





LEGEND

-  Area of Potential Effects (APE)
-  EIR Project Area
- Remediation Wells (excludes monitoring wells)
- Future Provisional Wells
-  Pipeline for Remedy

 Approximate extent of hexavalent chromium [Cr(VI)] concentrations exceeding 32 micrograms per liter (µg/L) at any depth in groundwater based on second quarter 2011 sampling events. Dashed where based on limited data.

Note:
The locations of pipelines and existing infrastructure are approximate. The figure is not intended to be a comprehensive depiction of all existing infrastructure in the APE.

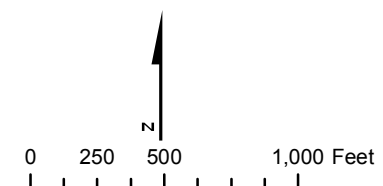
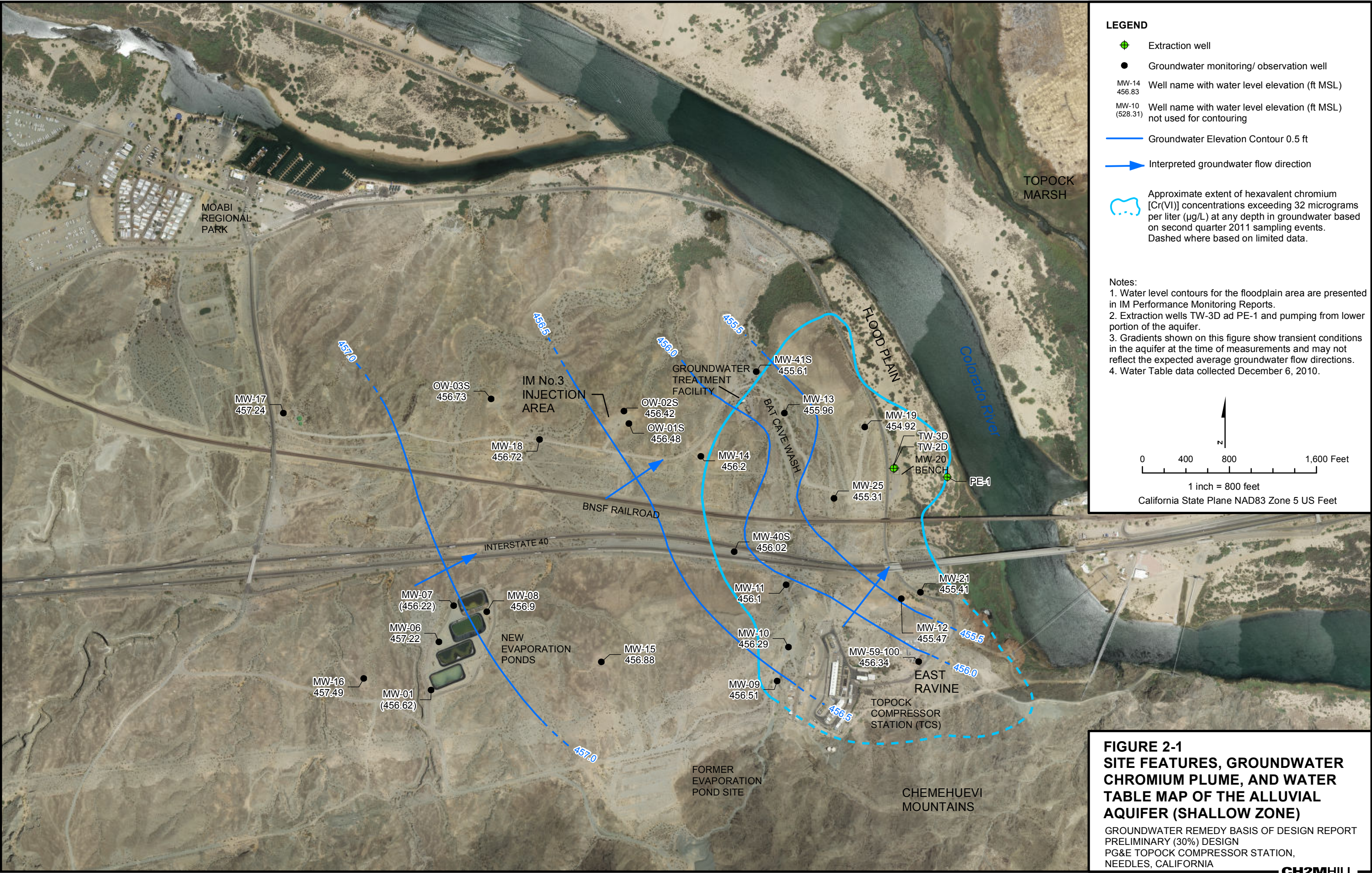
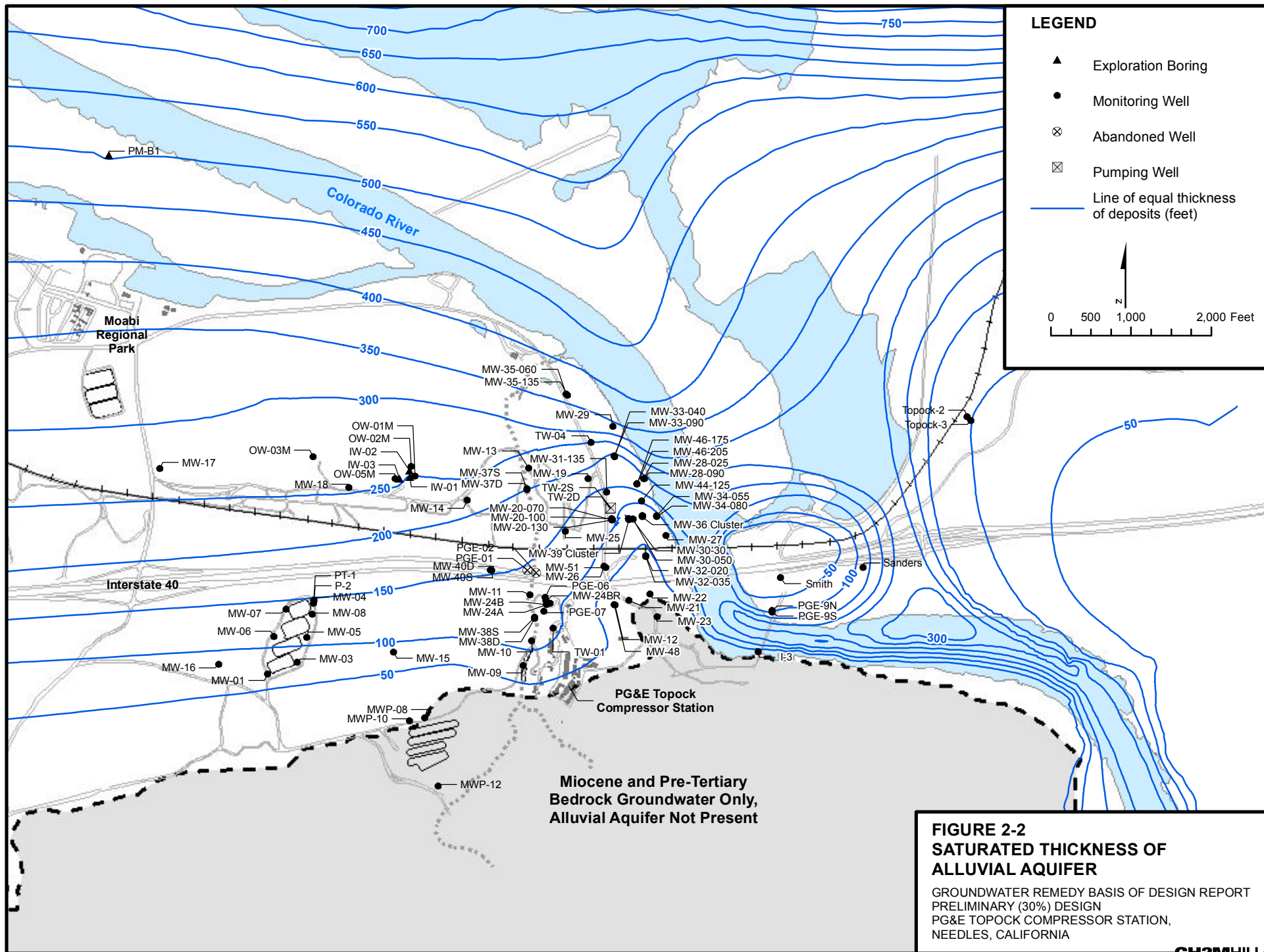


FIGURE 1-2 GROUNDWATER REMEDY PROJECT AREA AND SYSTEM LAYOUT

GROUNDWATER REMEDY BASIS OF DESIGN REPORT
PRELIMINARY (30%) DESIGN
PG&E TOPOCK COMPRESSOR STATION,
NEEDLES, CALIFORNIA





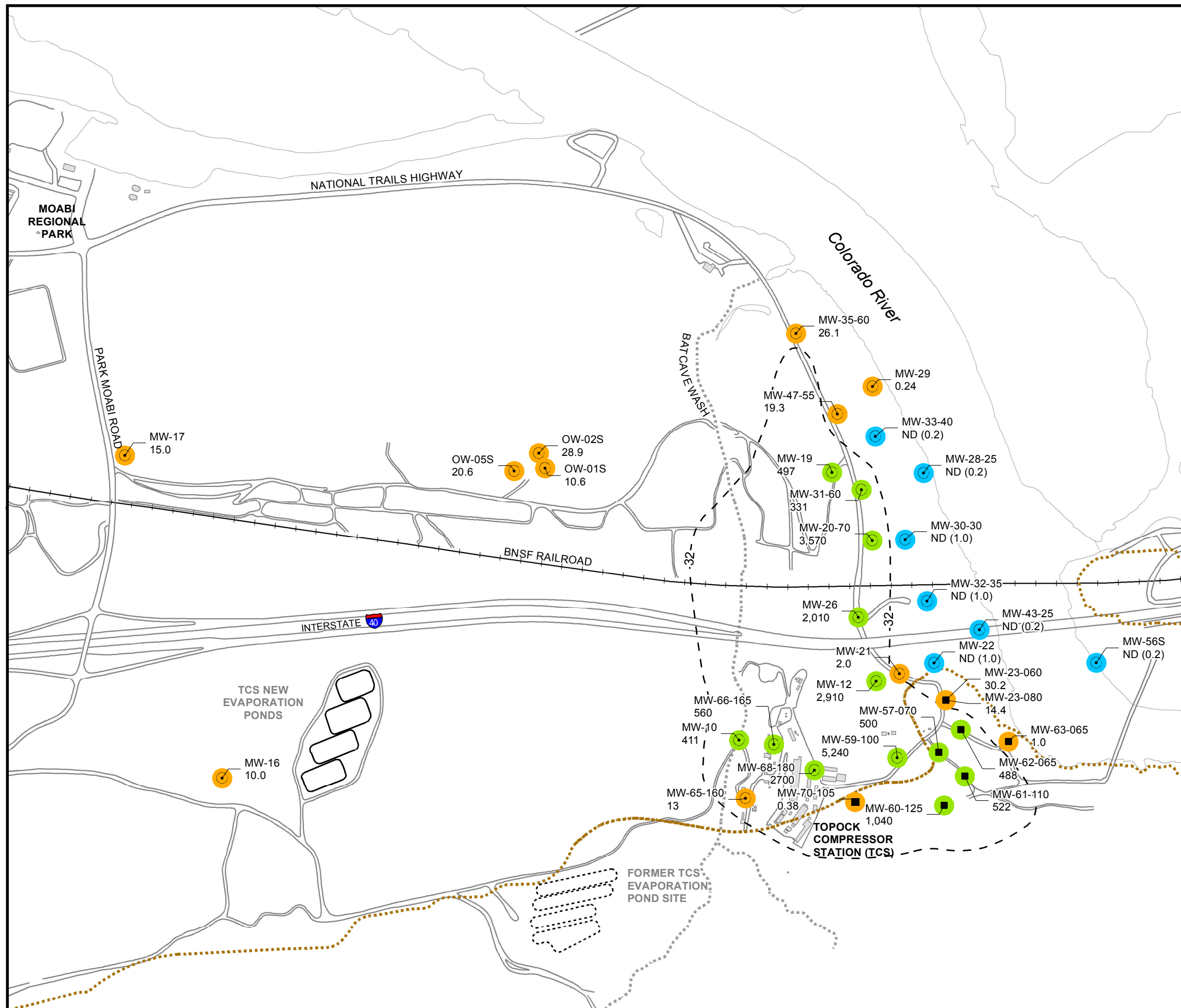
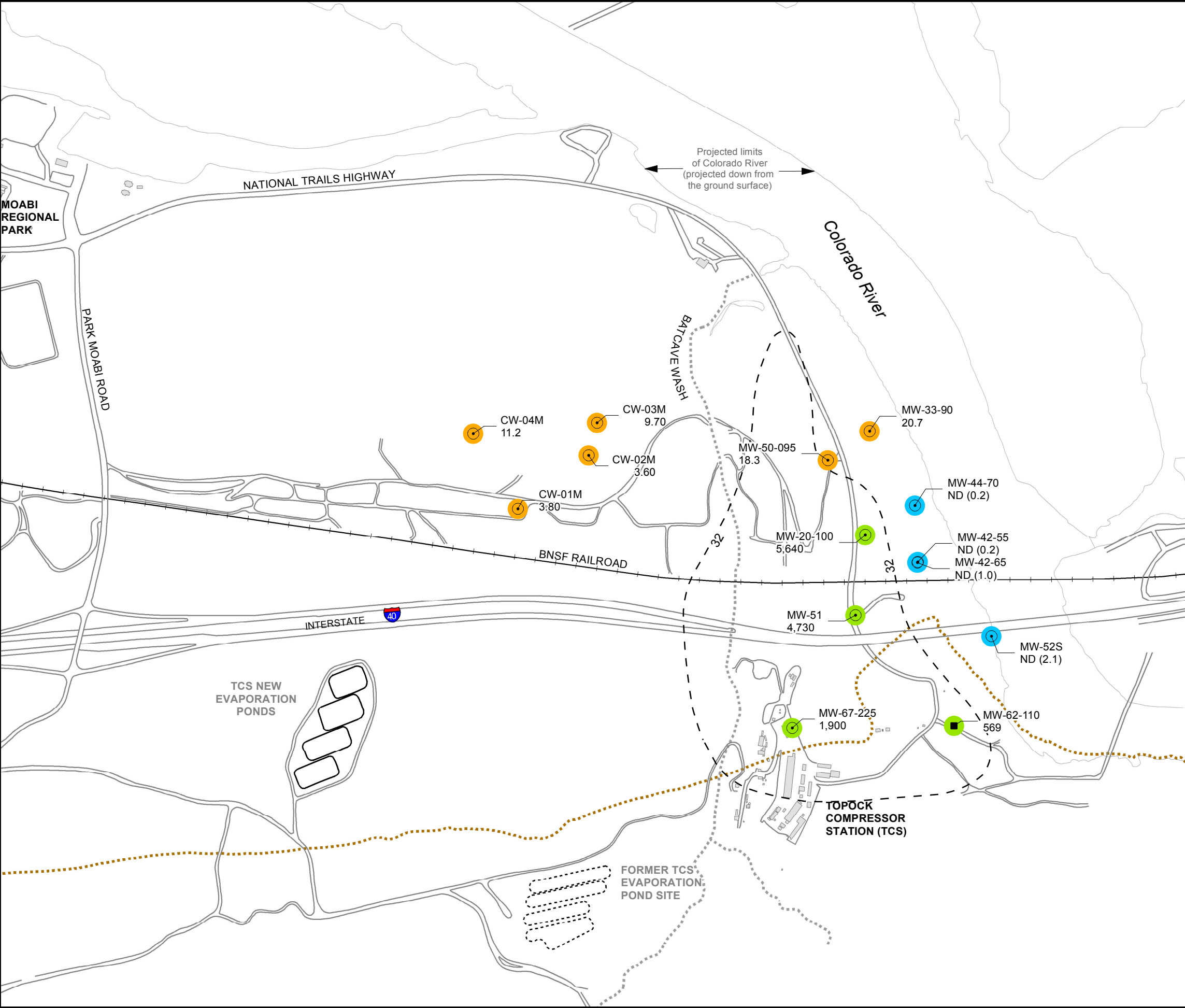


FIGURE 2-3a
Cr(VI) SAMPLING RESULTS,
SHALLOW WELLS IN ALLUVIAL AQUIFER
AND BEDROCK, SECOND QUARTER 2011

GROUNDWATER REMEDY BASIS OF DESIGN REPORT
PRELIMINARY (30%) DESIGN
PG&E TOPOCK COMPRESSOR STATION,
NEEDLES, CALIFORNIA



LEGEND

○ Alluvial Aquifer well sampled during sampling event
■ Bedrock well sampled during sampling event

6.48 Concentration of hexavalent chromium [Cr(VI)] in groundwater, micrograms per liter (µg/L)

Results shown are maximum concentrations in primary and duplicate samples from wells completed in **Mid-Depth zone** of Alluvial Aquifer and Bedrock.

ND (0.2) Cr(VI) not detected at listed reporting limit

Cr(VI) Concentrations - Second Quarter 2011

● Not detected at analytical reporting limit
● Concentration between reporting limit and 32 µg/L
● Concentration ≥ 32 µg/L

---32--- Approximate outline of monitoring wells in Alluvial Aquifer and Bedrock with Cr(VI) concentrations ≥ 32 µg/L based on Fourth Quarter 2010 and Second Quarter 2011 groundwater sampling results.

..... Approximate bedrock contact at 425 feet above mean sea level.

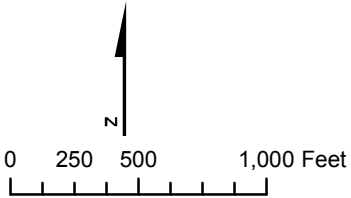
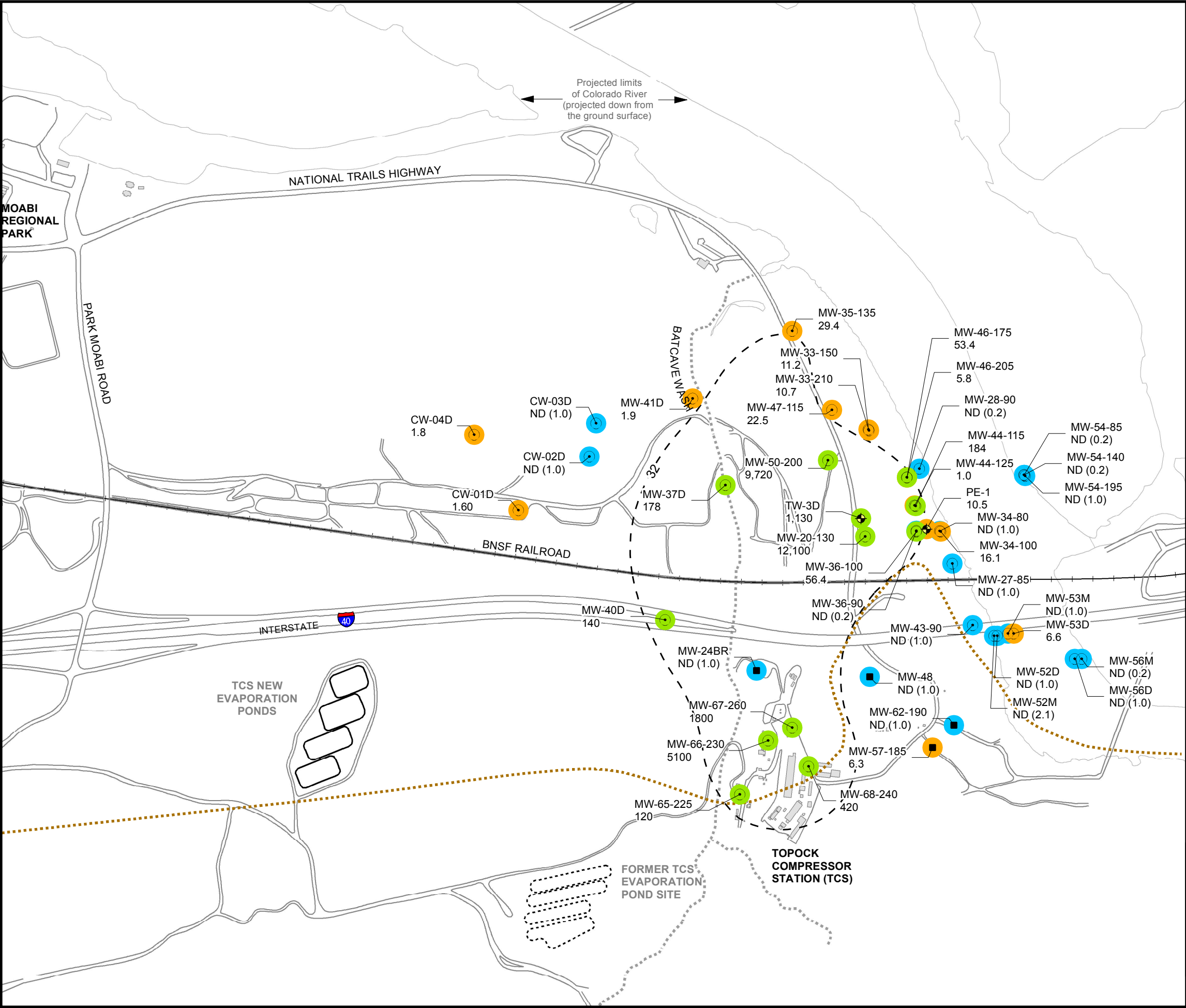


FIGURE 2-3b
Cr(VI) SAMPLING RESULTS
MID-DEPTH WELLS IN ALLUVIAL AQUIFER
AND BEDROCK, SECOND QUARTER 2011

GROUNDWATER REMEDY BASIS OF DESIGN REPORT
PRELIMINARY (30%) DESIGN
PG&E TOPOCK COMPRESSOR STATION,
NEEDLES, CALIFORNIA



LEGEND

- Extraction well sampled during sampling event
- Alluvial Aquifer well sampled during sampling event
- Bedrock well sampled during sampling event

6.48 Concentration of hexavalent chromium [Cr(VI)] in groundwater, micrograms per liter (µg/L)

Results shown are maximum concentrations in primary and duplicate samples from wells completed in **Deep zone** of Alluvial Aquifer and Bedrock.

