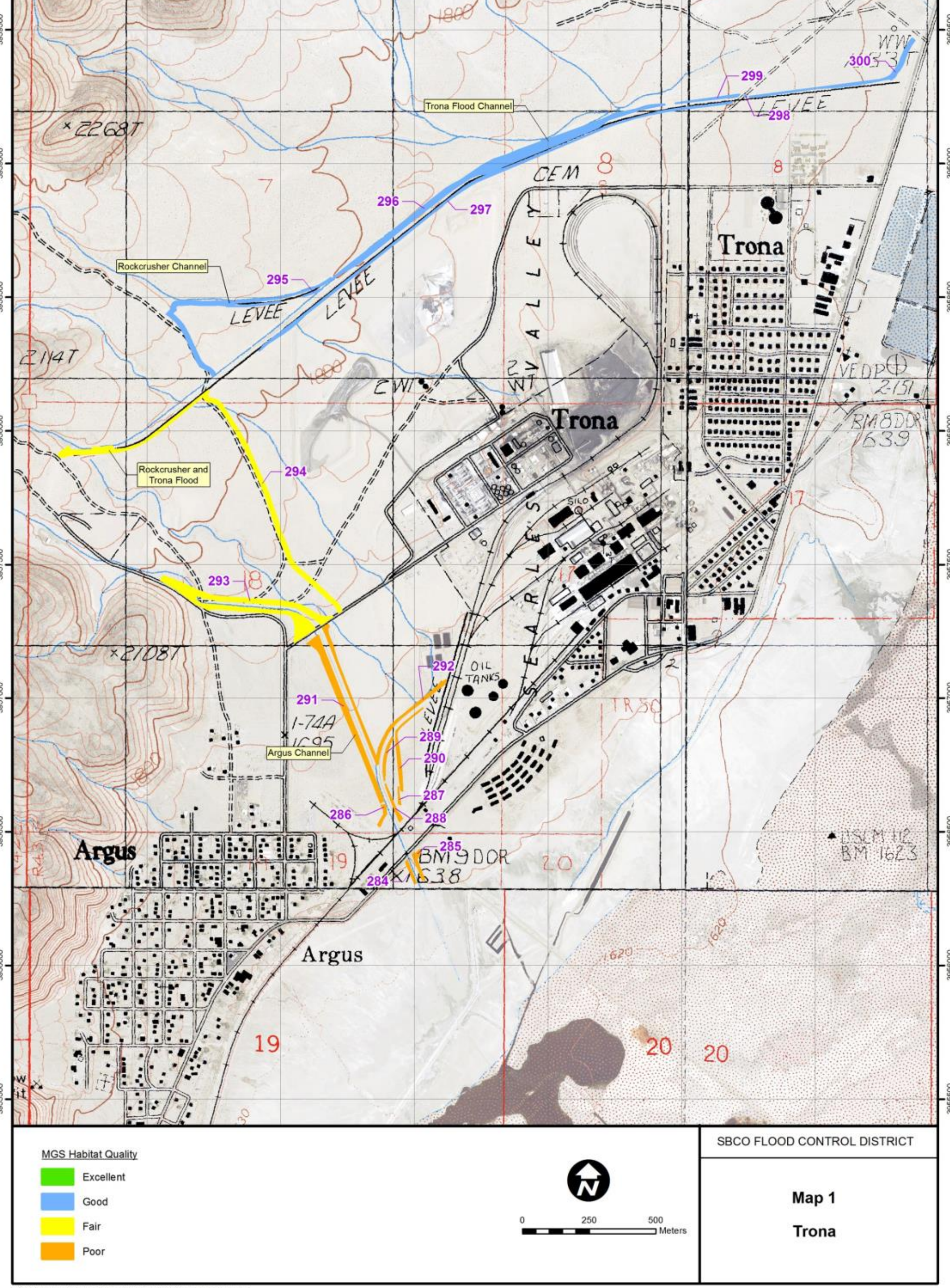
SBCO FLOOD CONTROL DISTRICT

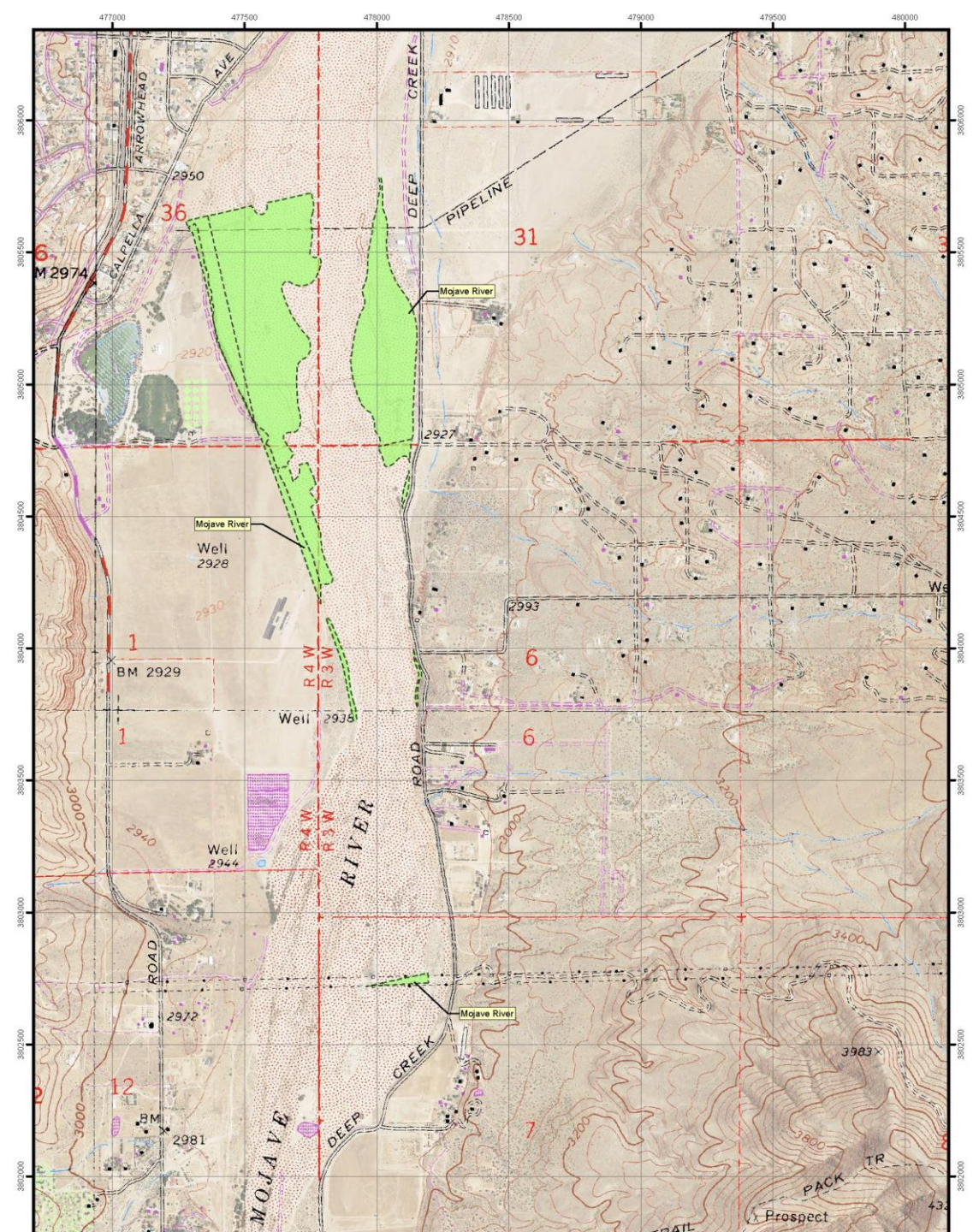


MGS Survey Areas

SBCO FLOOD CONTROL DISTRICT


Trona Flood Channel
Rockcrusher Channel
Rockcrusher and Trona Flood
Argus Channel
Trona
Argus
MGS Survey Areas
MGS Habitat (Suitable)
MGS Habitat (Marginal)
MGS Habitat (Suitable) (added area)
MGS Habitat (Marginal) (added area)
0
250
500
Meters
SBCO FLOOD CONTROL DISTRICT
Map 1
Trona


Trona Flood Channel
Rockcrusher Channel
Rockcrusher and Trona Flood
Argus Channel
Trona
Argus
284
285
286
287
288
289
290
291
292
293
294
295
296
297
298
299
300
MGS Habitat Quality
Excellent
