









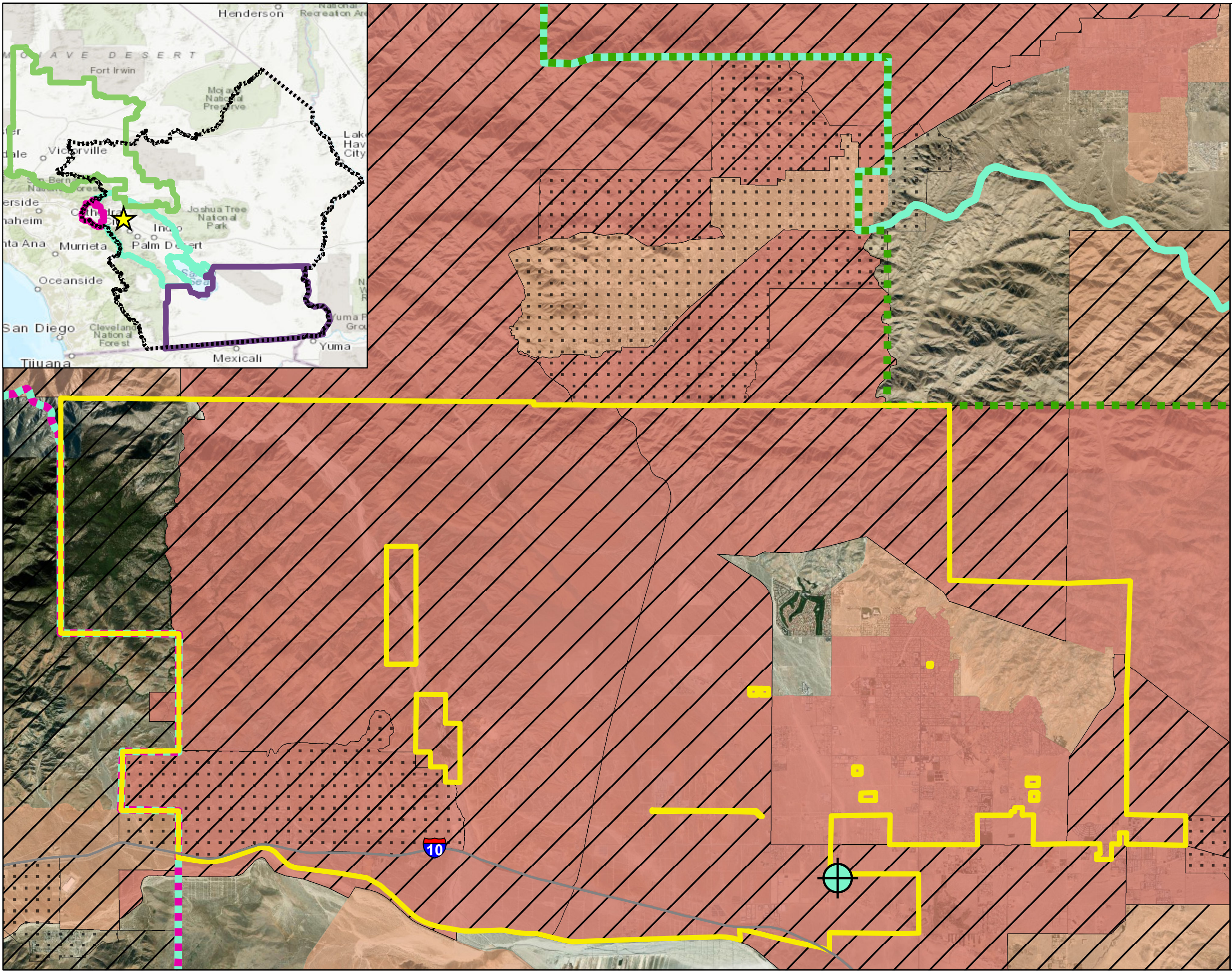
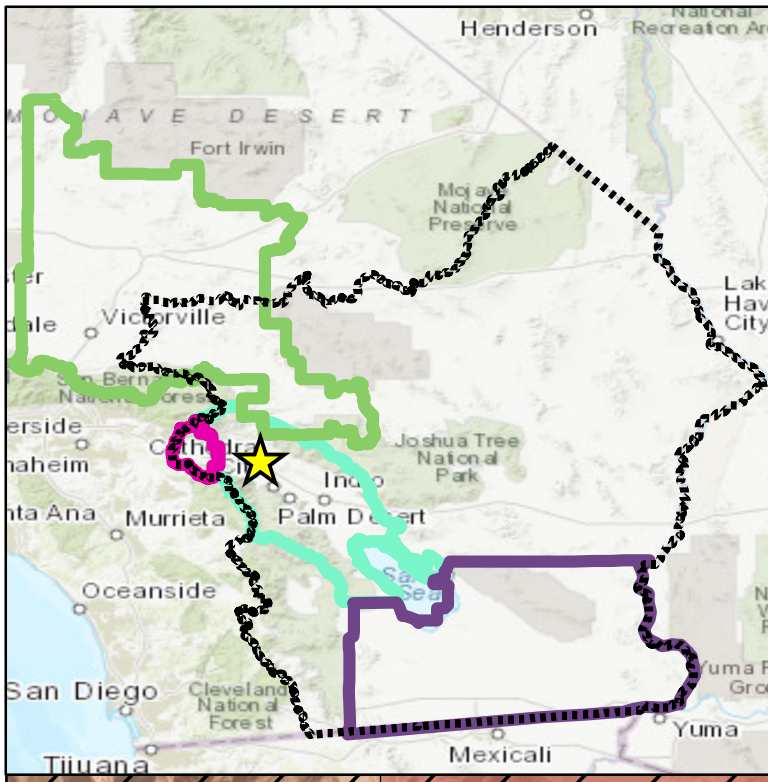