ND (0.2) Cr(VI) not detected at listed reporting limit

Cr(VI) Concentrations - Second Quarter 2011

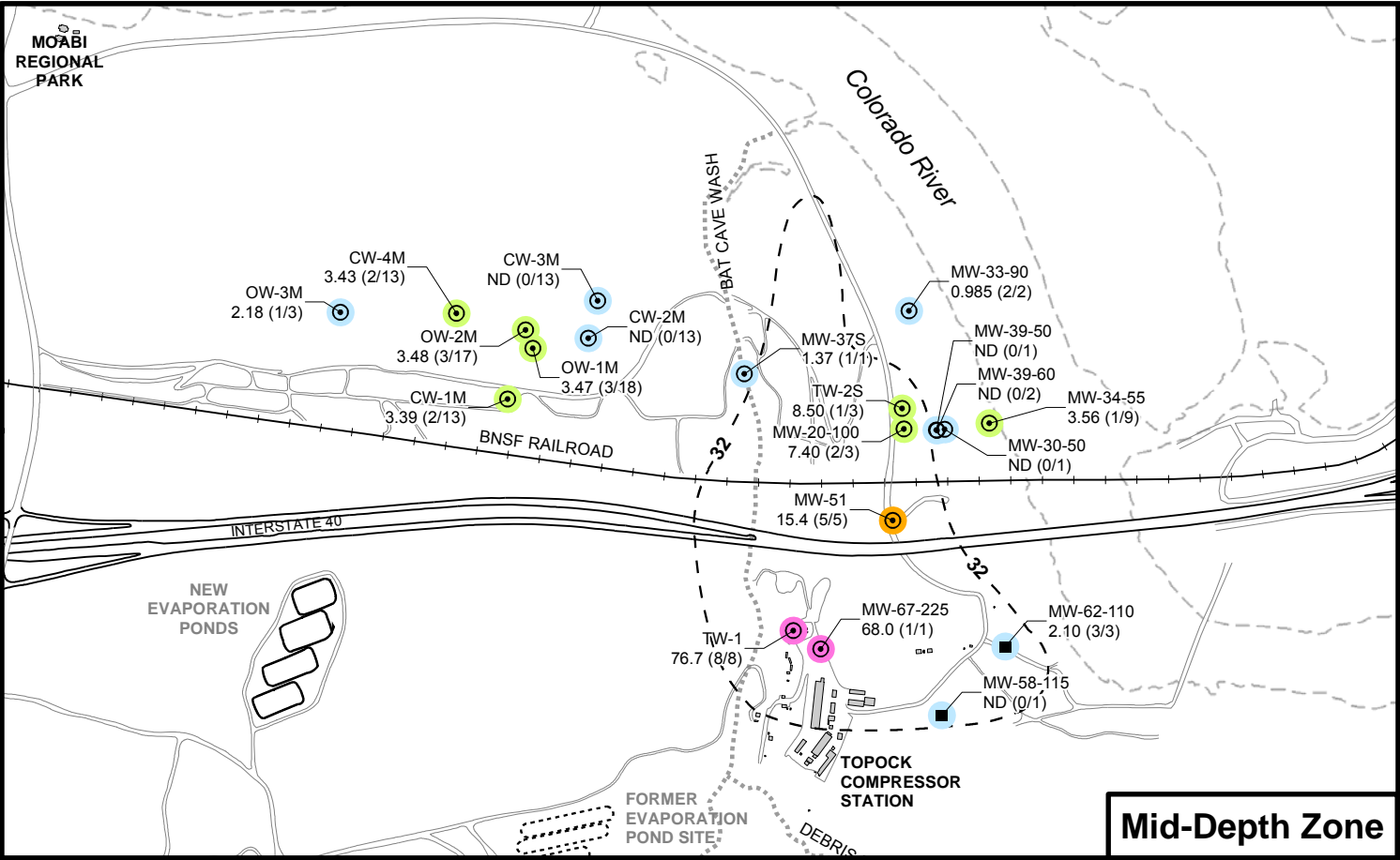
- Not detected at analytical reporting limit
- Concentration between reporting limit and 32 µg/L
- Concentration ≥ 32 µg/L

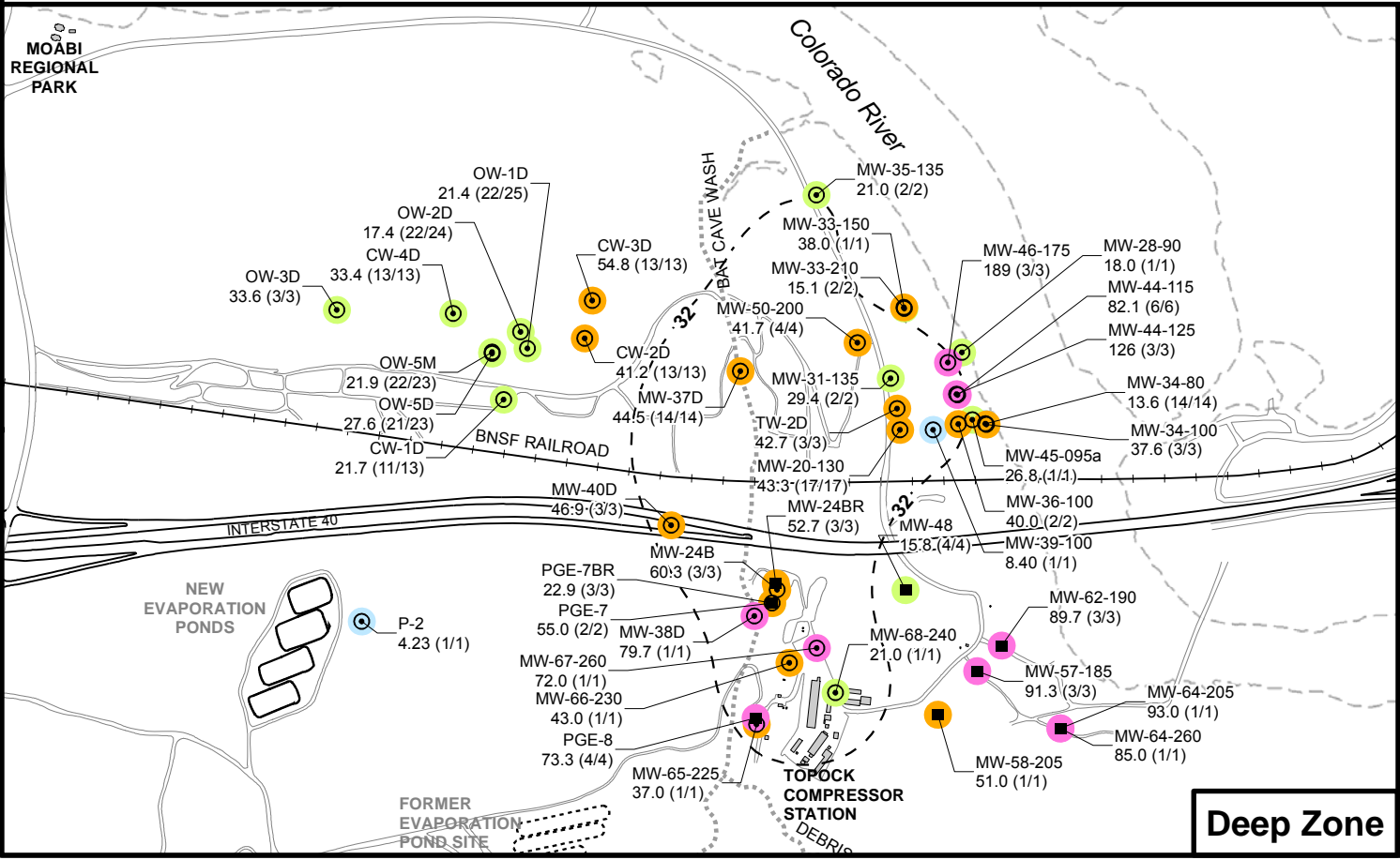
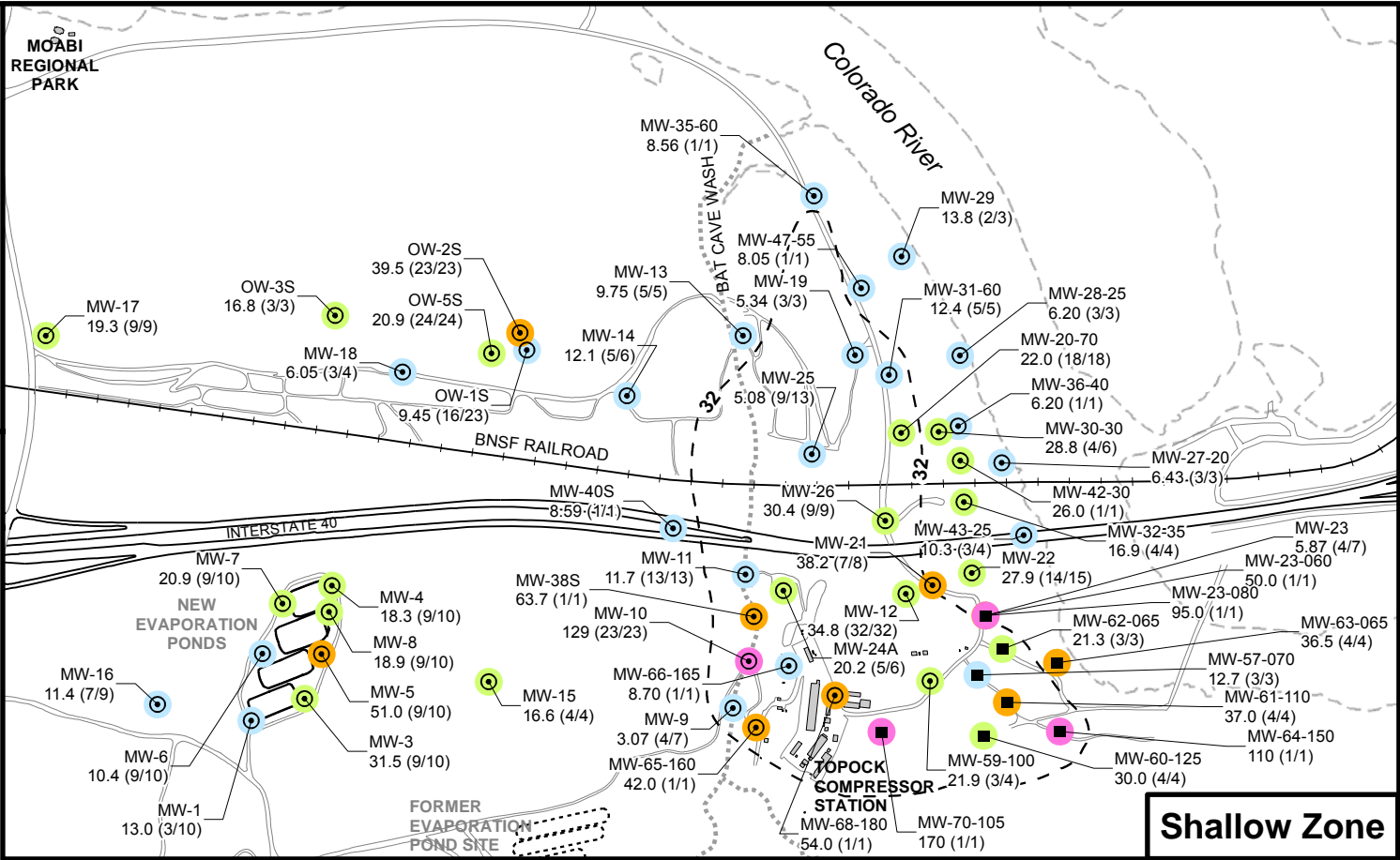
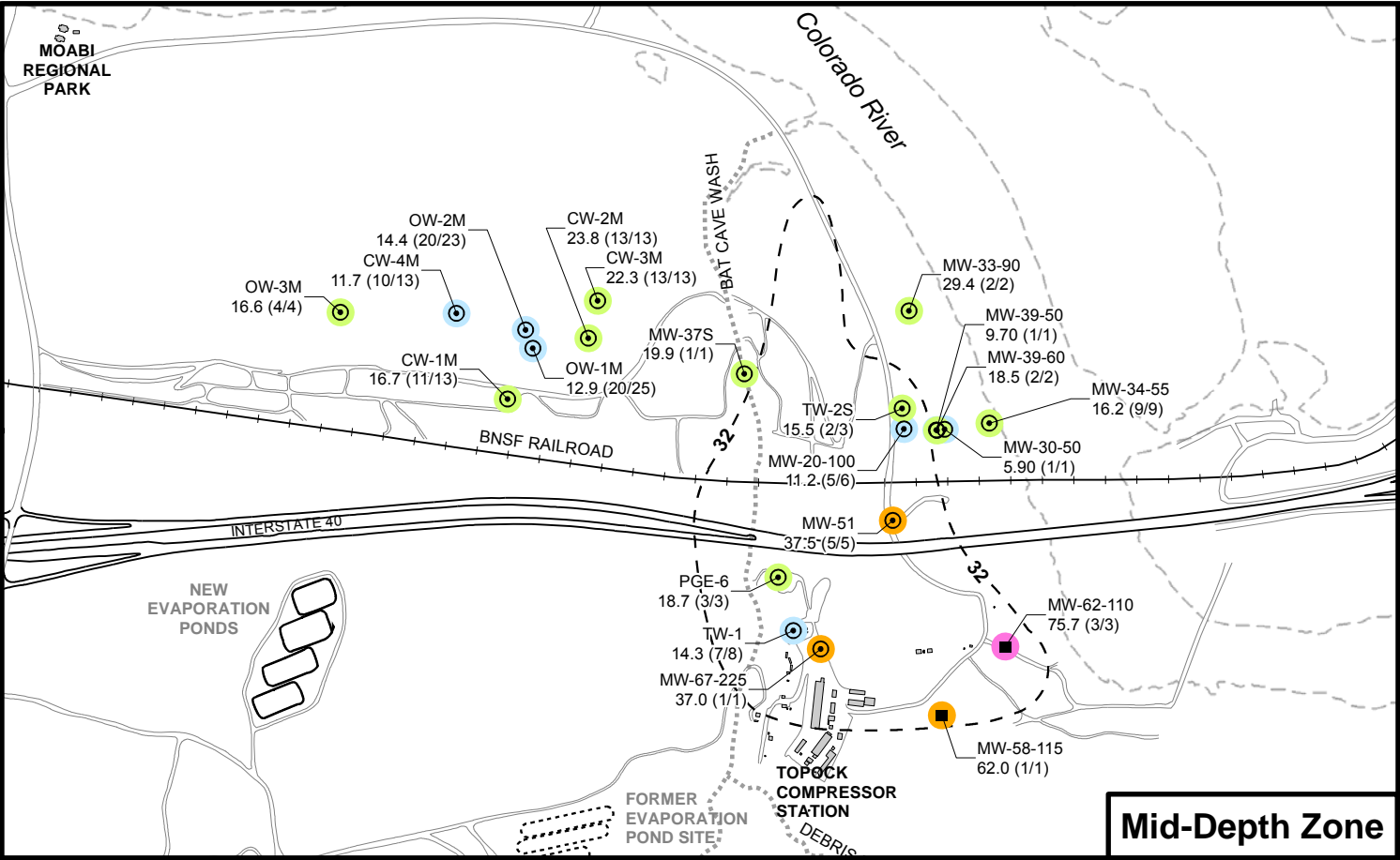
- - - - - 32 - - - - - Approximate outline of monitoring wells in Alluvial Aquifer and Bedrock with Cr(VI) concentrations ≥ 32 µg/L based on Fourth Quarter 2010 and Second Quarter 2011 groundwater sampling results.

..... Approximate bedrock contact at 395 feet above mean sea level.

FIGURE 2-3c
Cr(VI) SAMPLING RESULTS,
DEEP WELLS IN ALLUVIAL AQUIFER
AND BEDROCK, SECOND QUARTER 2011

GROUNDWATER REMEDY BASIS OF DESIGN REPORT
PRELIMINARY (30%) DESIGN
PG&E TOPOCK COMPRESSOR STATION,
NEEDLES, CALIFORNIA





LEGEND

- Groundwater Well completed in Alluvial Aquifer (Shallow, Mid-depth or Deep Zones)
- Groundwater Well completed in Bedrock

Dissolved Molybdenum Average Concentrations

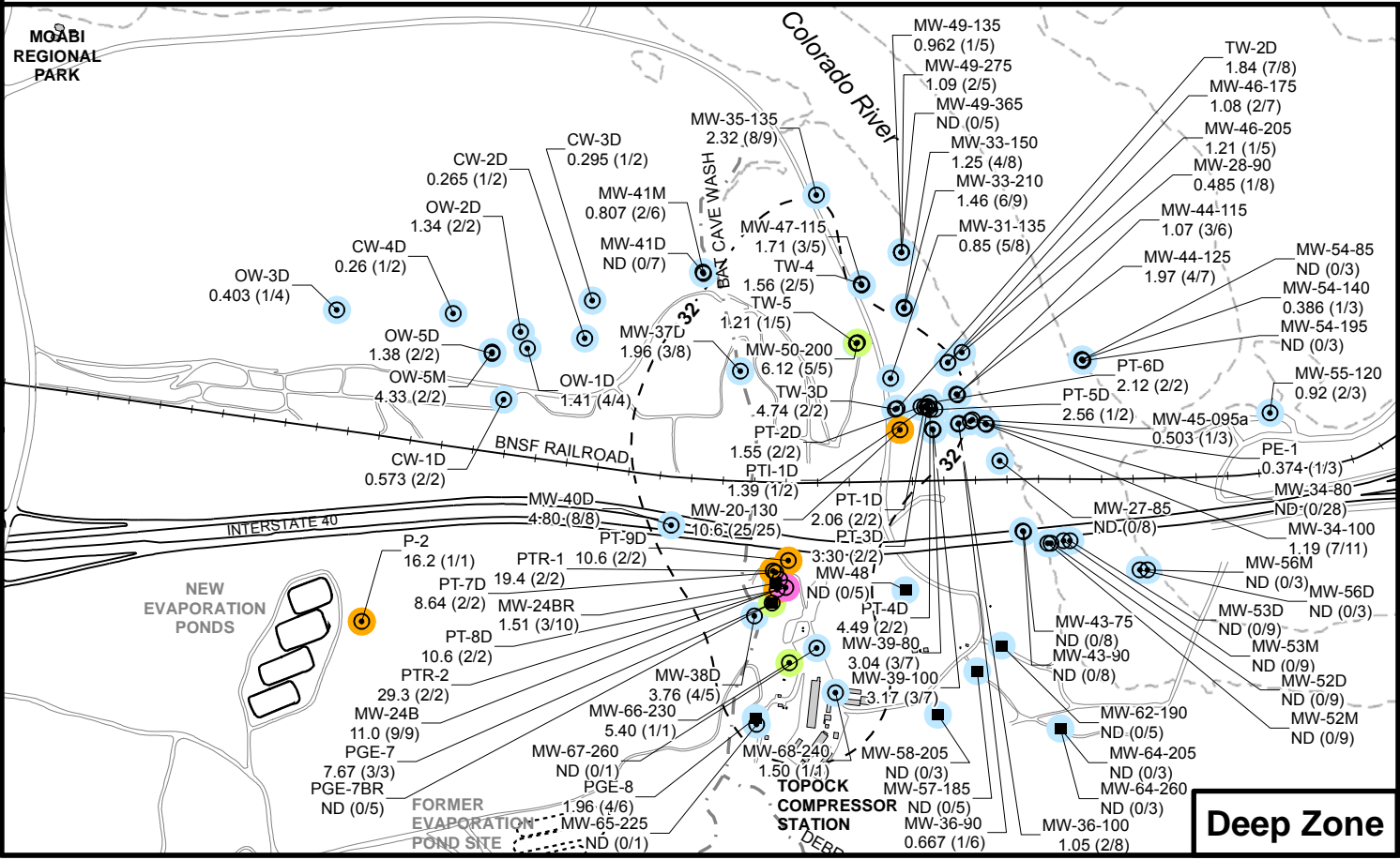
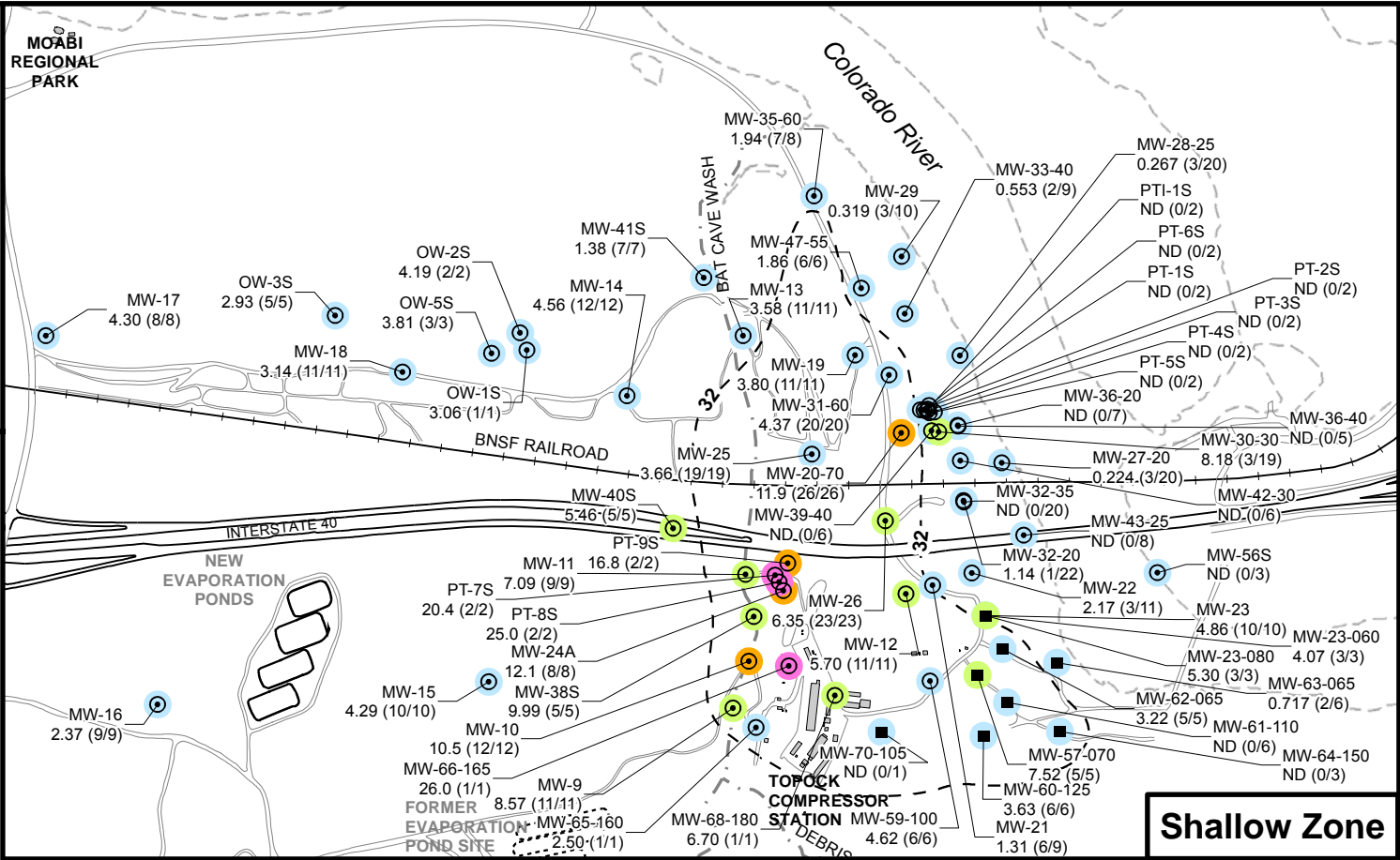
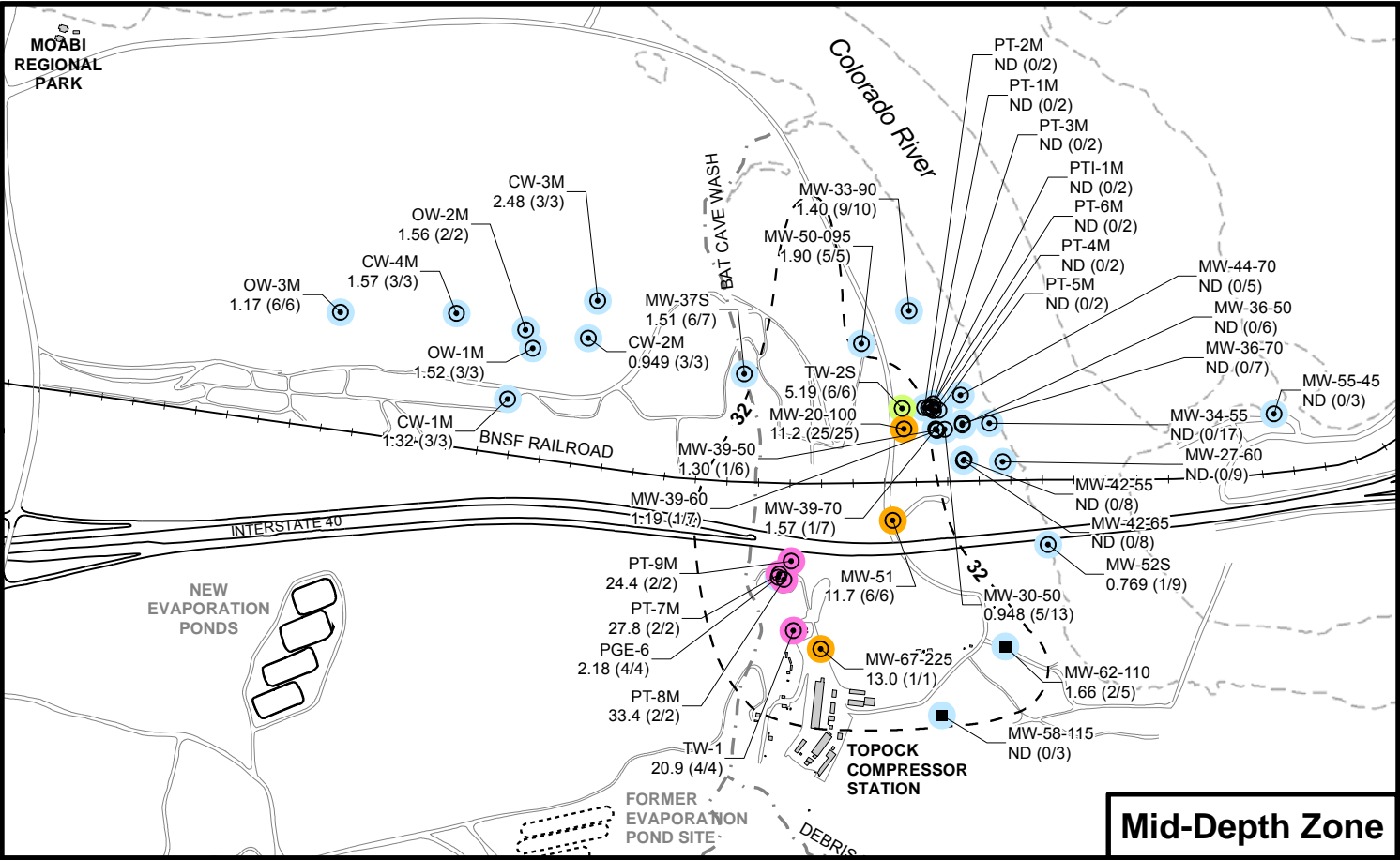
- MW-17 ← Well ID
- 5.8 (8/16) ← (No. of detections / No. of samples)
- ↑ Average concentration, micrograms per liter (µg/L)
1997 - 2011 groundwater sampling
- ≤ 15.0 µg/L
 - 15.0 - 36.3 µg/L
 - 36.4 - 70.0 µg/L
 - > 70.0 µg/L