Good
Fair
Poor
0
250
500
Meters
SBCO FLOOD CONTROL DISTRICT
Map 1
Trona


ARROWHEAD AVE
CALPELLA
DEEP CREEK
PIPELINE
Mojave River
Well 2928
BM 2929
Well 2938
Well 2944
ROAD
MOJAVE RIVER
BM 2981
PACK TR
Prospect
2950
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2993
2972
3983
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31
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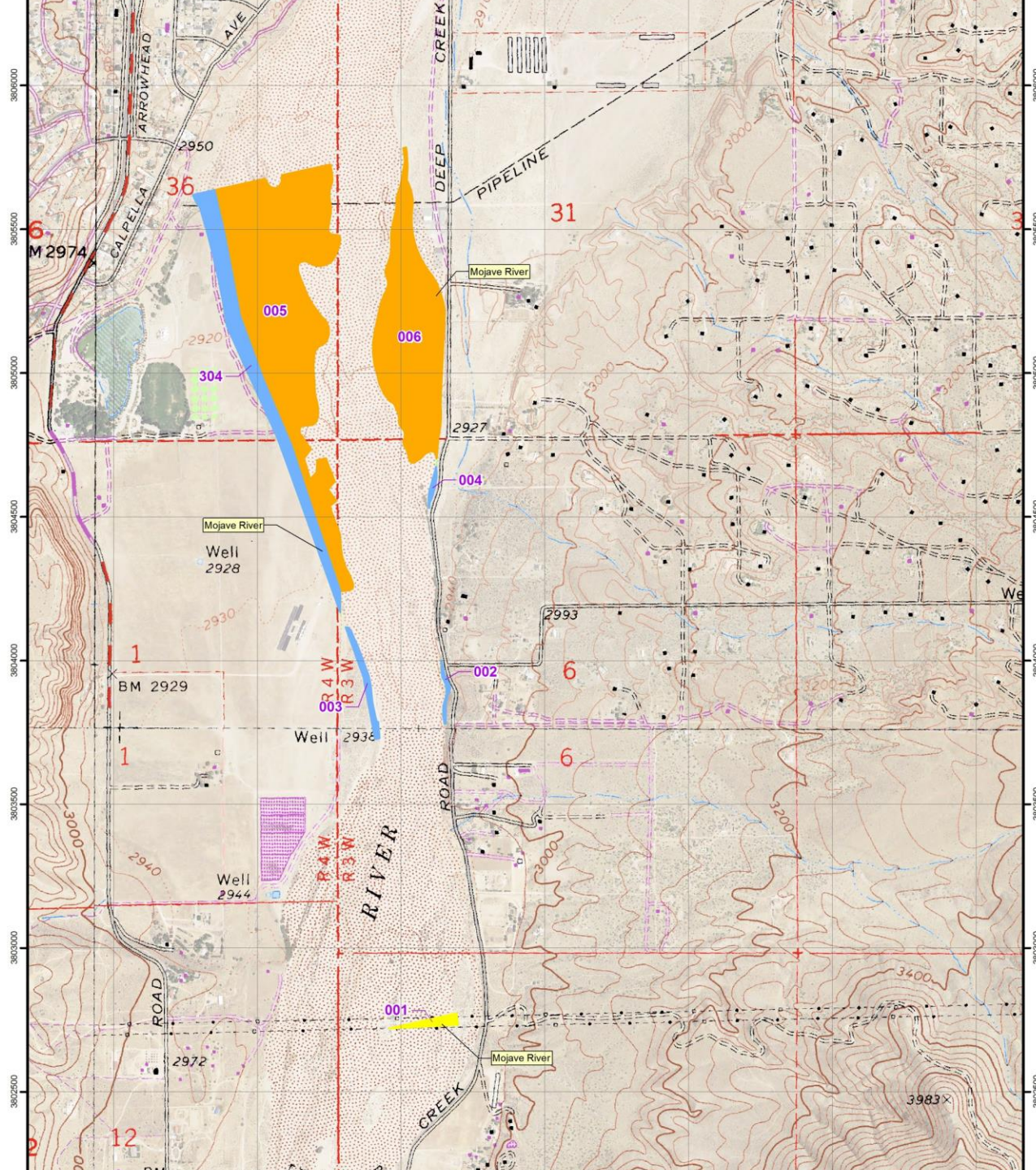
M 2974
R4W
R3W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CALPELLA
DEEP CREEK
PIPELINE
Mojave River
005
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Well 2928
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Well 2938