**Well 22 Rehabilitation**  
**Attachment 1A**  
**Mission Springs Water District**

-  Well 22
-  Highways
-  Mission Springs Water District Service Area
- IRWM Planning Region**
-  Coachella Valley
-  Mojave
-  San Geronio
- Underrepresented Communities**
-  < 85% CA. MHI, Pop <= 20K with UnEmp 2% > CA Avg. (EDA)
-  < 85% CA. MHI, Pop <= 20K with Local Financial Hardship (EDA)
-  < 60% CA. MHI (SDAC)
-  < 80% CA. MHI (DAC)



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 Project\Work\15\_Drought\PSP\DACI\Setaside\GIS  
 Date Updated: November 4, 2021  
 Department: Woodard & Curran



## Attachment 1B

**From:** [Khurana, Aayush@Waterboards](mailto:Khurana_Aayush@Waterboards)  
**To:** [Bassam Alzammar](mailto:Bassam Alzammar)  
**Cc:** [Danny Friend](mailto:Danny Friend); [Steve Ledbetter](mailto:Steve Ledbetter); [Huang, Chun@Waterboards](mailto:Huang_Chun@Waterboards)  
**Subject:** RE: Well 22 Rehabilitation  
**Date:** Wednesday, December 8, 2021 10:37:10 AM

---

Hi Bassam,

I cannot find the email(s) either. We have a 1-year email deletion policy. I don't think I saved the email(s) in our server either. Either way, I can reiterate my recommendations:

- We require two consecutive absent coliform results from a groundwater source before the source can be placed back in service (after well exhibits repeated positive coliform issues).
- We recommend downhole disinfection and flushing of the well and see if the positive coliform problem goes away.
- We recommend a cycle bacteriological test (collect samples at startup, 15 min, 30 min, 1 hour) to look for any zonal issues.
- We recommend looking for deficiencies in the well that may contribute to positive coliform results. This includes an inspection of the well's surface features, downhole inspection. Rehabilitation is recommended if the downhole inspection report recommends it.
- If all of the above fails, and water system still wants to use the well (citing no positive coliform results in the distribution system), we may require 4-log virus inactivation of the well. i.e. more stringent continuous disinfection requirements, requiring a higher certified treatment operator, meeting 4-log inactivation requirements, more frequent monitoring, more barriers to treatment failure (such as continuous analyzers, automatic shutoffs, etc.)

Chun-please add if I missed anything.