Approximate outline of Cr(VI) in Alluvial Aquifer depth zone ≥ 32 µg/L, Second Quarter 2011

- Notes:
- Molybdenum Background Study Upper Tolerance Limit (UTL) = 36.3 µg/L
 - In computing averages, non-detects were assigned half of the reporting limit concentration. Some averages may be elevated due solely to high reporting limits for non-detect samples. Refer to the complete data set in Appendix A for verification.

**FIGURE 2-5
MOLYBDENUM CONCENTRATIONS
IN GROUNDWATER, JULY 1997 - JUNE
2011**

GROUNDWATER REMEDY BASIS OF DESIGN REPORT
PRELIMINARY (30%) DESIGN
PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA



LEGEND

- Groundwater Well completed in Alluvial Aquifer (Shallow, Mid-depth or Deep Zones)
- Groundwater Well completed in Bedrock

Nitrate Average Concentrations

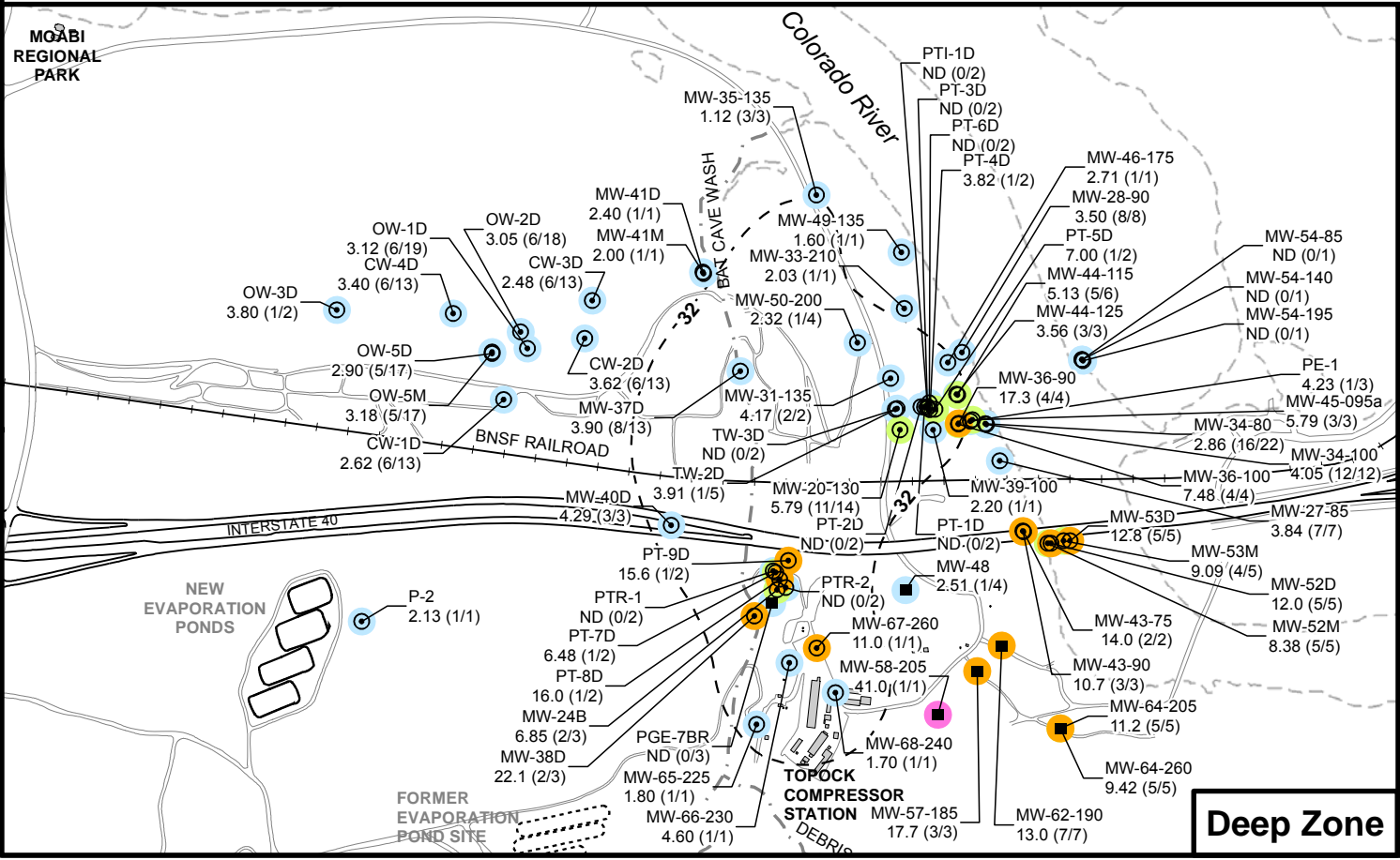
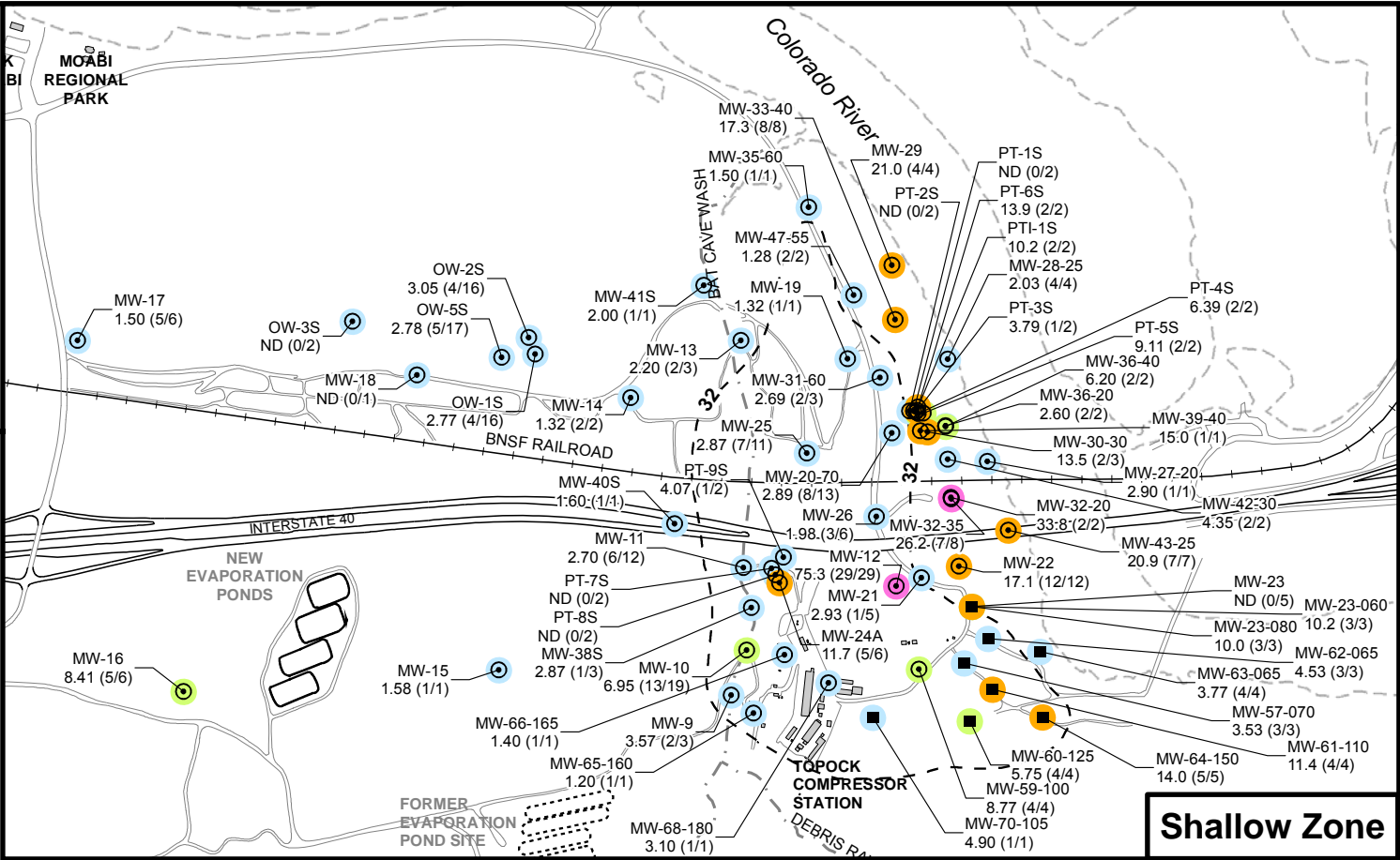
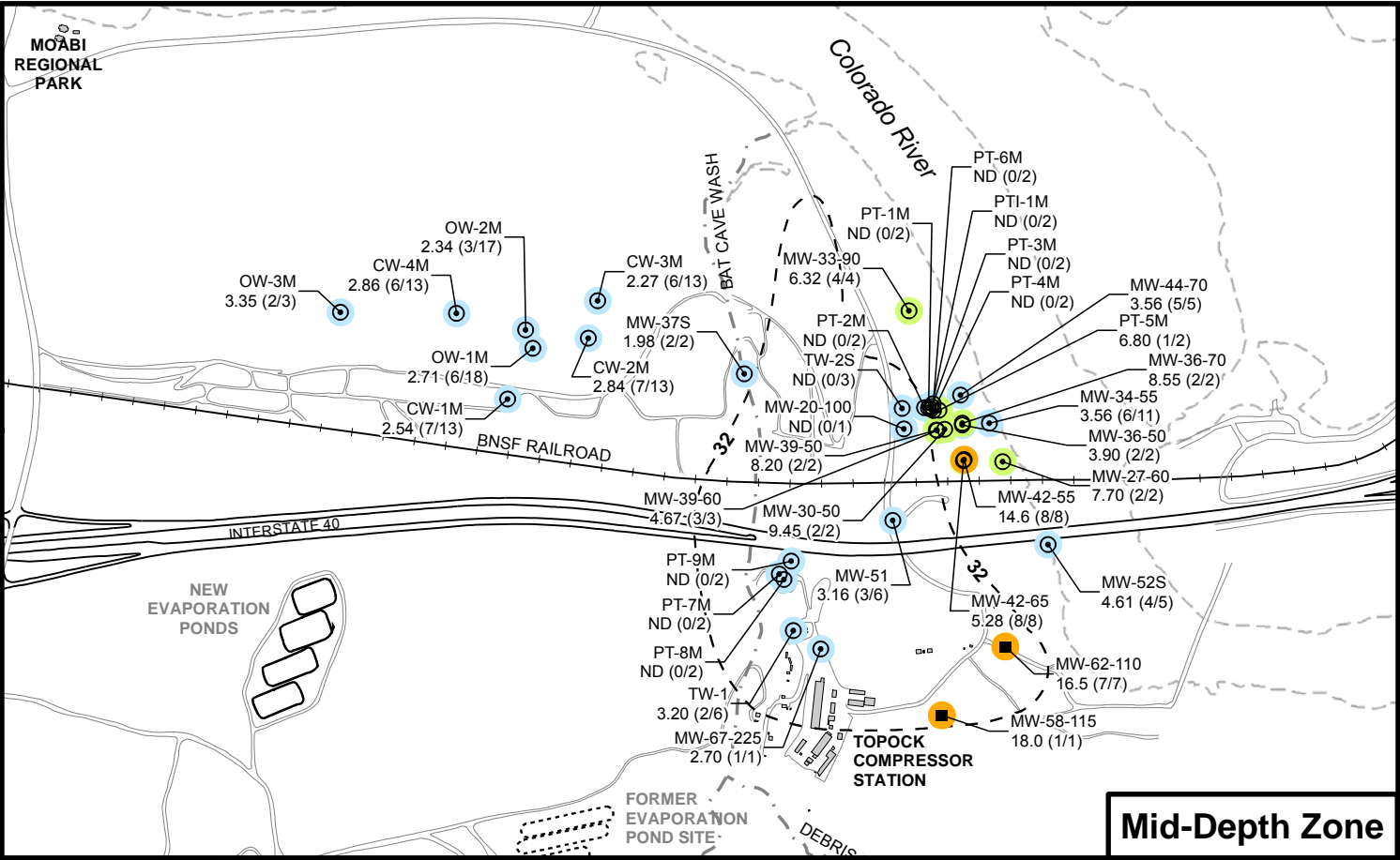
- MW-17 ← Well ID
- 5.8 (8/16) ← (No. of detections / No. of samples)
- ↑ Average concentration, milligrams per liter (mg/L) 1997 - 2011 groundwater sampling
- ≤ 5.03 mg/L
 - 5.03 - 10.0 mg/L
 - 10.1 - 19.9 mg/L
 - > 19.9 mg/L

Approximate outline of Cr(VI) in Alluvial Aquifer depth zone ≥ 32 µg/L, Second Quarter 2011

- Notes:
- Nitrate Background Study Upper Tolerance Limit (UTL) = 5.03 mg/L
 - Nitrate applicable or relevant and appropriate requirement (ARAR) = 10.0 mg/L
 - In computing averages, non-detects were assigned half of the reporting limit concentration. Some averages may be elevated due solely to high reporting limits for non-detect samples. Refer to the complete data set in Appendix A for verification.

FIGURE 2-6
NITRATE CONCENTRATIONS IN
GROUNDWATER, JULY 1997 - JUNE
2011

GROUNDWATER REMEDY BASIS OF DESIGN REPORT
PRELIMINARY (30%) DESIGN
PG&E TOPECO COMPRESSOR STATION
NEEDLES, CALIFORNIA



LEGEND

- Groundwater Well completed in Alluvial Aquifer (Shallow, Mid-depth or Deep Zones)
- Groundwater Well completed in Bedrock