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MOJAVE RIVER
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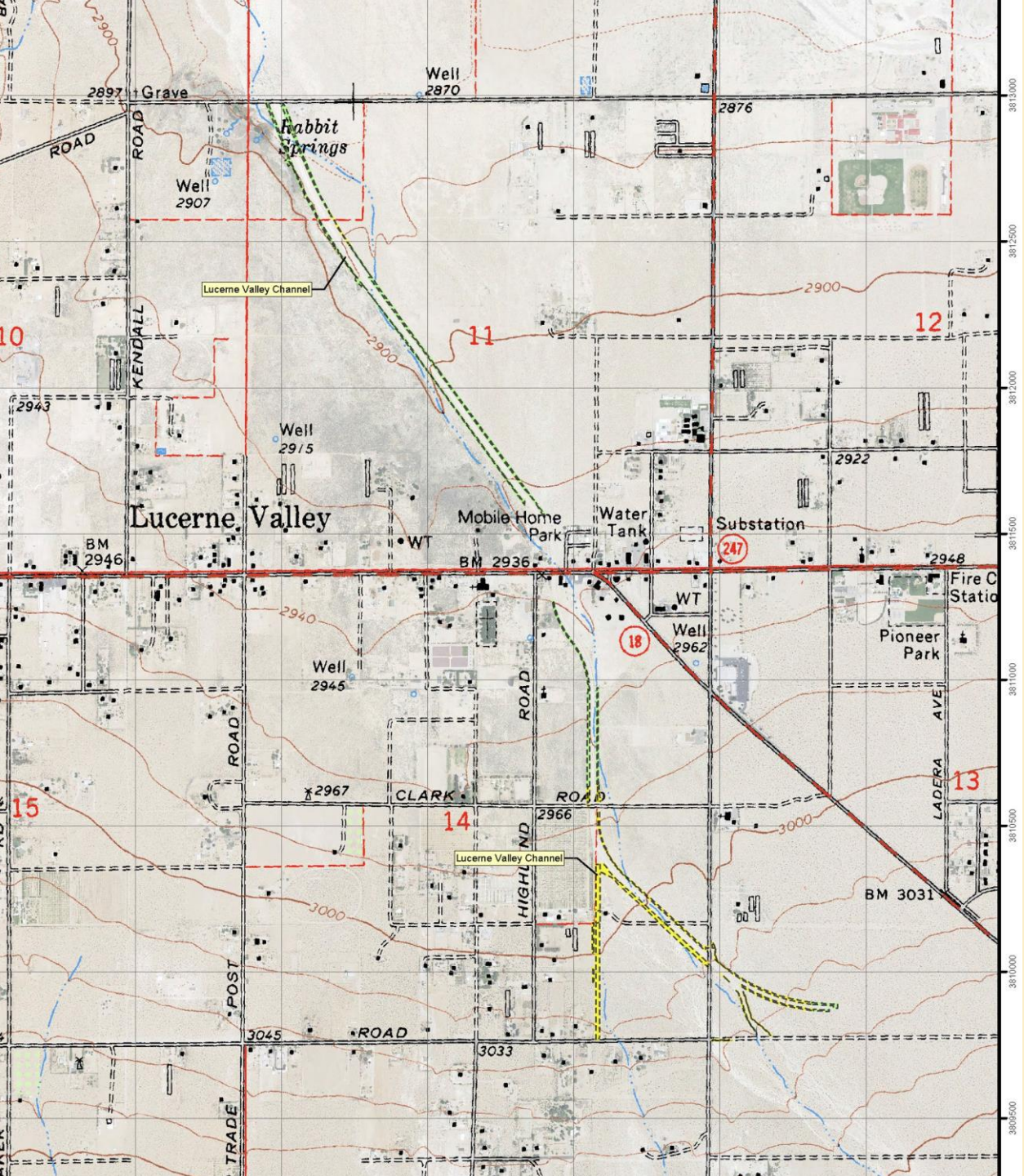
M 2974
R4W
R3W


Well
2870
2897
Grave
2876
ROAD
KENDALL
Habbit
Springs
Well
2907
Lucerne Valley Channel
2900
10
11
12
2943
Well
2915
2922
Lucerne Valley
Mobile Home
Park
Water
Tank
Substation
247
BM
2946
WT
BM 2936
2948
Fire C
Statio
2940
18
Well
2962
Pioneer
Park
Well
2945
ROAD
LADERA
AVE
13
15
2967
CLARK
ROAD
14
2966
3000
HIGHLAND
Lucerne Valley Channel
BM 3031
POST
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ROAD