### **Aayush Khurana**

Water Resource Control Engineer  
Division of Drinking Water, Riverside District #20  
State Water Resources Control Board  
1350 Front Street, Rm 2050  
San Diego, CA 92101  
Office# 619-525-4646  
Cell# 510-283-4740

---

**From:** Bassam Alzammar <balzammar@mswd.org>  
**Sent:** Wednesday, December 8, 2021 9:45 AM  
**To:** Khurana, Aayush@Waterboards <Aayush.Khurana@Waterboards.ca.gov>  
**Cc:** Danny Friend <DFriend@mswd.org>; Steve Ledbetter <sledbetter@tkeengineering.com>  
**Subject:** Well 22 Rehabilitation  
**Importance:** High

EXTERNAL:

Good morning Aayush,

We are currently working with our consultant on the design for the rehabilitation of Well 22 and during this process, they came across a grant opportunity that could be put money towards the rehabilitation project. This grant opportunity deadline is today. I recall back in July of 2020, we had numerous discussions and emails about the bad sample and re-samples we received and your (States) recommendation to inspect the well and equipment due to the fact we could not get two absent samples back to back. I have gone through my emails and I don't have any correspondence on this and I believe it was communicated over the phone.

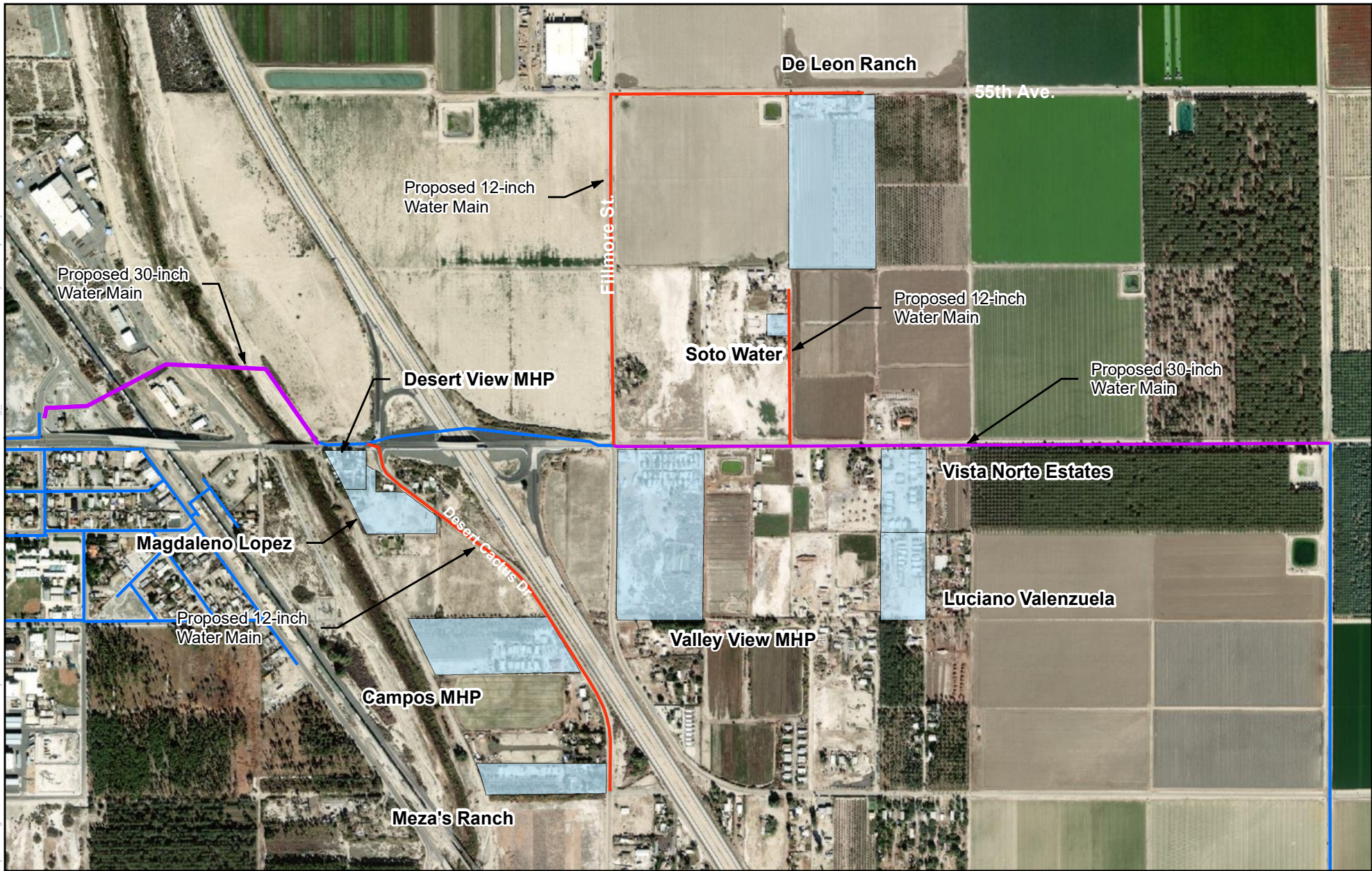
Can you provide us an email with your request/recommendation to pull the pump and equipment and inspect the well due to the multiple consecutive positive coliform samples for well 22 so we can provide it in our application for the grant. I appreciate your help on this. If you have any questions please feel free to contact me.