Dissolved Arsenic Average Concentrations

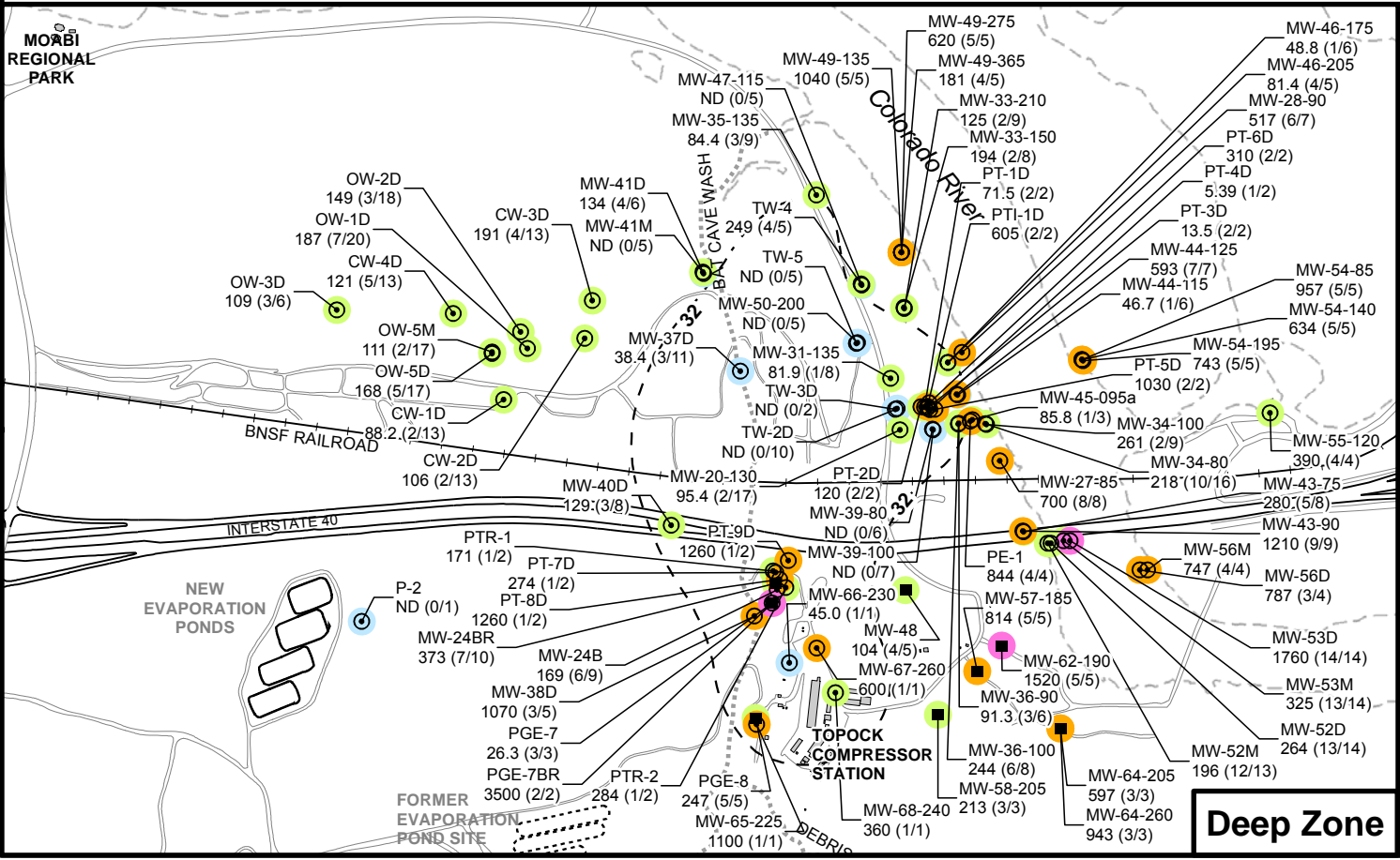
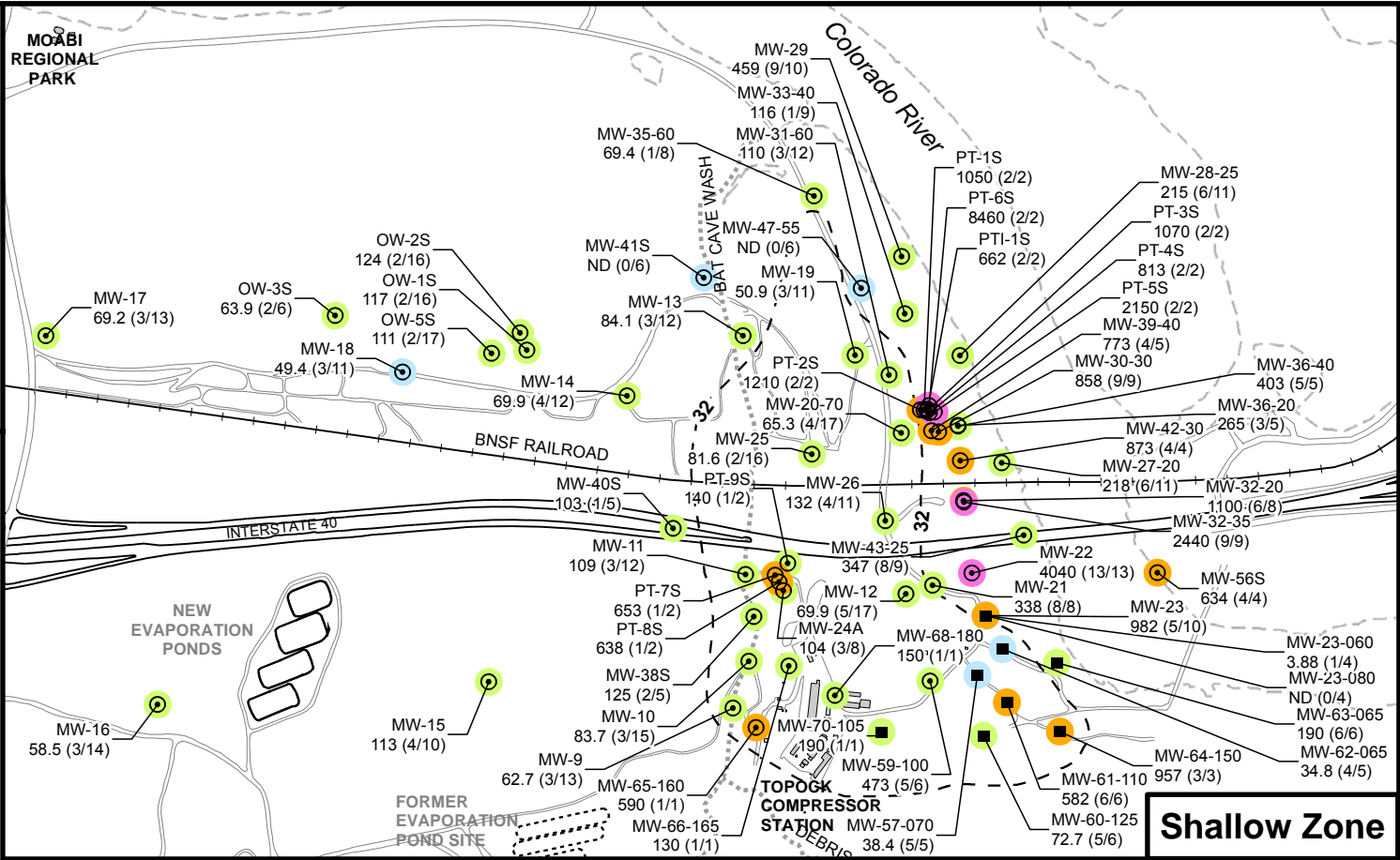
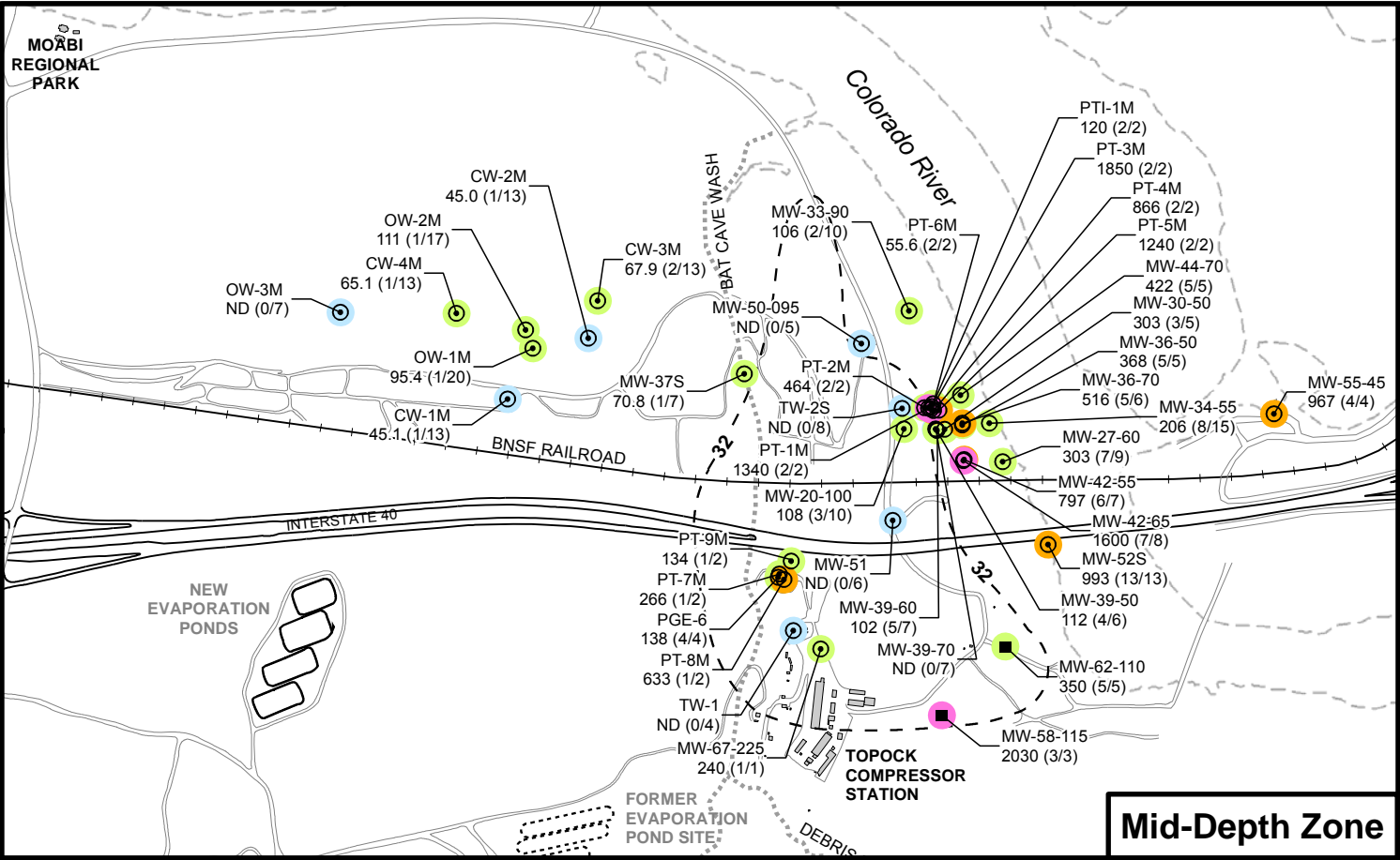
- MW-17 ← Well ID
- 5.8 (8/16) ← (No. of detections / No. of samples)
- ↑ Average concentration, micrograms per liter (µg/L)
1997 - 2011 groundwater sampling
- ≤ 5.0 µg/L (or not detected [ND])
 - 5.0 - 10.0 µg/L
 - 10.1 - 24.3 µg/L
 - > 24.3 µg/L

- Notes:
- Arsenic Background Study Upper Tolerance Limit (UTL) = 24.3 µg/L
 - Arsenic applicable or relevant and appropriate requirement (ARAR) = 10.0 µg/L
 - In computing averages, non-detects were assigned half of the reporting limit concentration. Some averages may be elevated due solely to high reporting limits for non-detect samples. Refer to the complete data set in Appendix A for verification.

Approximate outline of Cr(VI) in Alluvial Aquifer depth zone ≥ 32 µg/L, Second Quarter 2011

FIGURE 2-7
ARSENIC CONCENTRATIONS IN GROUNDWATER, JULY 1997 - JUNE 2011

GROUNDWATER REMEDY BASIS OF DESIGN REPORT
PRELIMINARY (30%) DESIGN
PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA



LEGEND

- ⊙ Groundwater Well completed in Alluvial Aquifer (Shallow, Mid-depth or Deep Zones)
- Groundwater Well completed in Bedrock

Dissolved Manganese Average Concentrations

MW-17 ← Well ID
5.8 (8/16) ← (No. of detections / No. of samples)
↑ Average concentration, micrograms per liter (µg/L)
1997 - 2011 groundwater sampling

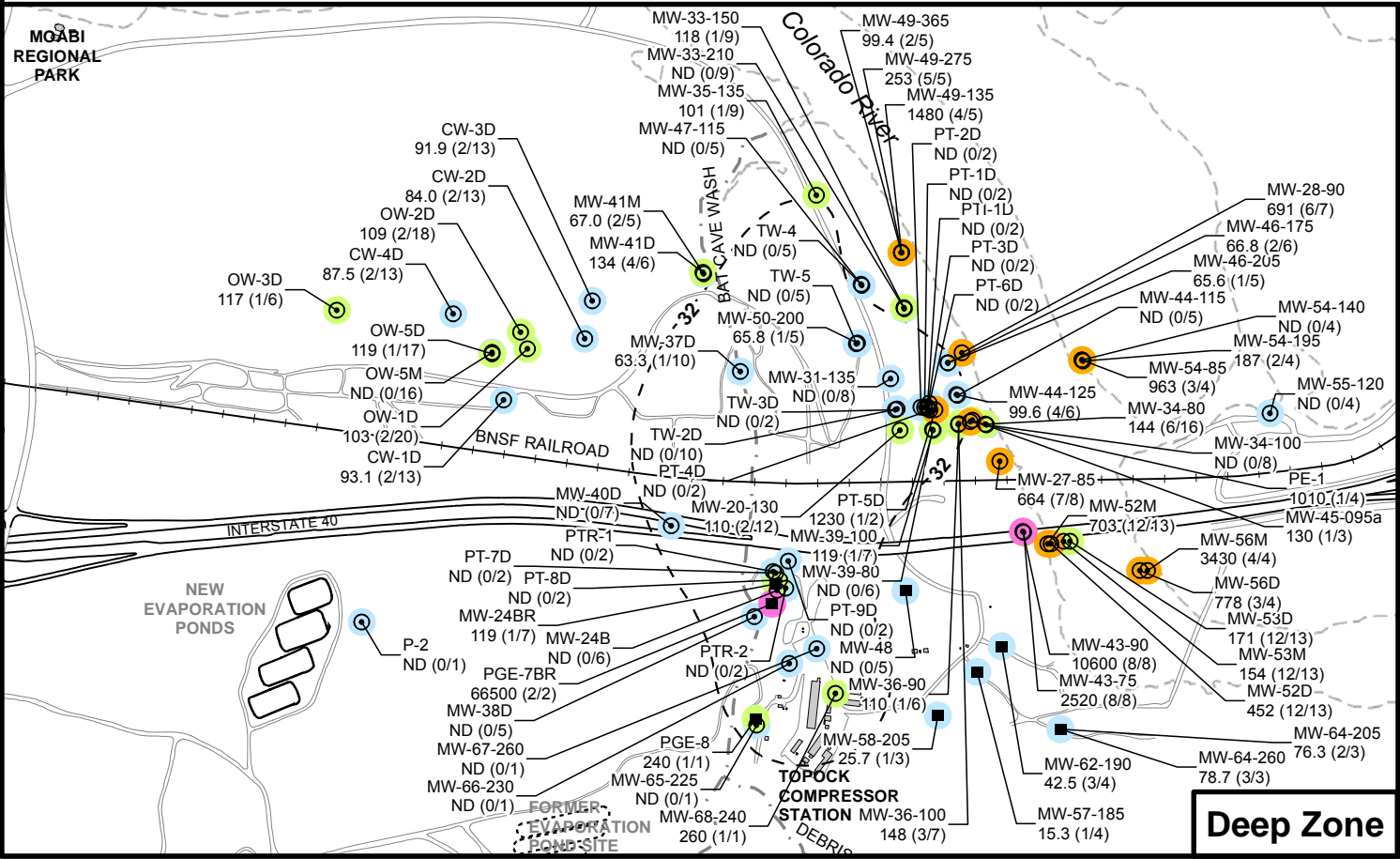
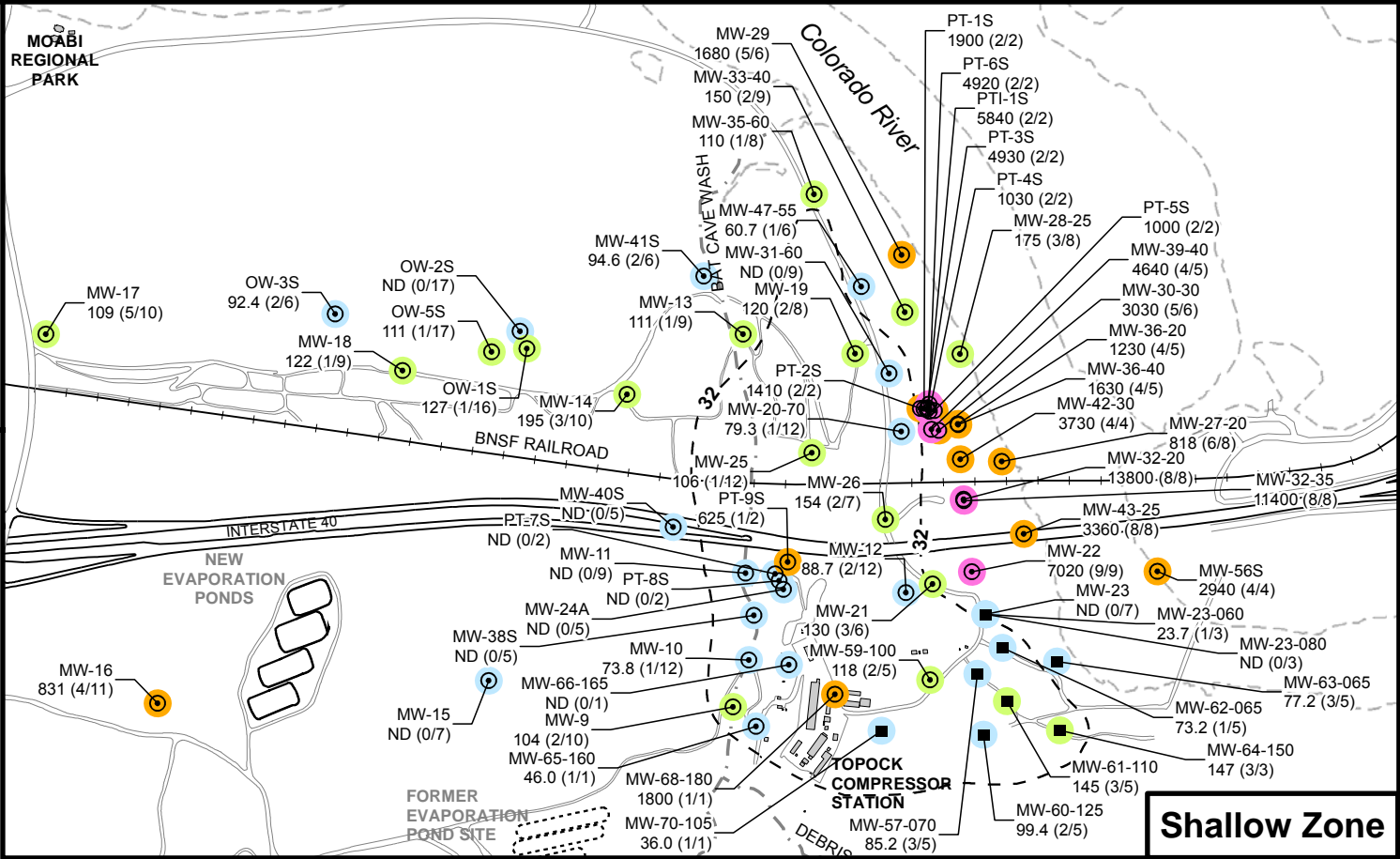
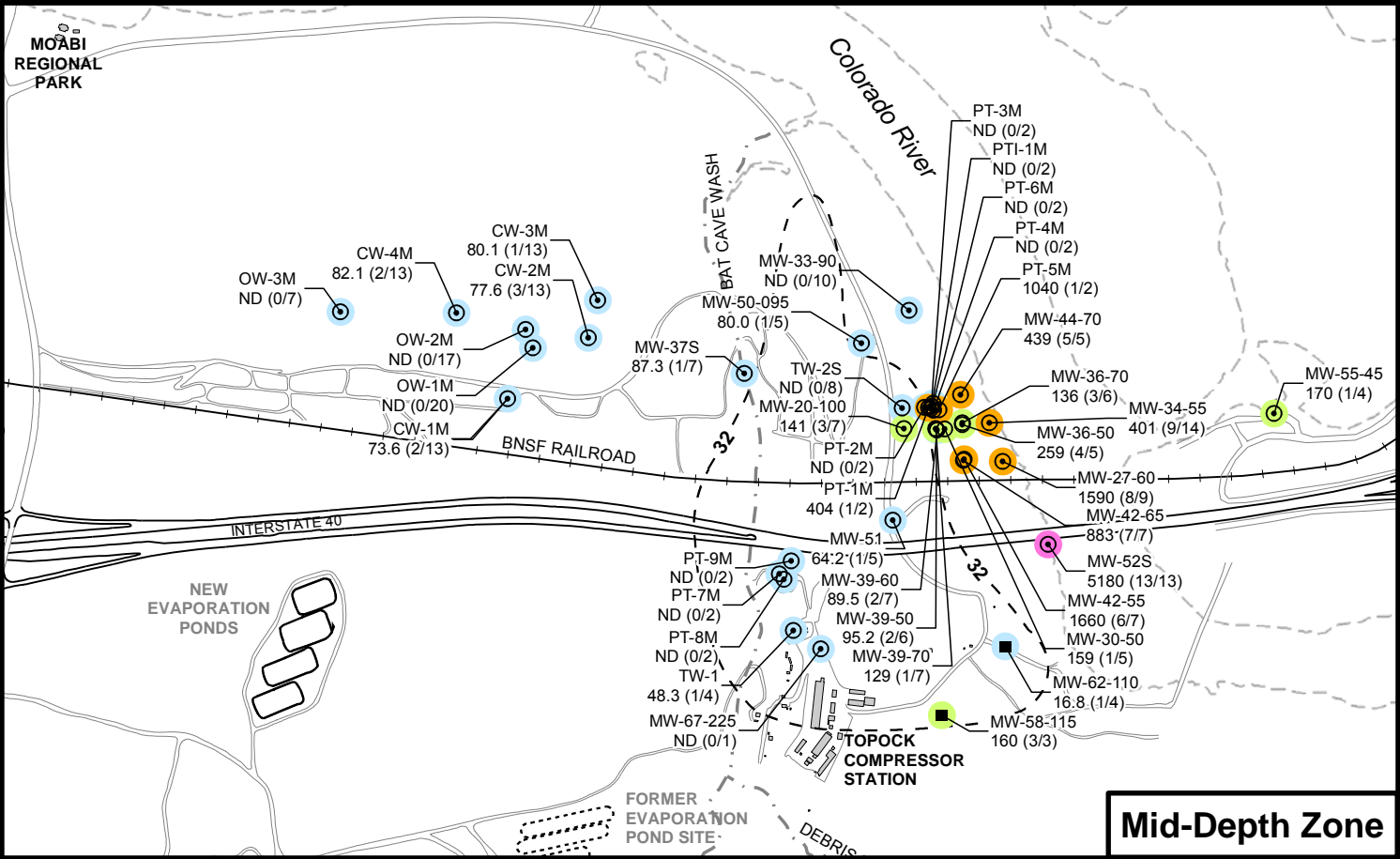
- ⊙ ≤ 50.0 µg/L (or not detected [ND])
- ⊙ 50.0 - 500 µg/L
- ⊙ 500 - 1,320 µg/L
- ⊙ > 1,320 µg/L

Notes:

1. Manganese Background Study Upper Tolerance Limit (UTL) = 1,320 µg/L
2. Manganese applicable or relevant and appropriate requirement (ARAR) = 50.0 µg/L
3. In computing averages, non-detects were assigned half of the reporting limit concentration. Some averages may be elevated due solely to high reporting limits for non-detect samples. Refer to the complete data set in Appendix A for verification.