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TRADE
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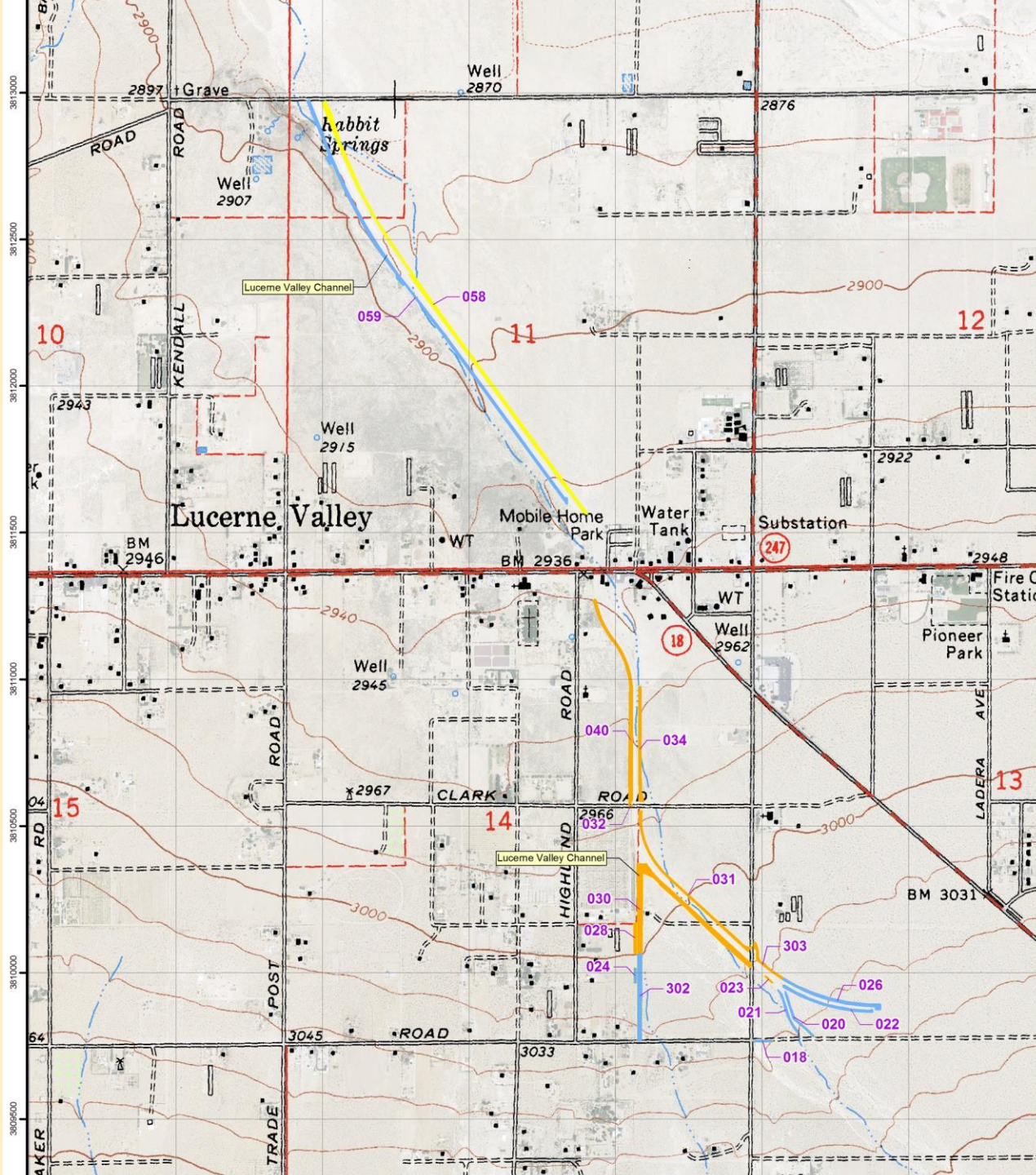
Well
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Lucerne Valley Channel
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Well
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Lucerne Valley
Mobile Home
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Fire C
Statio
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2962
Pioneer
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Lucerne Valley Channel
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TRADE