Thank you,

Bassam Alzammam  
Field Operations Manager  
**Mission Springs Water District**  
66575 Second Street  
Desert Hot Springs, CA 92240  
Direct Line (760)660-4943  
[www.mswd.org](http://www.mswd.org)

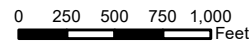


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**Valley View Project**  
Attachment 2A





- Legend**
- Small Water Systems
  - Valley View Project (Phase 1)
  - Valley View Project (Phase 2)
  - Existing CVWD Water Mains







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Map Created: November 2021

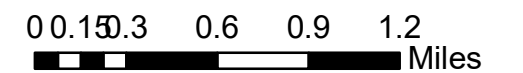
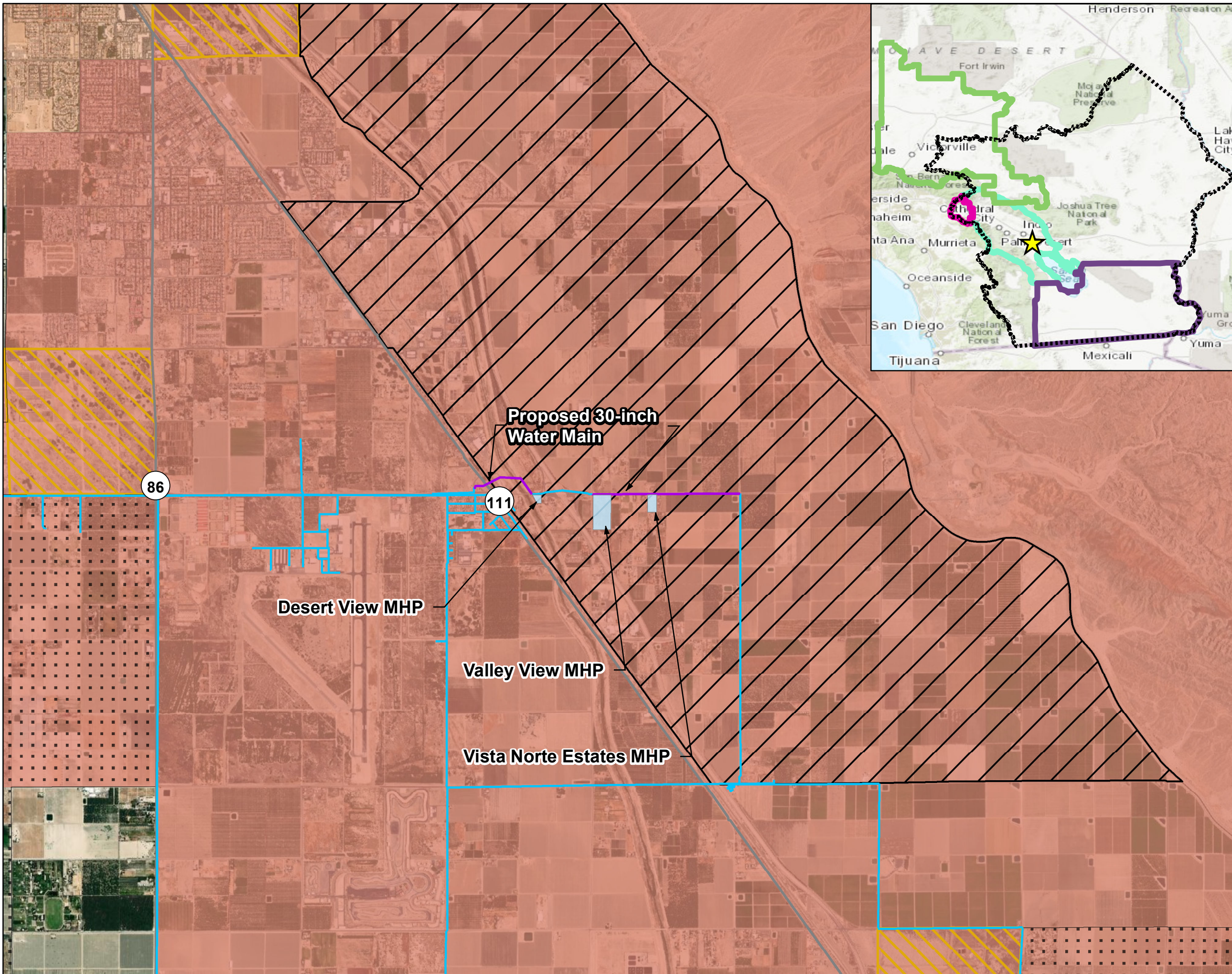
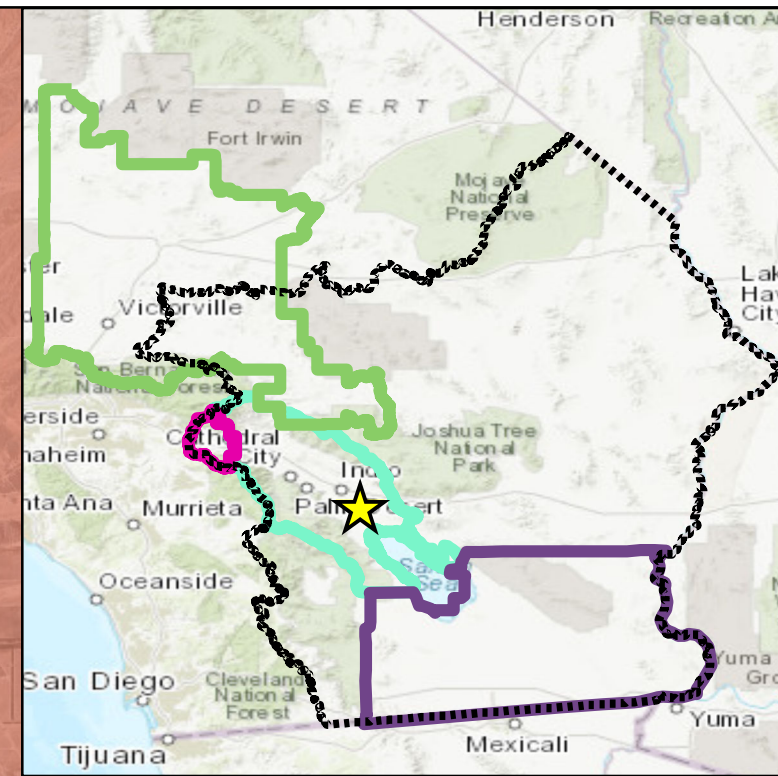
Attachment 2B  
**Valley View MHP**  
**Water Consolidation**