Approximate outline of Cr(VI) in
Alluvial Aquifer depth zone
≥ 32 µg/L, Second Quarter 2011

FIGURE 2-8
MANGANESE CONCENTRATIONS IN
GROUNDWATER, JULY 1997 - JUNE
2011
GROUNDWATER REMEDY BASIS OF DESIGN REPORT
PRELIMINARY (30%) DESIGN
PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA



LEGEND

- Groundwater Well completed in Alluvial Aquifer (Shallow, Mid-depth or Deep Zones)
- Groundwater Well completed in Bedrock

Dissolved Iron Average Concentrations

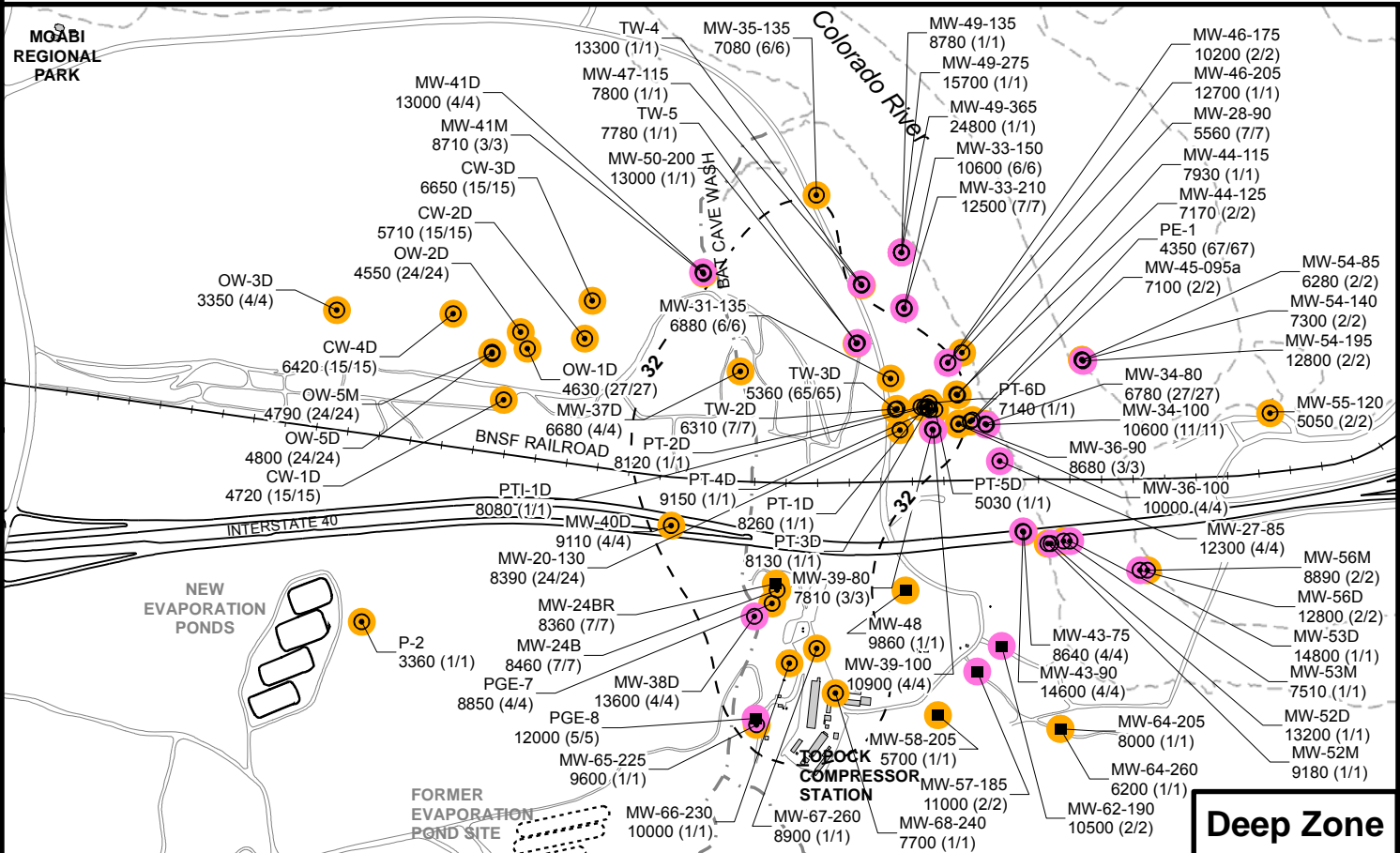
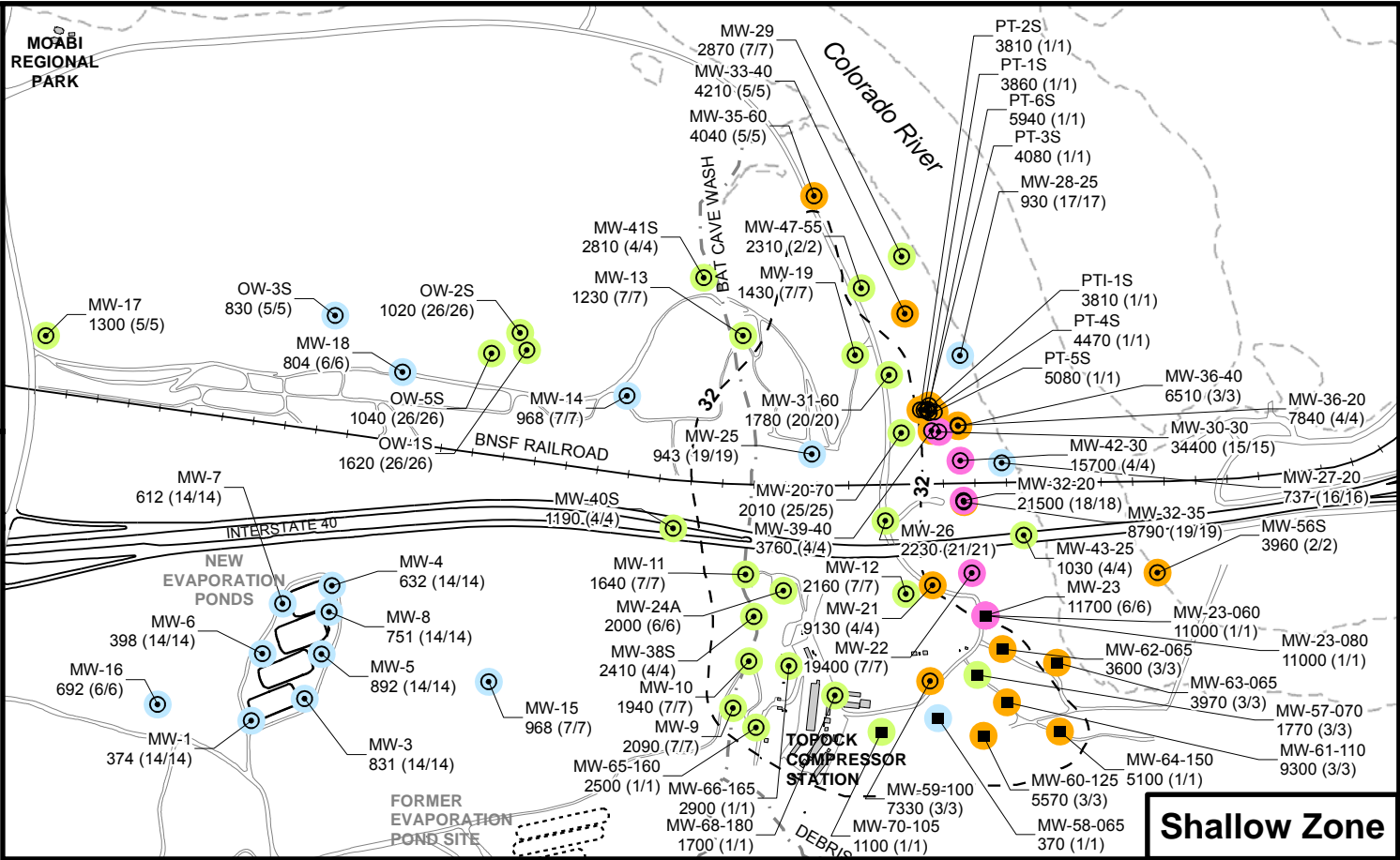
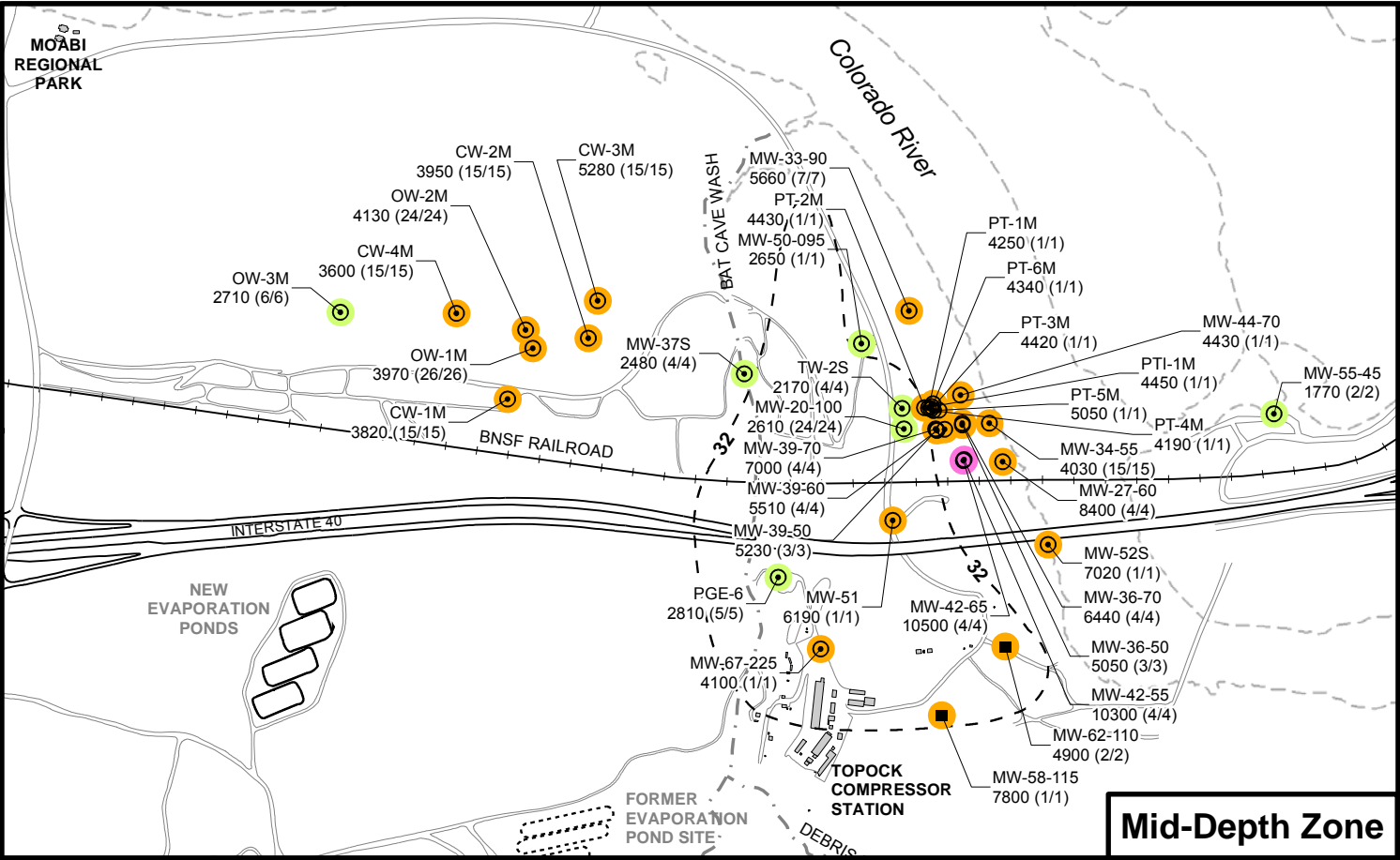
- MW-17 ← Well ID
- 5.8 (8/16) ← (No. of detections / No. of samples)
- ↑ Average concentration, micrograms per liter (µg/L)
1997 - 2011 groundwater sampling
- ≤ 100 µg/L
 - 100 - 300 µg/L
 - 300 - 3,930 µg/L
 - > 3,930 µg/L

Approximate outline of Cr(VI) in Alluvial Aquifer depth zone ≥ 32 µg/L, Second Quarter 2011

- Notes:
- Iron Background Study Upper Tolerance Limit (UTL) = 3,930 µg/L
 - Iron applicable or relevant and appropriate requirement (ARAR) = 300 µg/L
 - In computing averages, non-detects were assigned half of the reporting limit concentration. Some averages may be elevated due solely to high reporting limits for non-detect samples. Refer to the complete data set in Appendix A for verification.

FIGURE 2-9
IRON CONCENTRATIONS IN
GROUNDWATER, JULY 1997 - JUNE
2011

GROUNDWATER REMEDY BASIS OF DESIGN REPORT
PRELIMINARY (30%) DESIGN
PG&E TOPOCK COMPRESSION STATION
NEEDLES, CALIFORNIA



LEGEND

- ⊙ Groundwater Well completed in Alluvial Aquifer (Shallow, Mid-depth or Deep Zones)
- Groundwater Well completed in Bedrock

TDS Average Concentrations

MW-17 ← Well ID
5.8 (8/16) ← (No. of detections / No. of samples)
↑ Average concentration, milligrams per liter (mg/L)
1997 - 2011 groundwater sampling

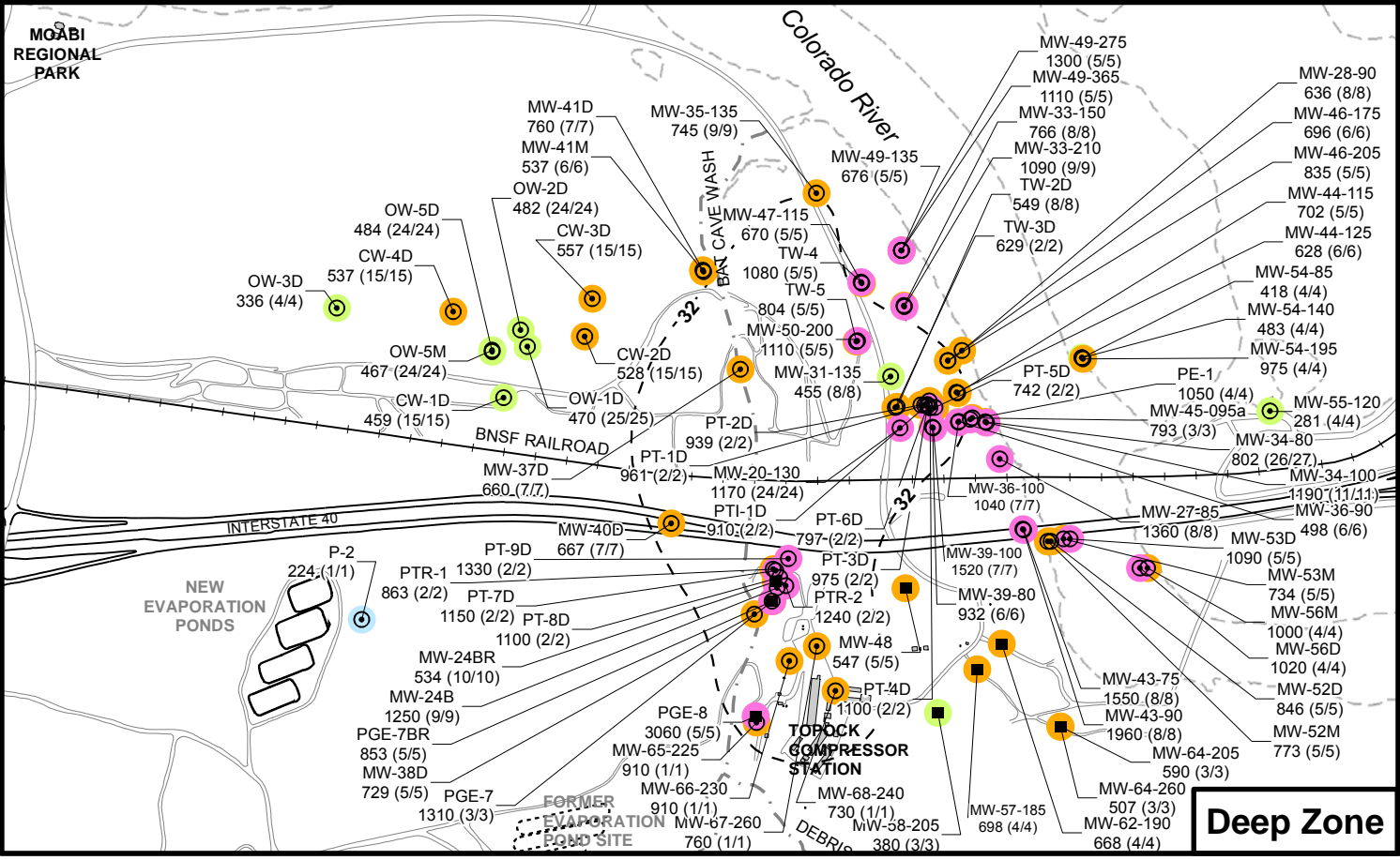
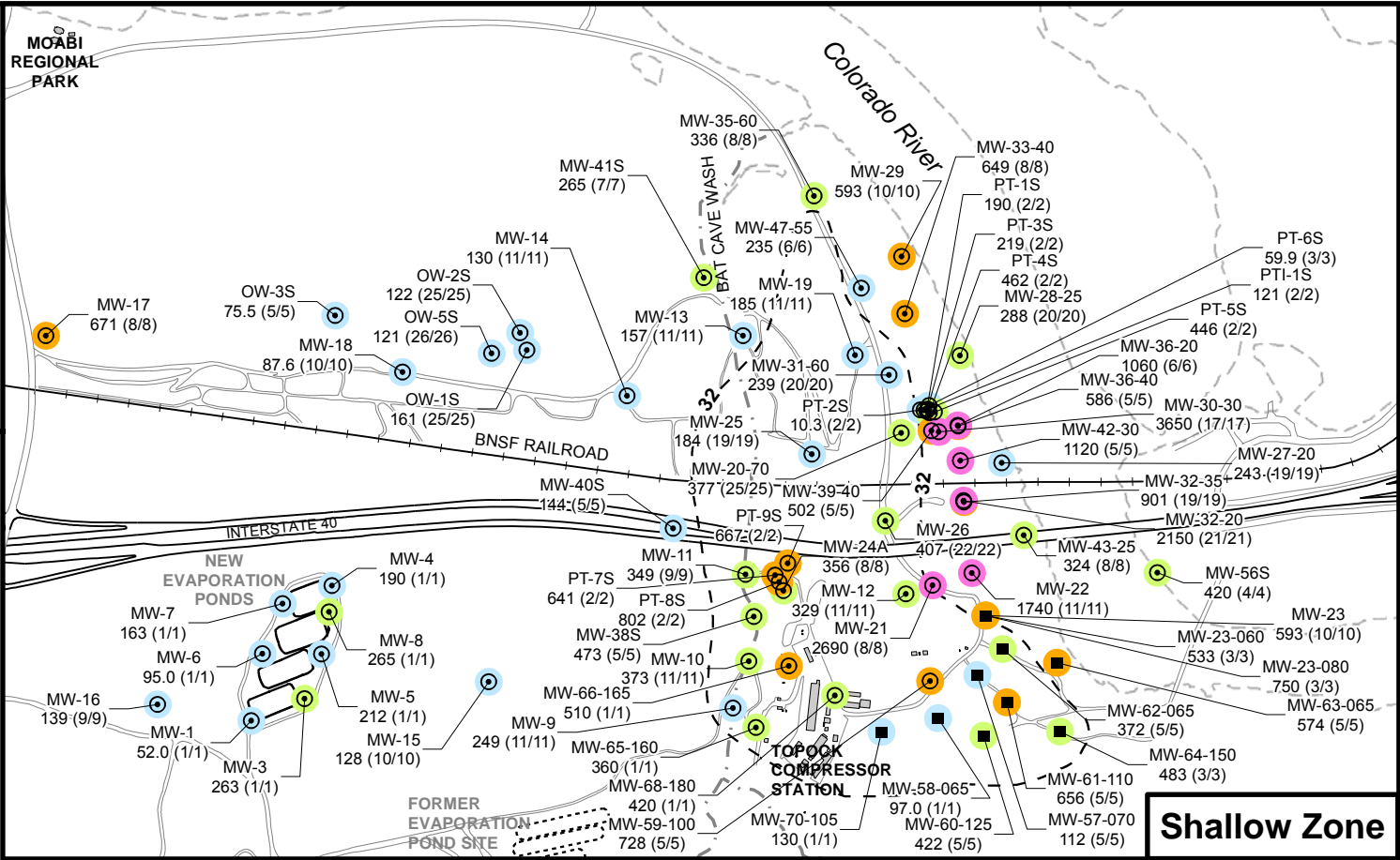
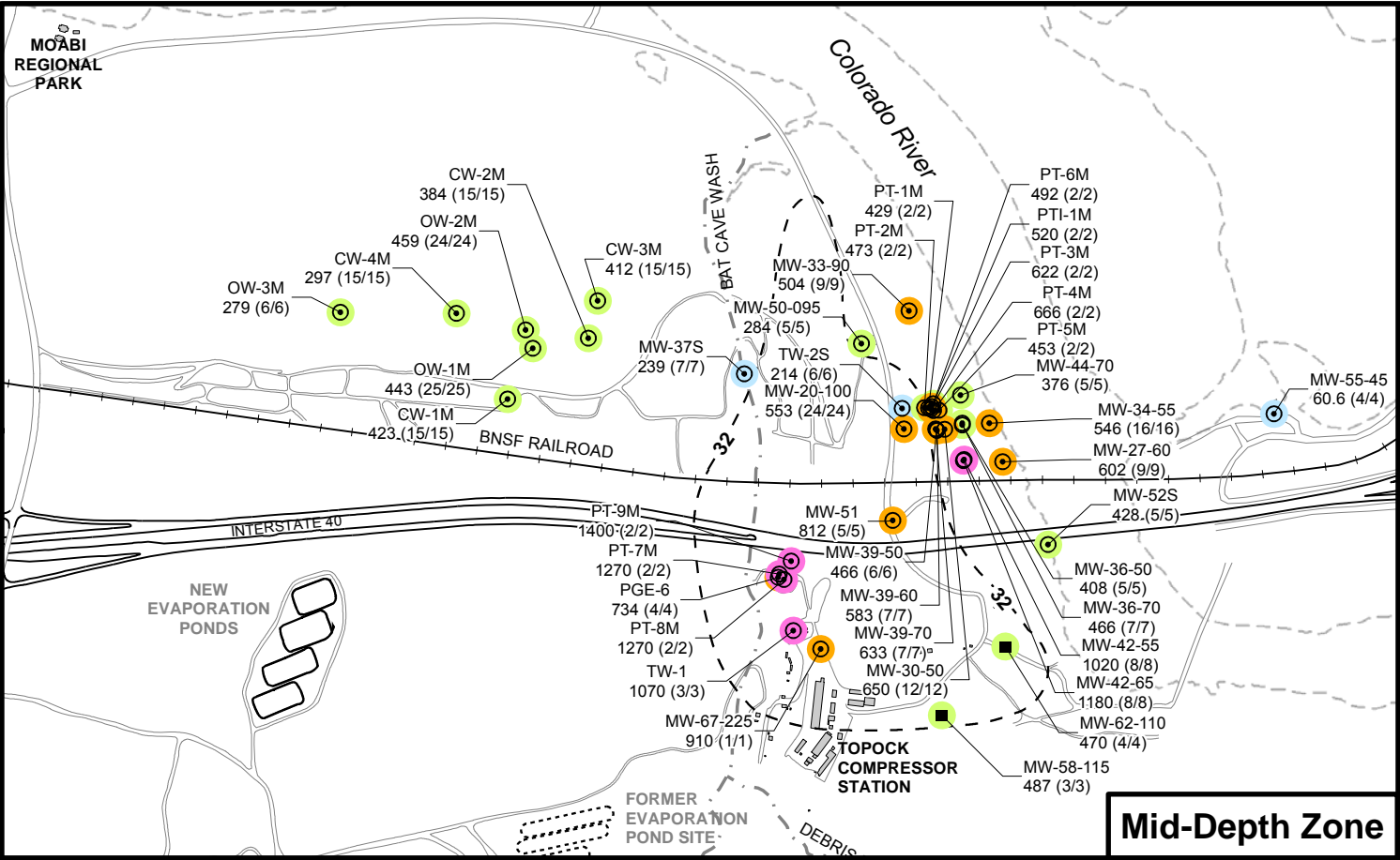
- ⊙ ≤ 1,000 mg/L
- ⊙ 1,000 - 3,000 mg/L
- ⊙ 3,000 - 10,000 mg/L
- ⊙ > 10,000 mg/L

- Notes:
- TDS applicable or relevant and appropriate requirement (ARAR) = 1,000 mg/L
 - In computing averages, non-detects were assigned half of the reporting limit concentration. Some averages may be elevated due solely to high reporting limits for non-detect samples. Refer to the complete data set in Appendix A for verification.