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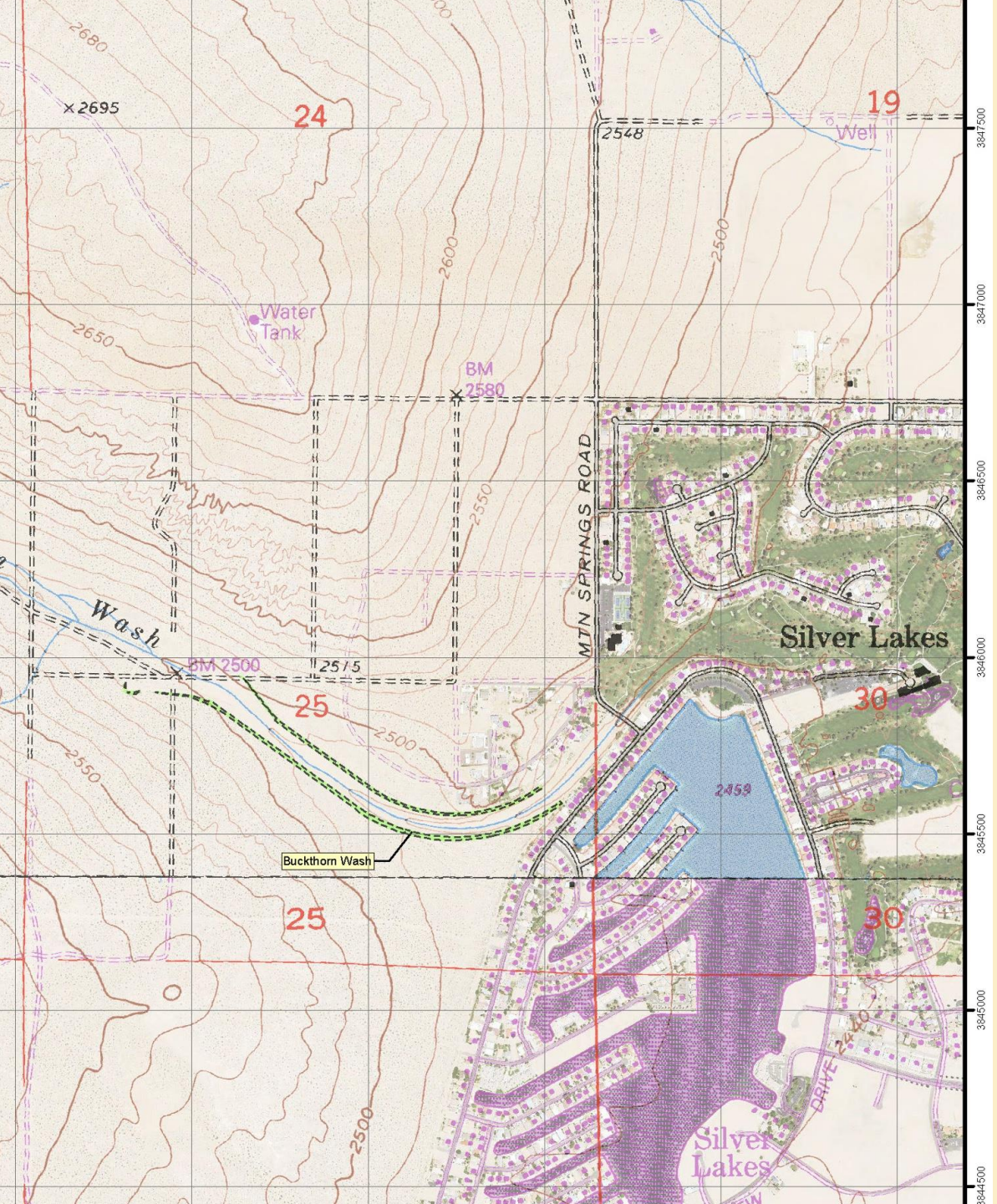
×2695
24
19
2548
Well
Water Tank
BM 2580
MTN SPRINGS ROAD
Silver Lakes
30
Wash
BM 2500
2515
25
2500
2550
2459
Buckthorn Wash
Silver Lakes
DRIVE
2440
3847500
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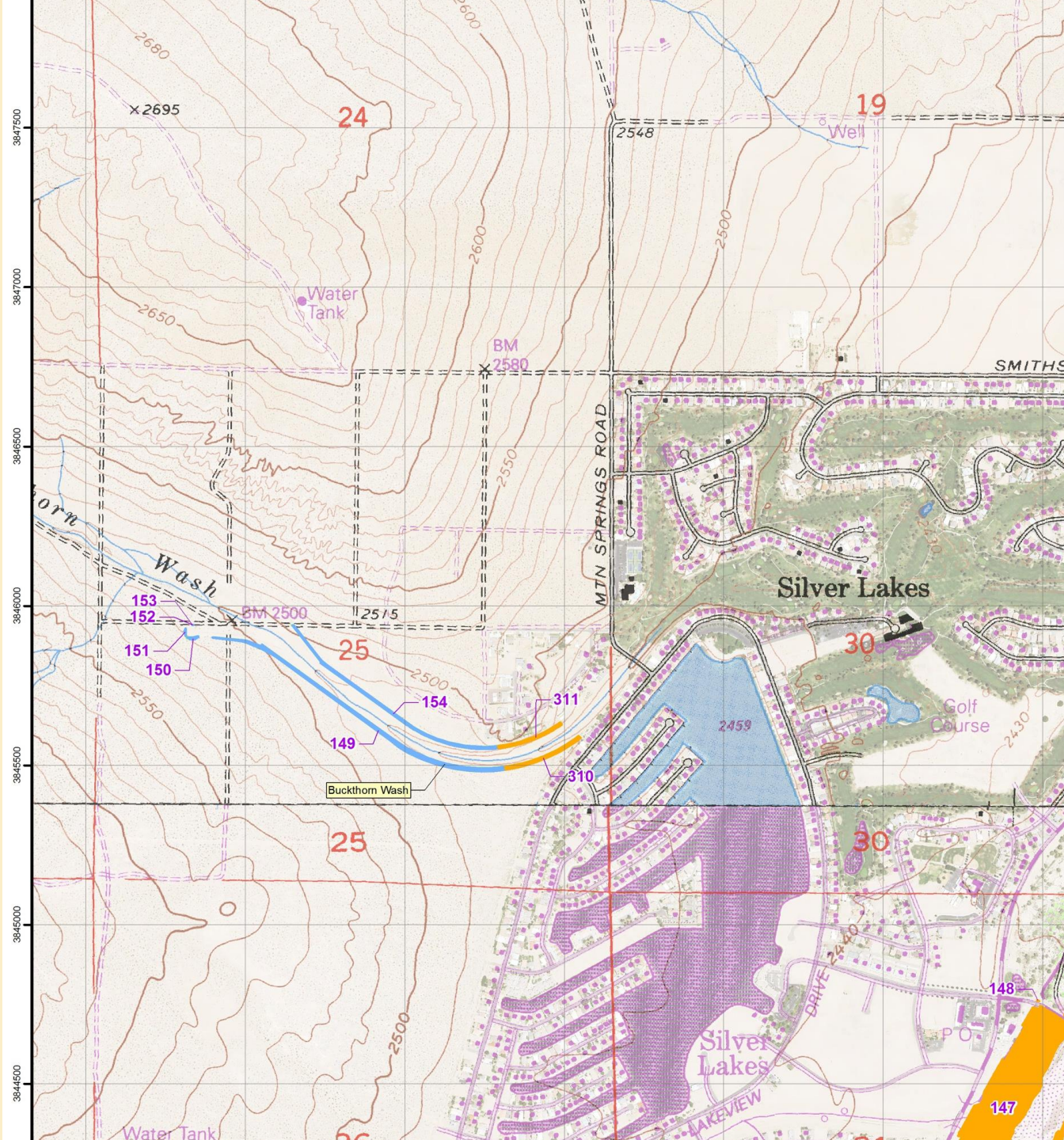
×2695
24
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2548
Well
Water Tank
BM 2580
SMITHS
MTN SPRINGS ROAD
Silver Lakes
30
Wash
BM 2500
2515
25
2500
2550
2459
153
152
151
150
154
149
311
310
Buckthorn Wash
Golf Course
148
147
Silver Lakes
DRIVE
2440
LAKEVIEW
Water Tank
3847500
3847000
3846500
3846000
3845500