Approximate outline of Cr(VI) in Alluvial Aquifer depth zone ≥ 32 µg/L, Second Quarter 2011

FIGURE 2-10
TDS CONCENTRATIONS IN
GROUNDWATER, JULY 1997 - JUNE
2011

GROUNDWATER REMEDY BASIS OF DESIGN REPORT
PRELIMINARY (30%) DESIGN
PG&E TOPECO COMPRESSOR STATION
NEEDLES, CALIFORNIA



LEGEND

- Groundwater Well completed in Alluvial Aquifer (Shallow, Mid-depth or Deep Zones)
- Groundwater Well completed in Bedrock

Sulfate Average Concentrations

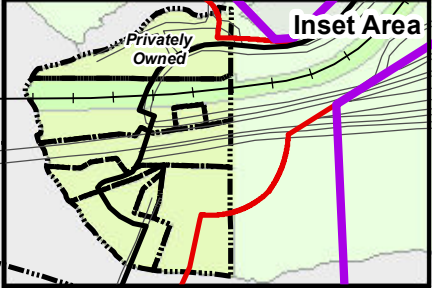
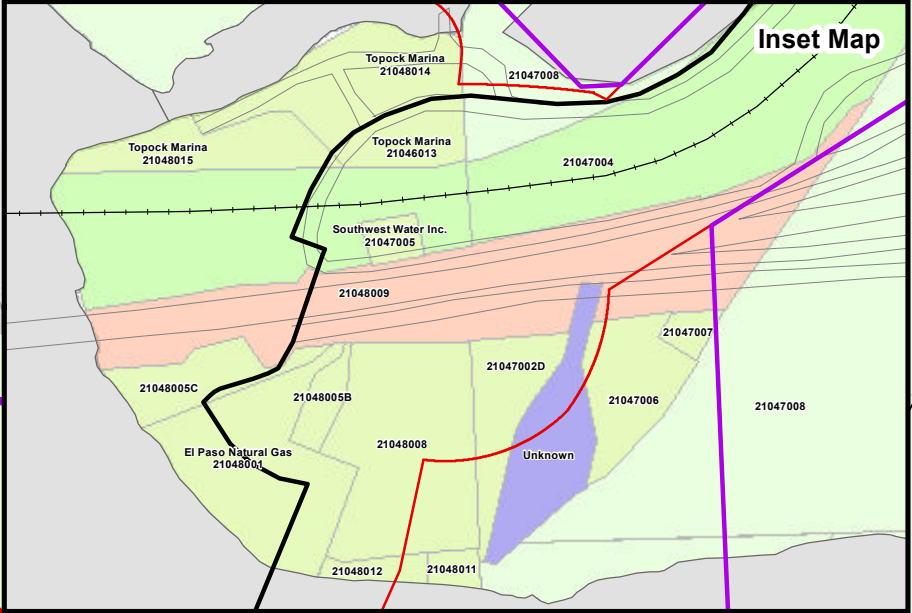
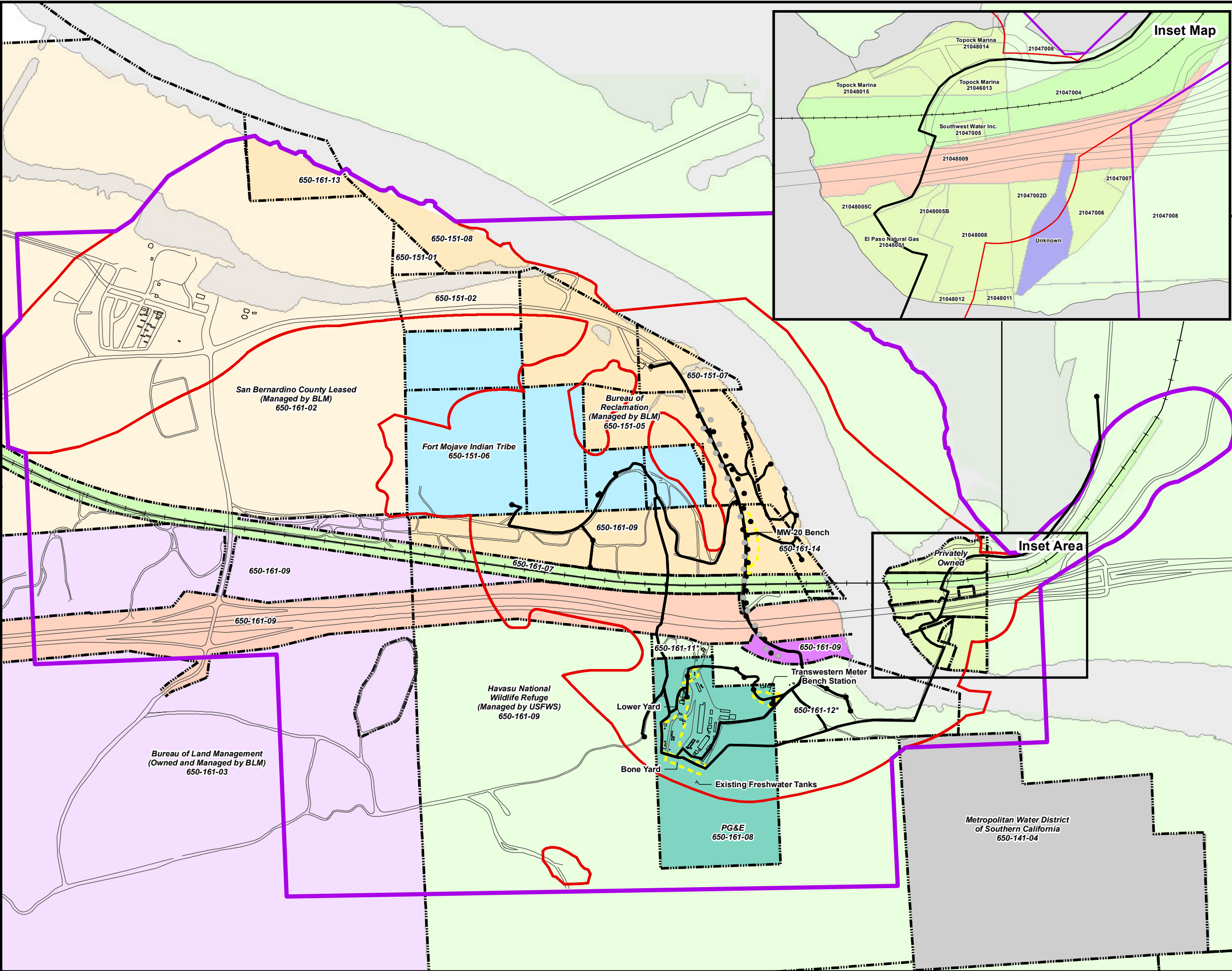
- Well ID
- (No. of detections / No. of samples)
- Average concentration, milligrams per liter (mg/L) 1997 - 2011 groundwater sampling
- ≤ 250 mg/L
- 250 - 500 mg/L
- 500 - 1,000 mg/L
- > 1,000 mg/L

- Notes:
- Sulfate applicable or relevant and appropriate requirement (ARAR) = 500 mg/L
 - In computing averages, non-detects were assigned half of the reporting limit concentration. Some averages may be elevated due solely to high reporting limits for non-detect samples. Refer to the complete data set in Appendix A for verification.

Approximate outline of Cr(VI) in Alluvial Aquifer depth zone ≥ 32 µg/L, Second Quarter 2011

FIGURE 2-11
SULFATE CONCENTRATIONS IN
GROUNDWATER, JULY 1997 - JUNE
2011

GROUNDWATER REMEDY BASIS OF DESIGN REPORT
PRELIMINARY (30%) DESIGN
PG&E TOPECO COMPRESSOR STATION
NEEDLES, CALIFORNIA



LEGEND

EIR Project Area

Area of Potential Effects (APE)

Property Owner

- BNSF Railroad
- Bureau of Land Management (owned and managed by BLM)
- Bureau of Reclamation (managed by BLM)
- Caltrans Leased From Underlying Federal Owner
- Fort Mojave Indian Tribe Owner in Fee, With PG&E Easement and Access for Remediation
- Havasu National Wildlife Refuge
- Metropolitan Water District of Southern California
- PG&E
- Privately Owned
- San Bernadino County
- San Bernadino County Leased (managed by BLM)
- MW-20 Bench Area

Remedy Features

- Remediation Wells (excludes monitoring wells)
- Future Provisional Wells
- Pipeline for Remedy

Note:

- * = PG&E has a possessory interest on these parcels (650-161-11, 650-161-12) for the operation of a compressor station and associated pipelines.
- Existing monitoring and other wells are not shown.

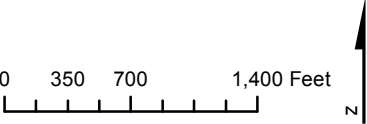
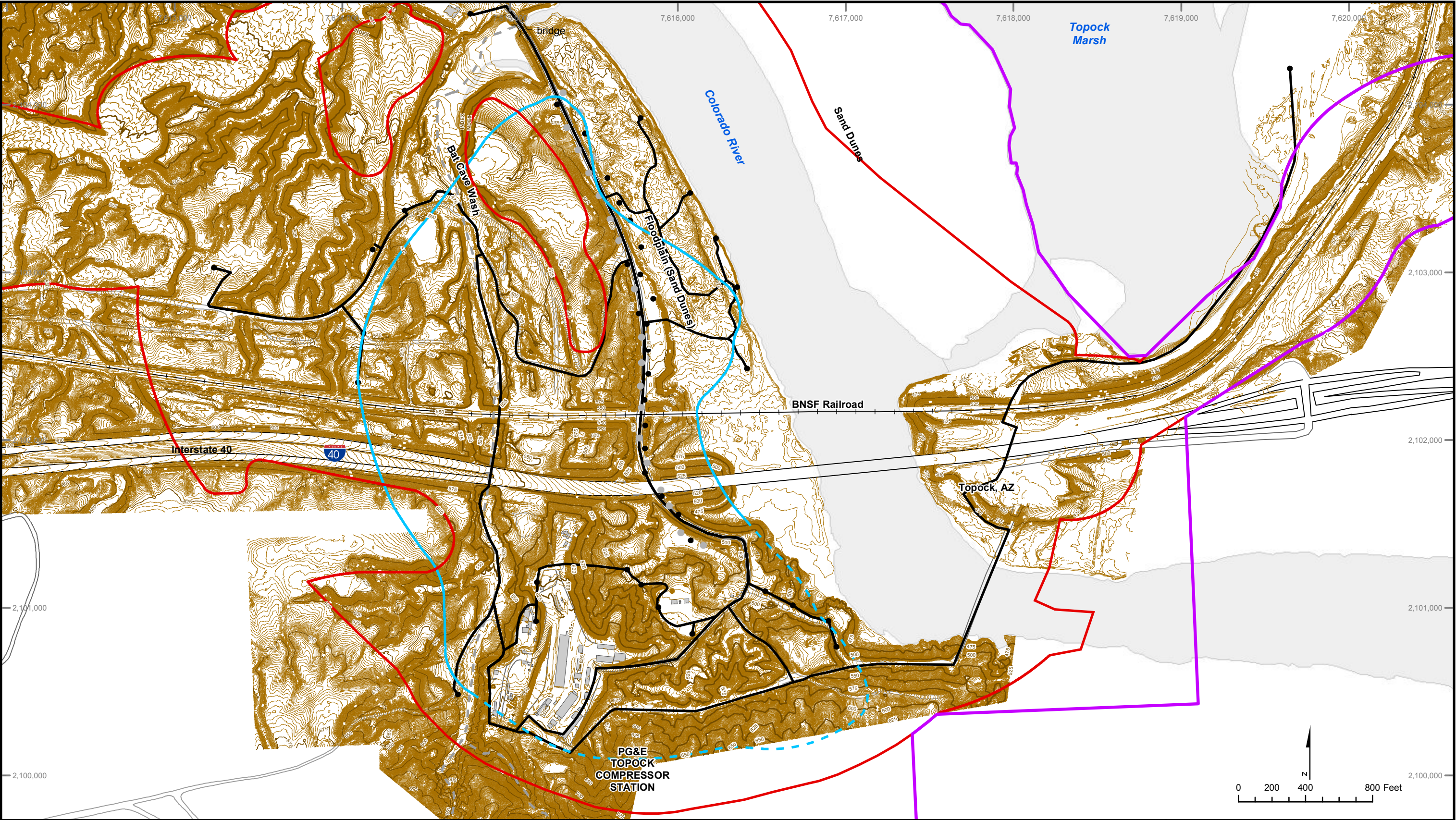


FIGURE 2-12
SURROUNDING PROPERTY MAP
GROUNDWATER REMEDY BASIS OF DESIGN REPORT
PRELIMINARY (30%) DESIGN
PG&E TOPOCK COMPRESSOR STATION,
NEEDLES, CALIFORNIA



LEGEND

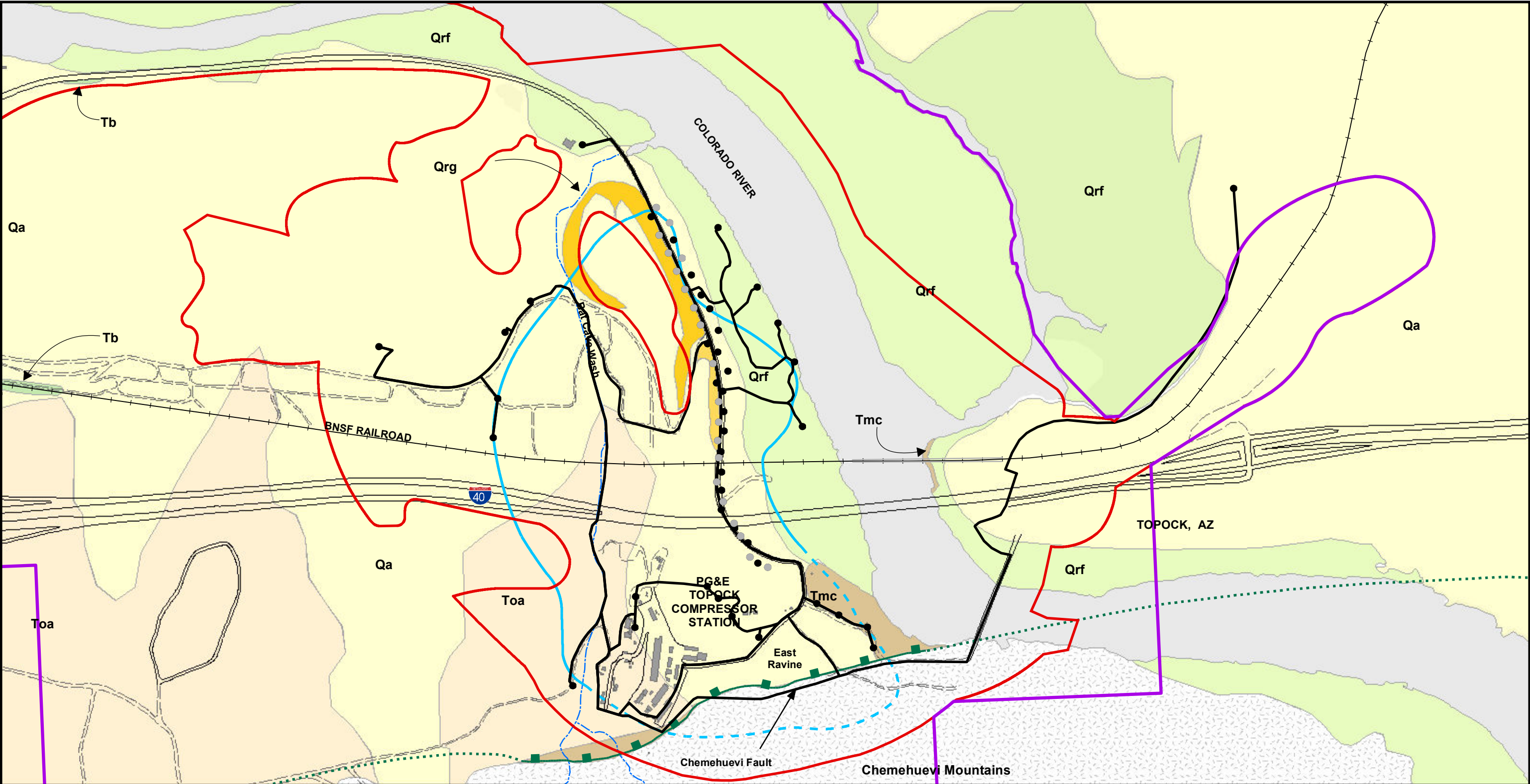
	EIR Project Area		Pipeline for remedy
	Area of Potential Effect (APE)		Topographic Contour 1-foot Interval
	Remediation Wells (excludes monitoring wells)		Topographic Contour 25-foot Interval
	Future Provisional Wells		

Approximate extent of hexavalent chromium [Cr(VI)] concentrations exceeding 32 micrograms per liter (µg/L) at any depth in groundwater based on second quarter 2011 sampling events. Dashed where based on limited data.

California State Plane, NAD 83, Zone 5, US Feet
Contour interval is 10 feet, with indexes at 50 feet.

Sources:
Topographic data from Toponex Inc. flyover (2011).

FIGURE 2-13
SITE TOPOGRAPHY
GROUNDWATER REMEDY BASIS OF DESIGN REPORT
PRELIMINARY (30%) DESIGN
PG&E TOPOCK COMPRESSOR STATION,
NEEDLES, CALIFORNIA



LEGEND

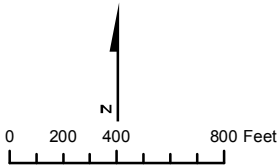
- Qrf = Quaternary Colorado River and recent Floodplain Deposits
- Qrg = Quaternary River Gravels
- Qa = Quaternary Alluvium and surficial deposits, undifferentiated
- Tb = Bouse Formation
- Toa = Tertiary Alluvium (Fanglomerate of Metzger and Loeltz)
- Tmc = Miocene Conglomerate (Bedrock)
- pTbr = Pre-Tertiary Bedrock (Metadiorite, Gneiss, Granitic Rocks)

- Detachment Fault
barbs on downthrown side
- Detachment Fault concealed
- Remediation Wells (excludes monitoring wells)
- Future Provisional Wells
- Pipeline for Remedy
- Approximate extent of hexavalent chromium [Cr(VI)] concentrations exceeding 32 micrograms per liter (µg/L) at any depth in groundwater based on second quarter 2011 sampling events. Dashed where based on limited data.

- Area of Potential Effects (APE)
- EIR Project Area

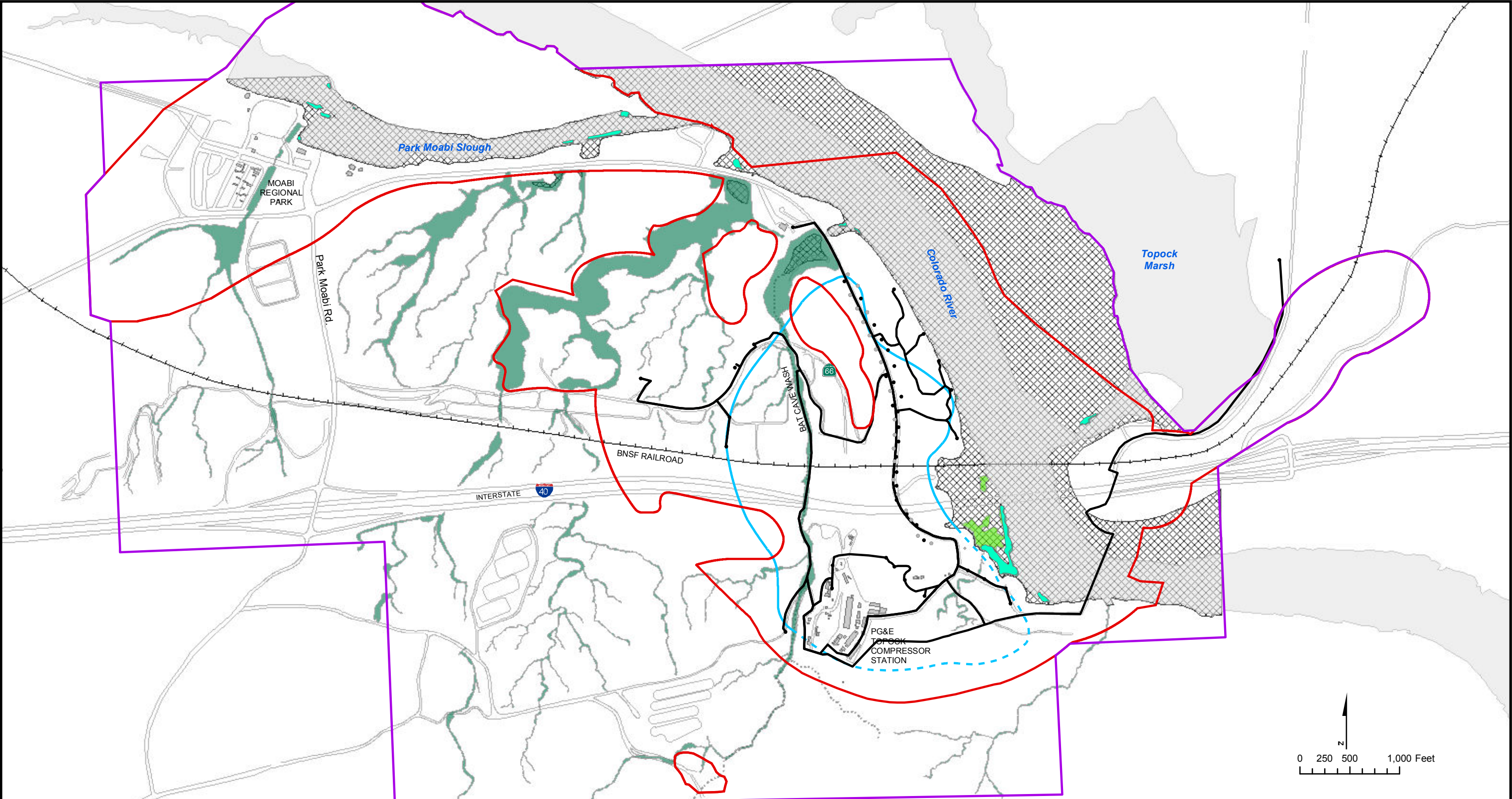
Note:

- Generalized surface geologic map compiled from Metzger and Loeltz (1973), John (1987), Howard and others (1997), and PG&E technical reports.
- This geologic map east of the Compressor Station was updated with mapping from the 2009 East Ravine investigation (CH2M HILL, 2009).














**FIGURE 2-14
GEOLOGIC MAP**
GROUNDWATER REMEDY BASIS OF DESIGN REPORT
PRELIMINARY (30%) DESIGN
PG&E TOPOCK COMPRESSOR STATION,
NEEDLES, CALIFORNIA





LEGEND

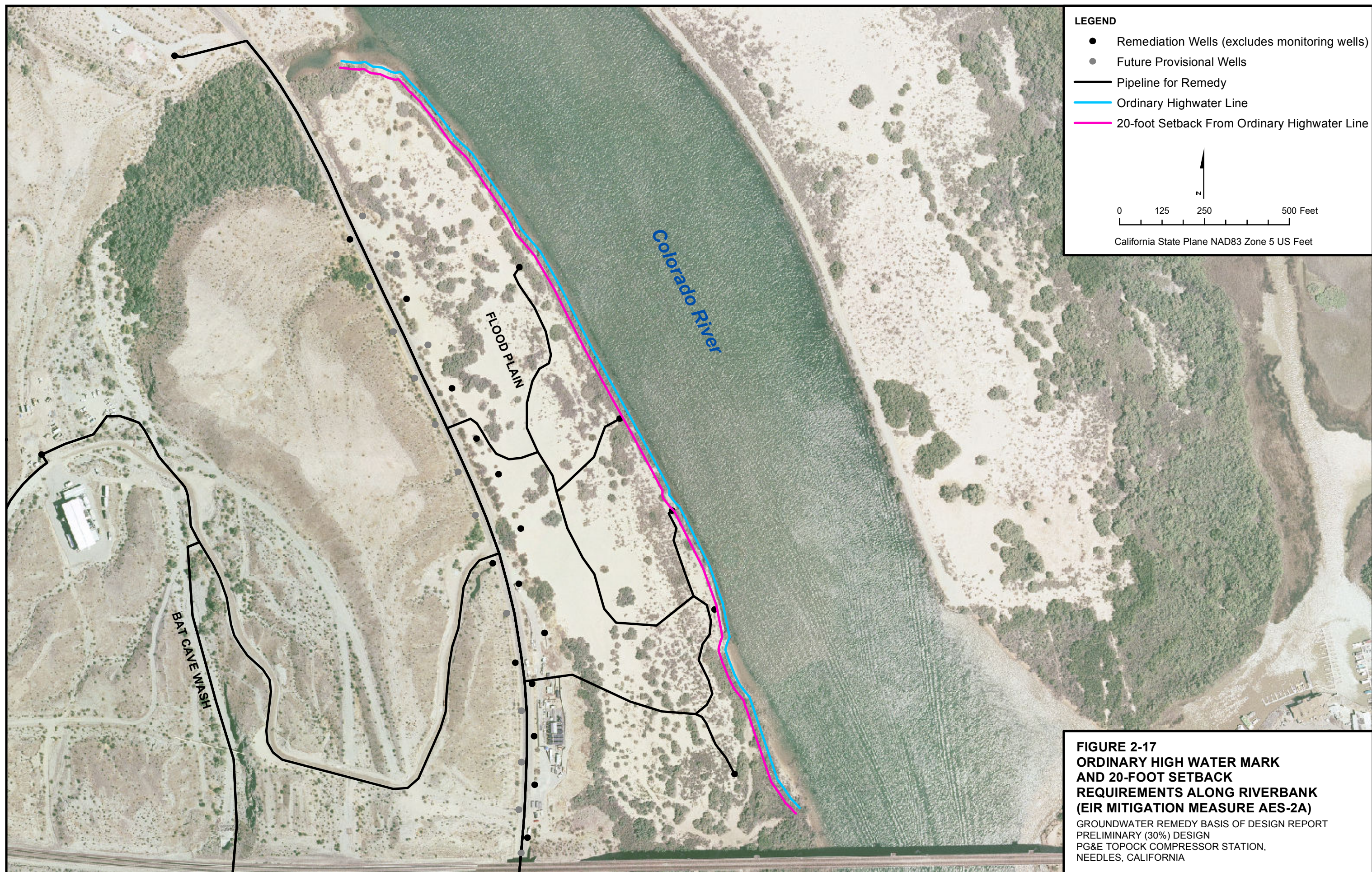
- | | | |
|---|---|--|
|  Area of Potential Effect (APE) |  100 -year floodplain |  USACE Waters of U.S. |
|  EIR Project Area |  Fringe Wetlands |  Approximate extent of hexavalent chromium [Cr(VI)] concentrations exceeding 32 micrograms per liter (µg/L) at any depth in groundwater based on second quarter 2011 sampling events. Dashed where based on limited data. |
|  Remediation Wells (excludes monitoring wells) |  Adjacent wetlands | |
|  Future Provisional Wells |  USACE Waters of U.S. - Colorado River | |
|  Pipeline for Remedy | | |

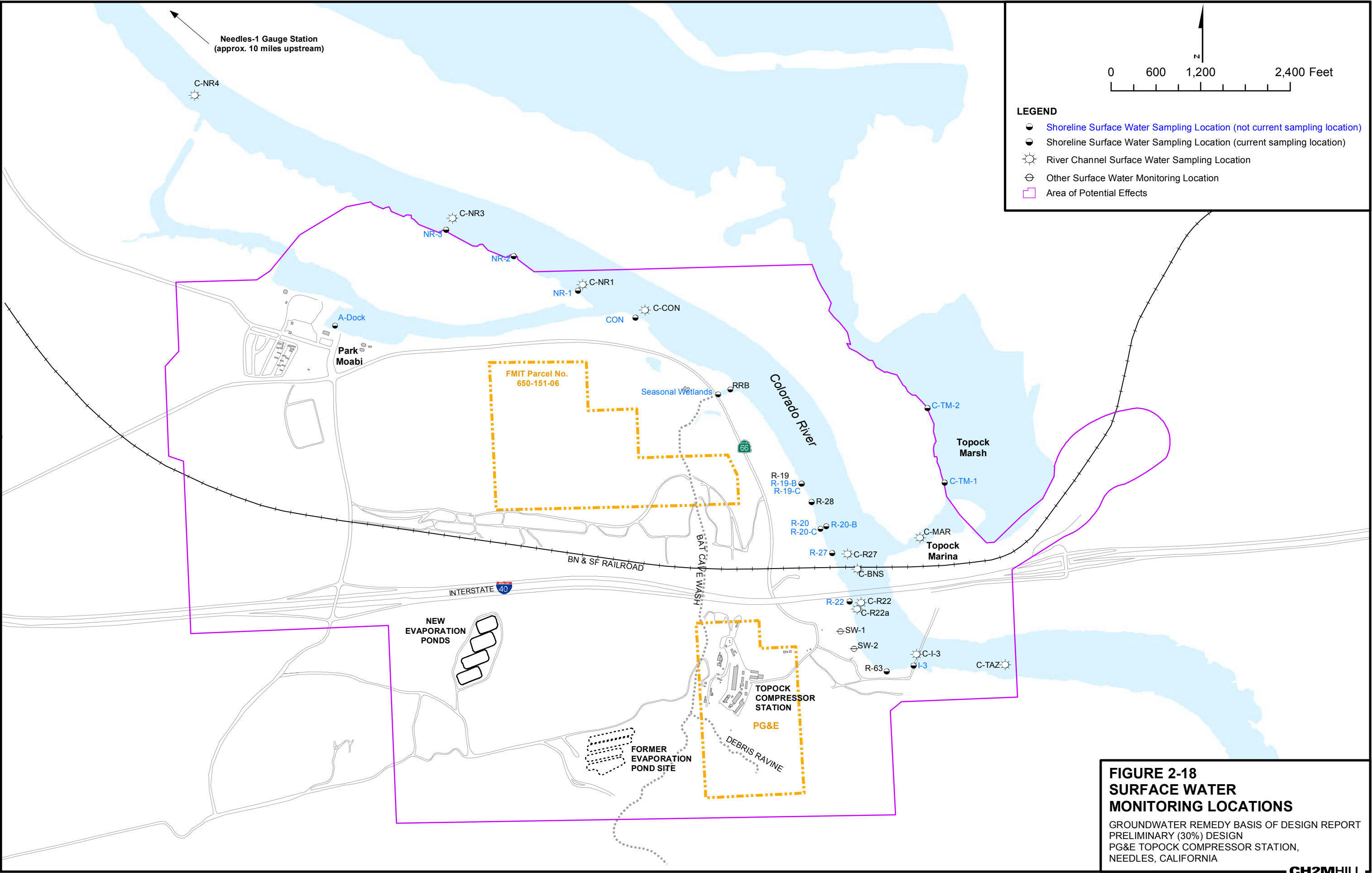
Source:
Biological Resources survey for the Area of Potential Effect (APE) Topock Compressor Station (CH2M HILL 2005a) and the *Programmatic Biological Assessment for Pacific Gas and Electric Topock Compressor Station Remedial and Investigative Actions* (CH2M HILL 2007b).

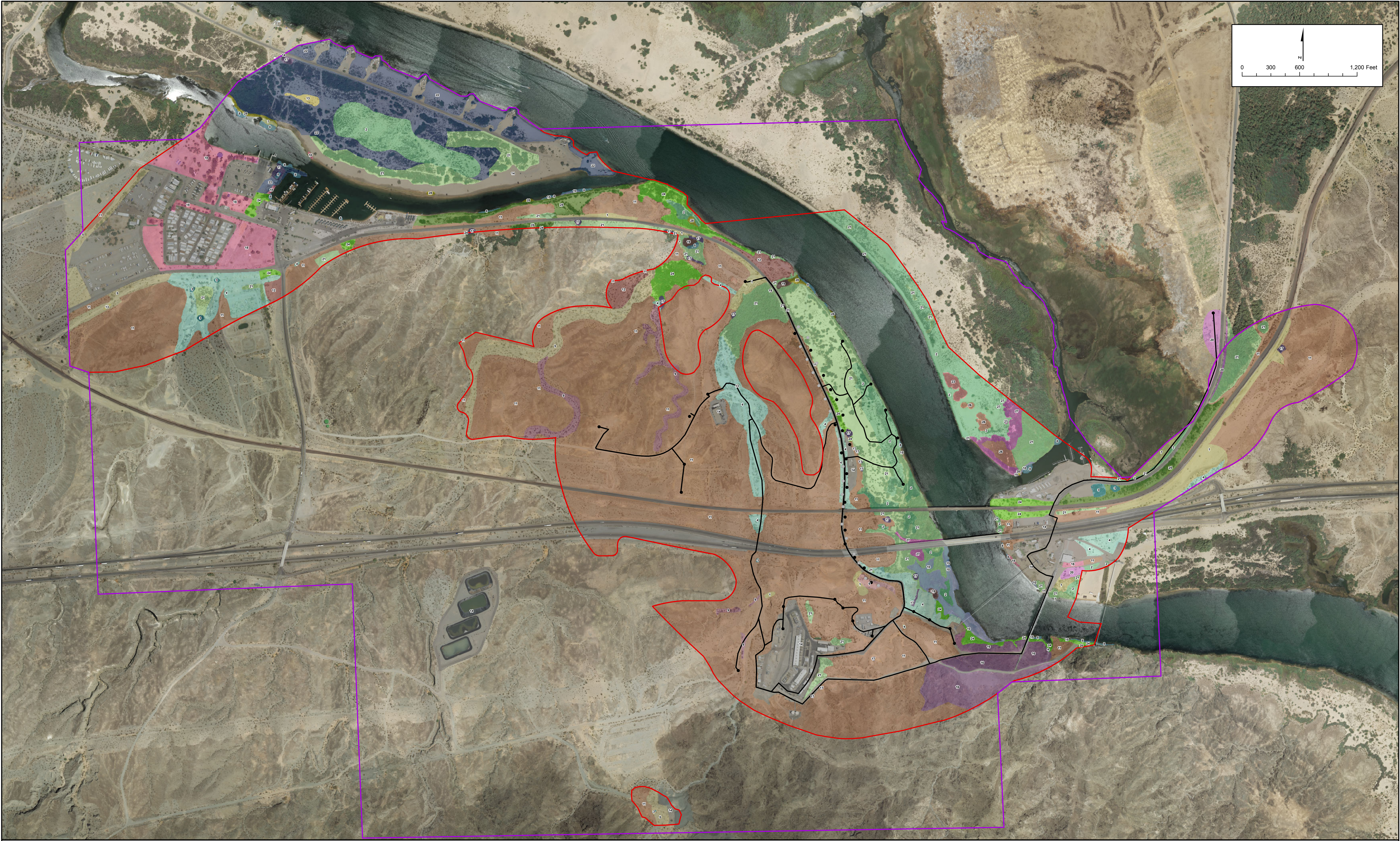
**FIGURE 2-16
UNITED STATES ARMY CORPS OF
ENGINEERS JURISDICTIONAL
WATERS AND WETLANDS**

GROUNDWATER REMEDY BASIS OF DESIGN REPORT
PRELIMINARY (30%) DESIGN
PG&E TOPOCK COMPRESSOR STATION,
NEEDLES, CALIFORNIA

CH2MHILL







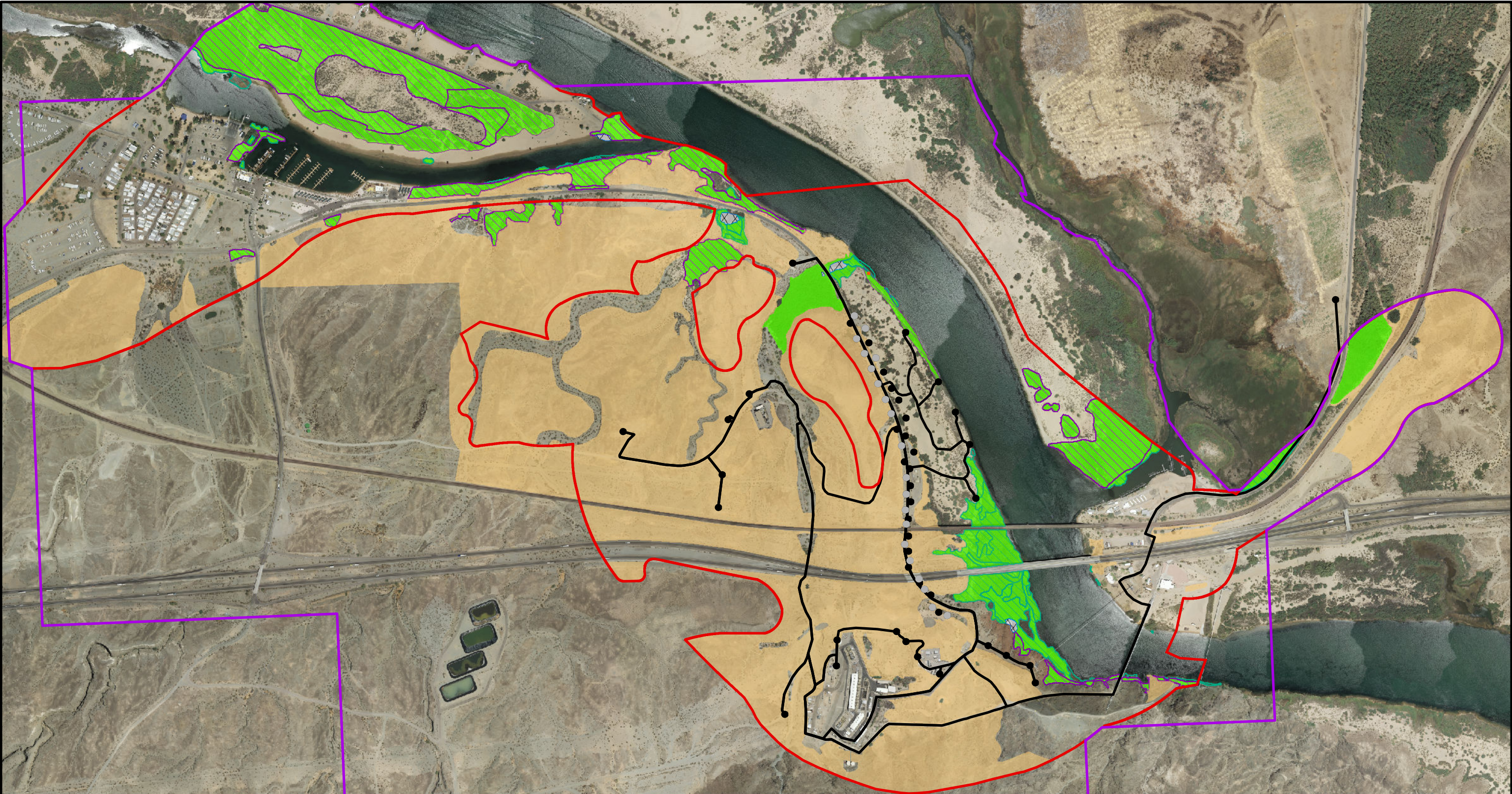
LEGEND

- Area of Potential Effects (APE)
EIR Project Area
Remediation Wells (excludes monitoring wells)
Future Provisional Wells
Pipeline for Remedy
- Vegetation Types**
- | | | | | | | |
|--|---|---|--|---|---|---|
| Alfalfa Scrub (MCV2 ¹ : Alfalfa scrub)[1] | Blue Palo Verde/Catclaw Acacia (MCV2: Blue palo verde-ironwood woodland)[5] | Catclaw Acacia (MCV2: Catclaw acacia thorn scrub)[9] | Desert Smoke Tree (MCV2: Blue palo verde-ironwood woodland)[13] | Honey Mesquite (MCV2: Mesquite bosque)[17] | Salt Cedar (MCV2: Tamarisk thickets)[21] | Salt Cedar/Honey Mesquite/Blue Palo Verde (MCV2: Tamarisk thickets/Mesquite bosque/Blue palo verde-ironwood woodland)[25] |
| Arrow Weed (MCV2: Arrow weed thickets)[2] | Blue Palo Verde/Honey Mesquite (MCV2: Blue palo verde woodland)[6] | Common Reed (MCV2: Common reed marshes)[10] | Developed/Disturbed[14] | Landsaped[18] | Salt Cedar/Arrow Weed (MCV2: Tamarisk/Arrow weed thickets)[22] | Salt Cedar/Screwbean Mesquite (MCV2: Tamarisk thickets/ Screwbean mesquite bosque)[26] |
| Athel Tamarisk (MCV2: Tamarisk thickets)[3] | Broad-leaved Cattail (MCV2: Cattail marshes)[7] | Creosote bush scrub (MCV2:Creosote bush scrub)[11] | Giant Reed (MCV2:Giant reed breaks)[15] | Open Water [19] | Salt Cedar/Athel Tamarisk (MCV2: Tamarisk thickets)[23] | Screwbean Mesquite (MCV2: Screwbean mesquite bosque)[27] |
| Blue Palo Verde (MCV2: Blue palo verde-ironwood woodland)[4] | California Bulrush (MCV2: California bulrush marsh)[8] | Creosote Bush/Cattle Saltbush (MCV2: Alfalfa scrub)[12] | Hillside Palo Verde (MCV2: Foothill palo verde desert scrub)[16] | Quailbush Scrub (MCV2: Quailbush scrub)[20] | Salt Cedar/Honey Mesquite (MCV2: Tamarisk thickets/Mesquite bosque)[24] | Wetland [28] |

Reference:
¹ Sawyer, J. O., T. Keeler-Wolf, and J. M. Evans. 2009. A manual of California vegetation, 2nd ed. California Native Plant Society, Sacramento, CA.

Aerial Image Source:
Groundwater Remedy Basis of Design Report Preliminary (30%) Design
PG&E Topock Compressor Station, Needles, California
Toponex Inc. aerial flyover, conducted August 2011

FIGURE 2-19
VEGETATION COMMUNITIES
IN PROJECT AREA
NOVEMBER 2011
Groundwater Remedy Basis of Design Report Preliminary (30%) Design
PG&E Topock Compressor Station, Needles, California

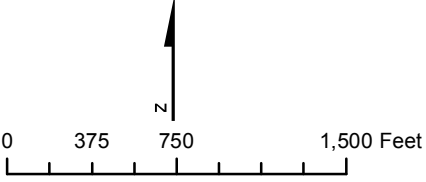


LEGEND

- EIR Project Area
- Area of Potential Effects (APE)
- Remediation Wells (excludes monitoring wells)
- Future Provisional Wells
- Pipeline for Remedy

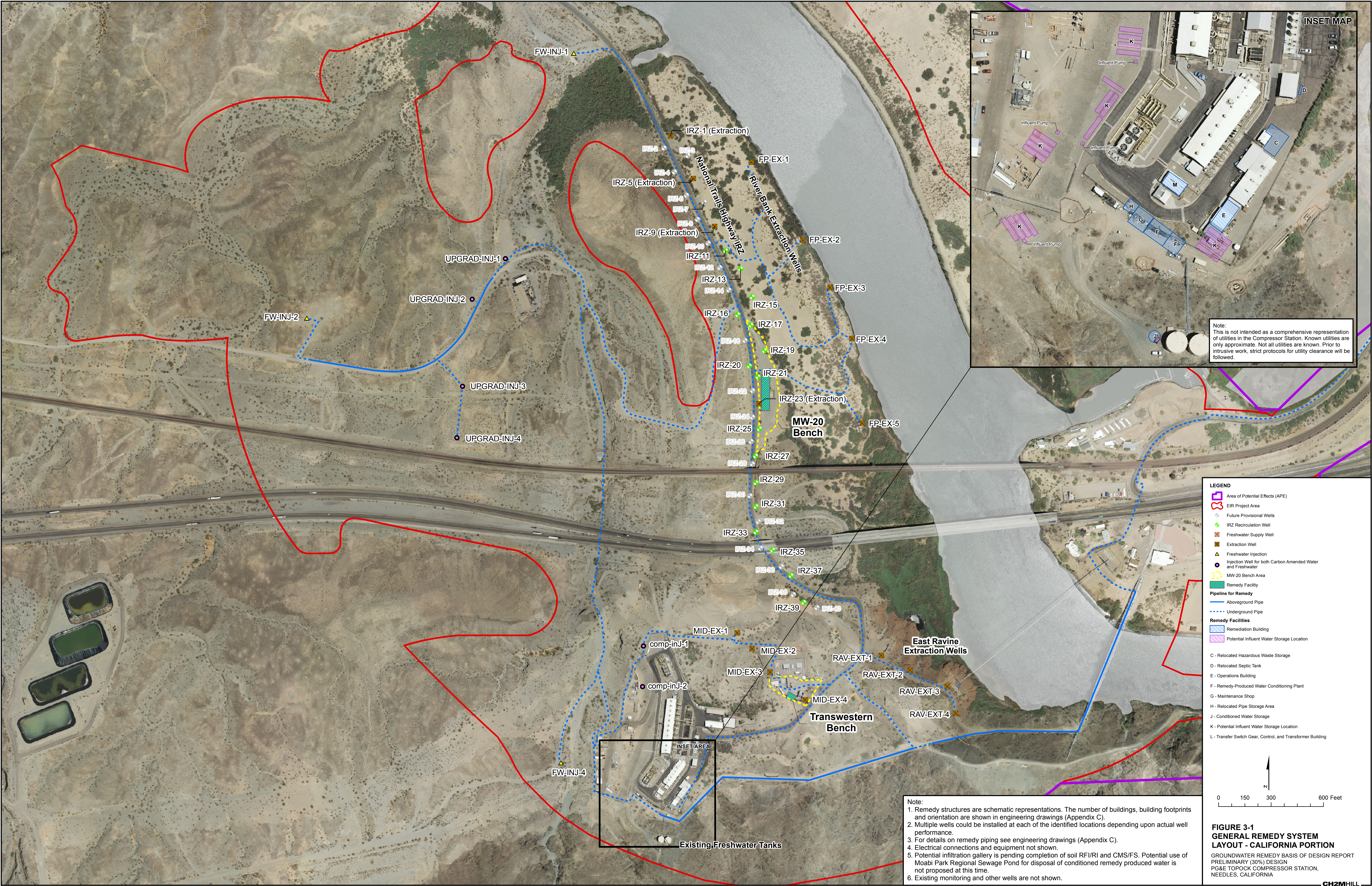
Habitat Areas

- | | |
|---|---|
| Colorado Pikeminnow, Bonytail chub, Humpback chub, and Razorback Chub | California black rail, Yuma clapper rail |
| Arizona Bell's vireo | Southwestern willow flycatcher |
| Western yellow-billed cuckoo | Desert Tortoise |