3845000
3844500

ID	Classification	Area_sqft	Acres	Vegetation suitable for MGS (1 = yes, 0 = no)	Soils suitable for MGS (1 = yes, 0 = no)	Disturbance level suitable for MGS (1 = yes, 0 = no)	Recent (past 20 years) record (1 = yes, 0 = no)	Record proximity (1 = yes, 0 = no)	Within known MGS range (1 = yes, 0 = no)	MGS model (1 = suitable, 0 = marginal)	Surveyor	Date	Map and Data Sheet #
001	Fair	50,275	1.154	1	0	1	0	0	0	1	Ksimon	5/13/16	6
002	Good	17,826	0.409	1	1	1	0	0	0	1	Ksimon	5/13/16	6
003	Good	71,809	1.649	1	1	1	0	0	0	1	Ksimon	5/13/16	6
004	Good	14,785	0.339	1	1	1	0	0	0	1	Ksimon	5/13/16	6
005	Poor	2,933,624	67.347	0	0	1	0	0	0	1	Ksimon	5/13/16	6
006	Poor	1,592,653	36.562	0	0	1	0	0	0	1	Ksimon	5/13/16	6
007	Good	26,562	0.610	1	1	1	0	0	0	1	Ksimon	5/13/16	7
008	Poor	59,070	1.356	0	0	0	0	0	0	0	Ksimon	5/13/16	7
009	Poor	18,817	0.432	0	0	0	0	0	0	0	Ksimon	5/13/16	7
010	Good	41,701	0.957	1	1	1	0	0	0	0	Ksimon	5/13/16	7
011	Good	10,357	0.238	1	1	1	0	0	0	0	Ksimon	5/13/16	7
012	Good	17	0.000	1	1	1	0	0	1	0	Ksimon	4/21/16	4
013	Good	840	0.019	1	1	1	0	0	1	0	Ksimon	4/21/16	4
014	Good	2,344	0.054	1	1	1	0	0	1	0	Ksimon	4/21/16	4
015	Good	86	0.002	1	1	1	0	0	1	0	Ksimon	4/21/16	4
016	Good	2,270	0.052	1	1	1	0	0	1	0	Ksimon	4/21/16	4
017	Good	30,027	0.689	1	1	1	0	0	1	0	Ksimon	4/21/16	4
018	Good	1,822	0.042	1	1	1	0	0	0	0	Ksimon	5/9/16	5
019	Good	150,604	3.457	1	1	1	0	0	1	0	Ksimon	4/21/16	4

Conclusions

Often those areas mapped as potential habitat by USGS modeling did not match up with these habitat values and resulted in designation of these areas as fair or poor habitat.

Occasionally the SBFCD facilities were well outside of the recent or known range of this species but were investigated because they were modelled by USGS as areas supporting potential habitat for this species. These areas often did support appropriate soils, vegetation and low levels of human disturbance, resulting in a designation of good habitat.