**FIGURE 2-20
HABITATS OF SPECIAL STATUS WILDLIFE,
AQUATIC, AND AVIAN SPECIES
AUGUST 2011**

Groundwater Remedy Basis of Design Report
Preliminary (30%) Design
PG&E Topock Compressor Station,
Needles, California

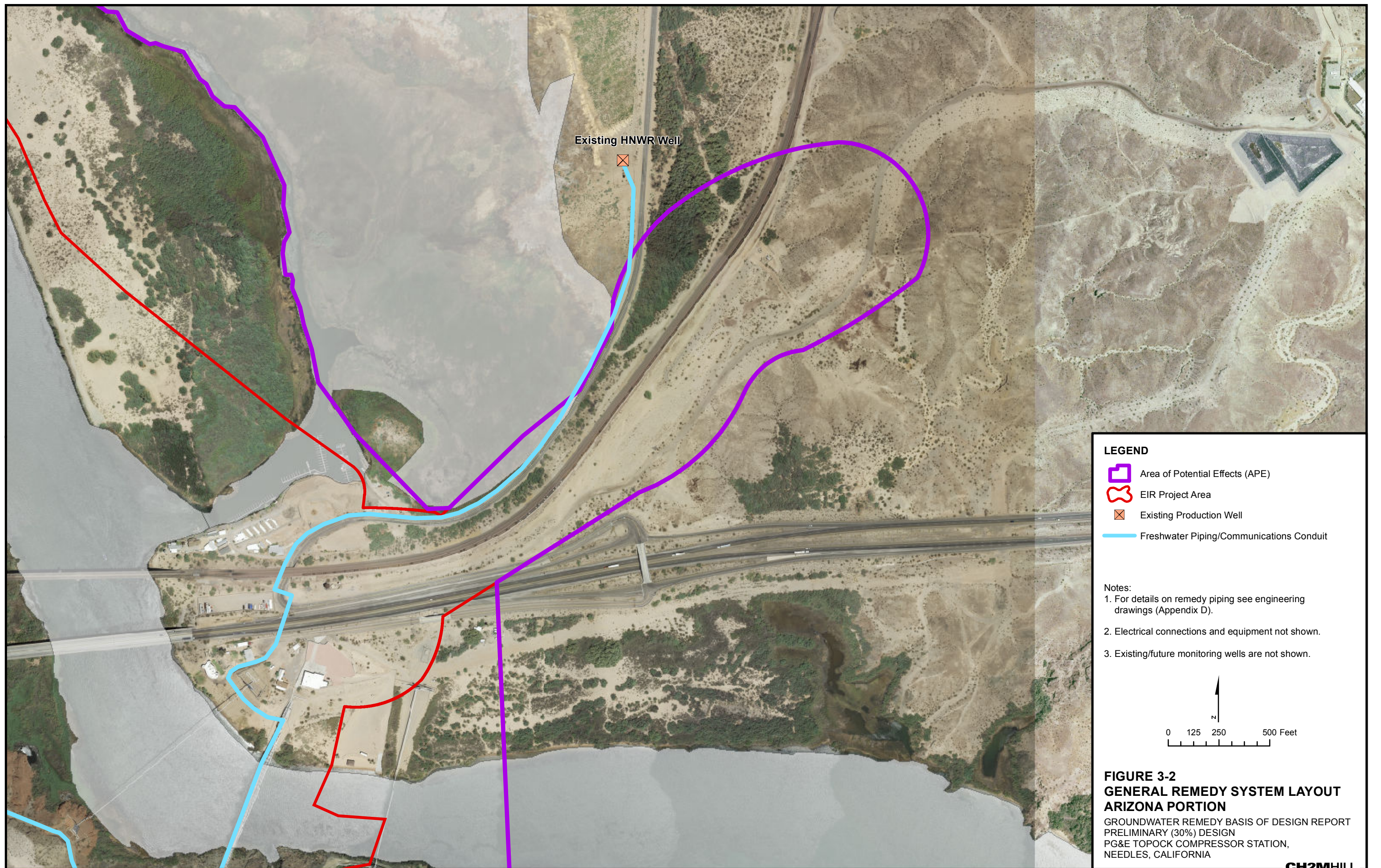


Note:

1. Remedy structures are schematic representations. The number of buildings, building footprints and orientation are shown in engineering drawings (Appendix C).
2. Multiple wells could be installed at each of the identified locations depending upon actual well performance.
3. For details on remedy piping see engineering drawings (Appendix C).
4. Electrical connections and equipment not shown.
5. Potential infiltration gallery is pending completion of soil RFI/RI and CMS/FS. Potential use of Moabi Park Regional Sewage Pond for disposal of conditioned remedy produced water is not proposed at this time.
6. Existing monitoring and other wells are not shown.

- LEGEND**
- Area of Potential Effects (APE)
 - EIR Project Area
 - Future Provisional Wells
 - IRZ Recirculation Well
 - Freshwater Supply Well
 - Extraction Well
 - Freshwater Injection
 - Injection Well for both Carbon Amended Water and Freshwater
 - MW-20 Bench Area
 - Remedy Facility
 - Pipeline for Remedy
 - Aboveground Pipe
 - Underground Pipe
 - Remedy Facilities
 - Remediation Building
 - Potential Influent Water Storage Location
 - C - Relocated Hazardous Waste Storage
 - D - Relocated Septic Tank
 - E - Operations Building
 - F - Remedy-Produced Water Conditioning Plant
 - G - Maintenance Shop
 - H - Relocated Pipe Storage Area
 - J - Conditioned Water Storage
 - K - Potential Influent Water Storage Location
 - L - Transfer Switch Gear, Control, and Transformer Building
- 0 150 300 600 Feet

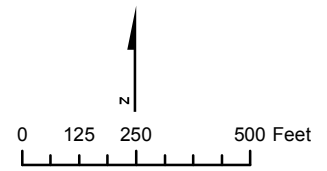
**FIGURE 3-1
GENERAL REMEDY SYSTEM
LAYOUT - CALIFORNIA PORTION**
GROUNDWATER REMEDY BASIS OF DESIGN REPORT
PRELIMINARY (30%) DESIGN
PG&E TOPOCK COMPRESSOR STATION,
NEEDLES, CALIFORNIA



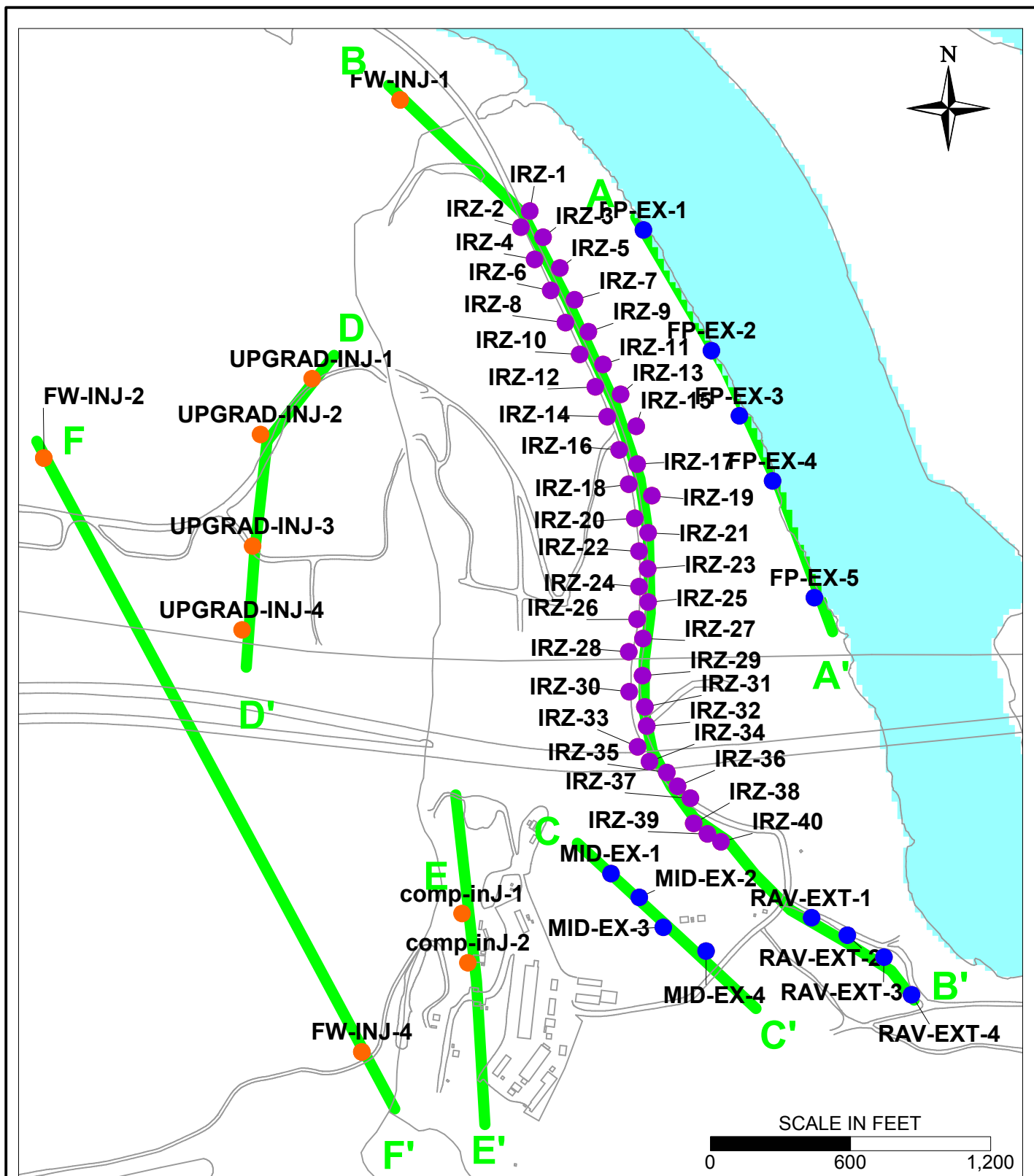
Existing HNWR Well

- LEGEND**
- Area of Potential Effects (APE)
 - EIR Project Area
 - Existing Production Well
 - Freshwater Piping/Communications Conduit

- Notes:**
1. For details on remedy piping see engineering drawings (Appendix D).
 2. Electrical connections and equipment not shown.
 3. Existing/future monitoring wells are not shown.



**FIGURE 3-2
GENERAL REMEDY SYSTEM LAYOUT
ARIZONA PORTION**
GROUNDWATER REMEDY BASIS OF DESIGN REPORT
PRELIMINARY (30%) DESIGN
PG&E TOPEACK COMPRESSOR STATION,
NEEDLES, CALIFORNIA



LEGEND

- IRZ WELLS
- UPGRADIENT INJECTION WELLS
- EXTRACTION WELLS
- CROSS SECTION LOCATIONS

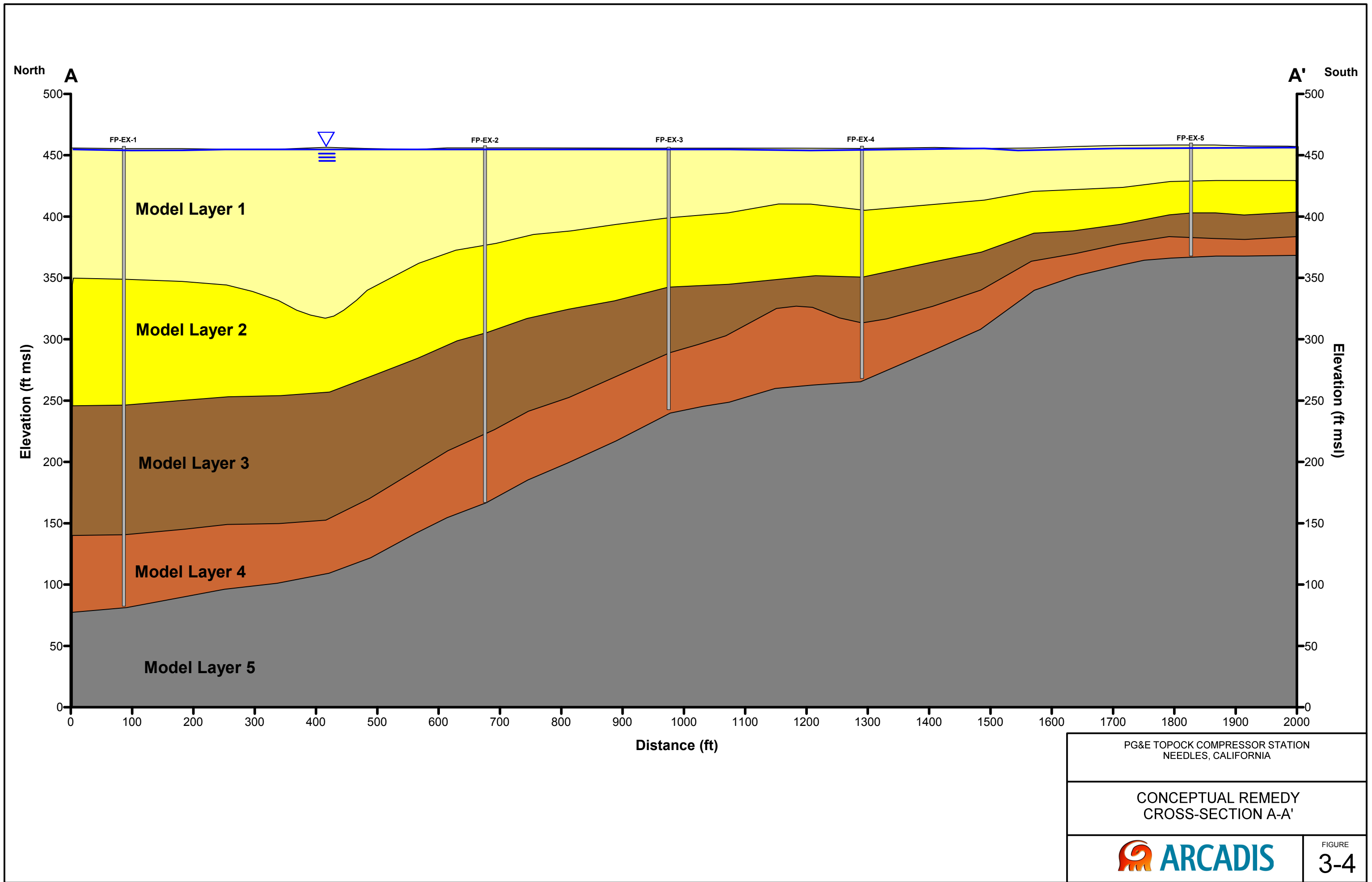
PG&E
TOPOCK, CALIFORNIA

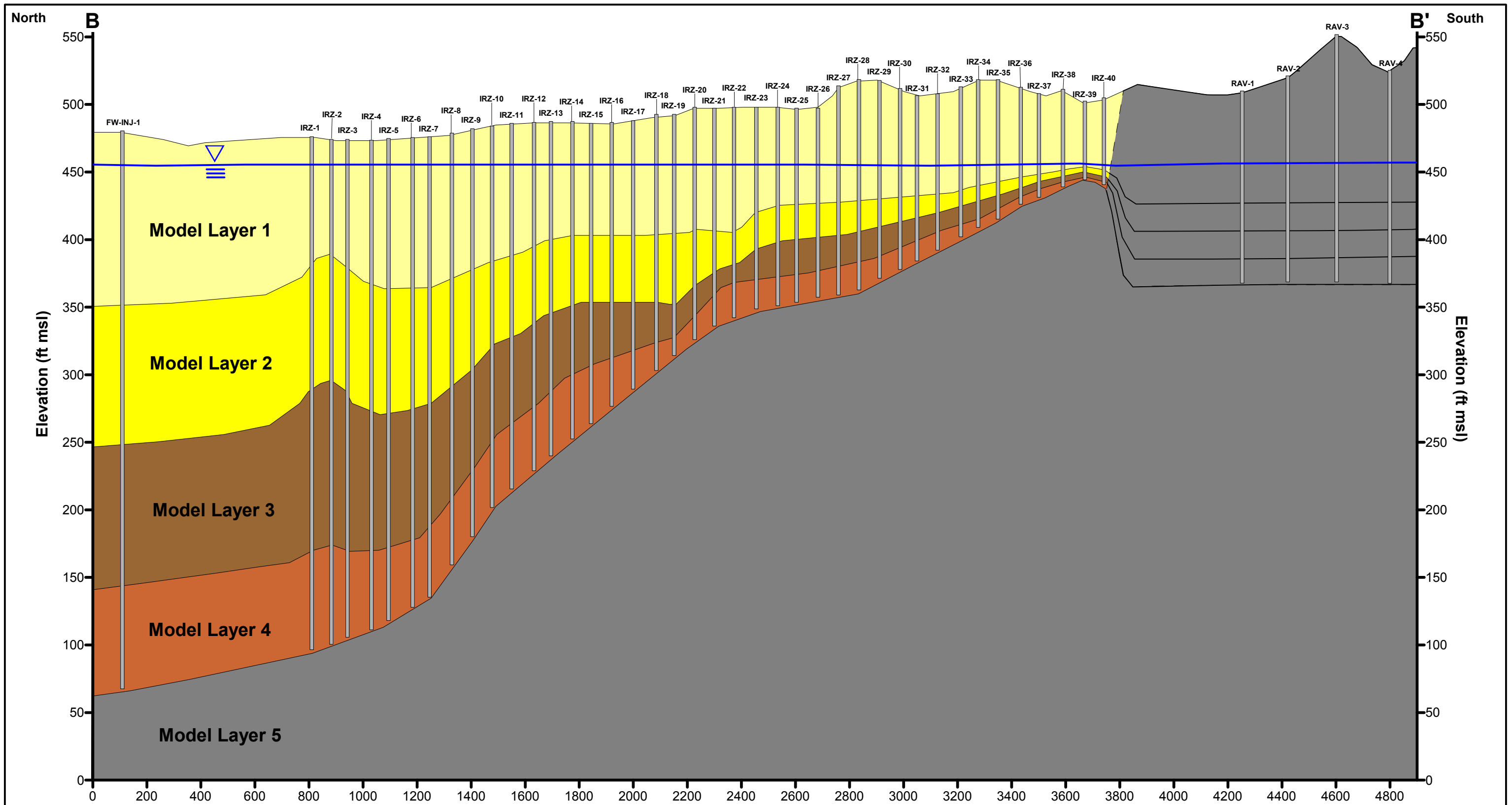
CONCEPTUAL REMEDY CROSS-SECTION LOCATIONS



FIGURE

3-3



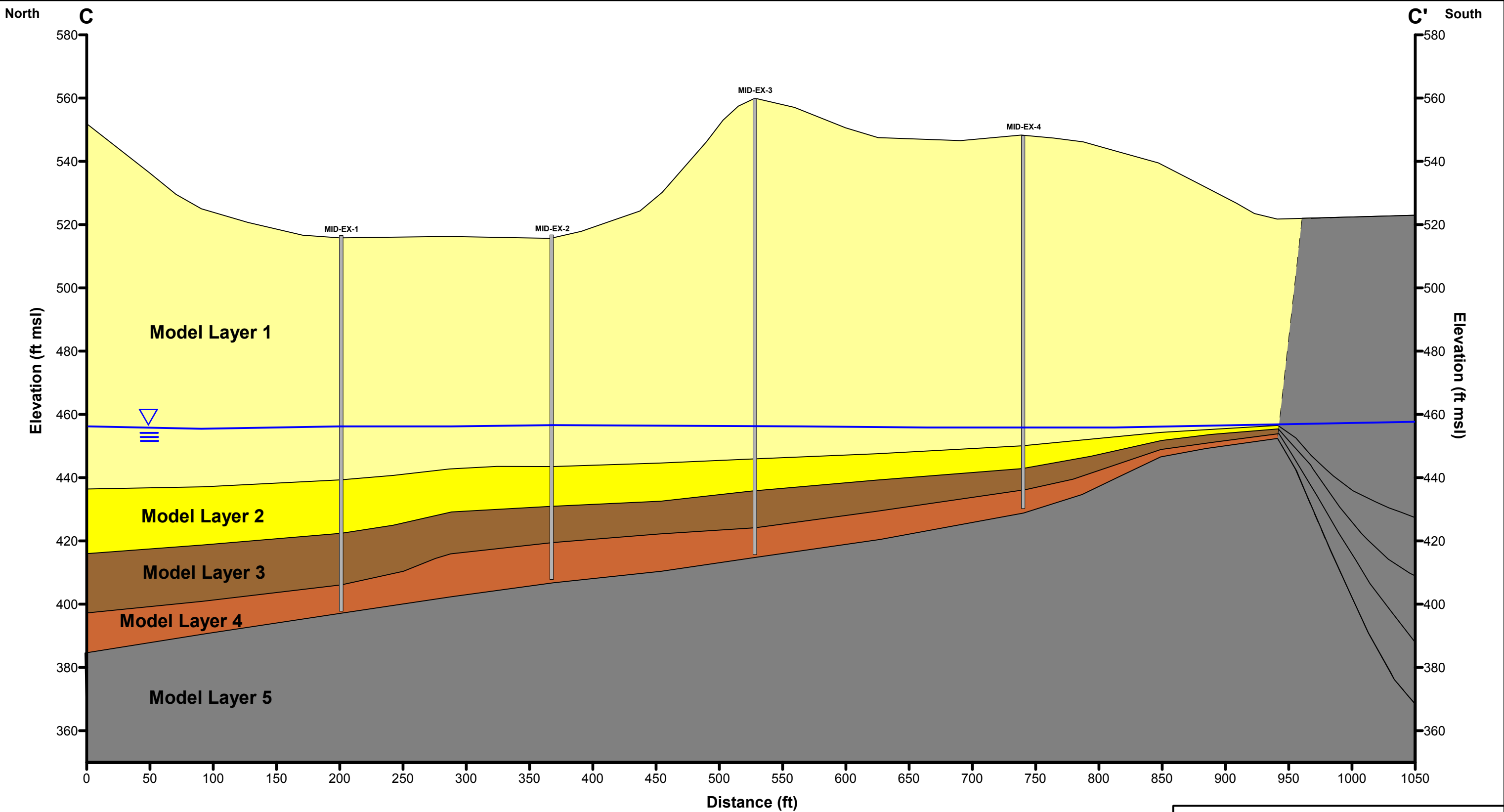



PG&E TOPOCK COMPRESSOR STATION
NEEDLES, CALIFORNIA

CONCEPTUAL REMEDY
CROSS-SECTION B-B'



FIGURE
3-5



PG&E TOPECO COMPRESSOR STATION NEEDLES, CALIFORNIA	
CONCEPTUAL REMEDY CROSS-SECTION C-C'	
	FIGURE 3-6