Coachella Valley  
 Water District

-  Small Water Systems
-  Valley View Project (Phase 1)
-  Existing CVWD Water Mains
-  Major Roads

**Underrepresented Communities**

-  Tribal Lands
-  < 85% CA. MHI, Pop <= 20K with UnEmp 2% > CA Avg. (EDA)
-  < 85% CA. MHI, Pop <= 20K with Local Financial Hardship (EDA)
-  < 60% CA. MHI (SDAC)



**Attachment 2C**  
**Site Photos Excerpt from Valley View Preliminary Engineering Report (2020)**

**Desert View Mobile Home Park**

The Desert View MHP SWS is of unknown age but was installed prior to 2009 per the DEH inspection report. The SWS is in working condition, per the owner. The pressure tank is of unknown age and shows signs of wear. The level of corrosion is difficult to assess because the tank was covered in dirt as shown in Figure 3-16. The fencing surrounding the well and pump equipment is also shown in Figure 3-16. The fence installed does not provide a high level of security.



**Figure 3-16: Pressure Tank (left) and Well with Fencing (right)**

**Valley View Mobile Home Park**







The Valley View MHP SWS is of unknown age but was installed prior to 2008 per the DEH inspection report. The SWS is in working condition, per the owner. The well and associated equipment is enclosed with fencing. The potable water storage tanks, pressure tank, and system pumps are less than 5 years old and show no signs of corrosion as shown in Figure 3-27, Figure 3-28, and Figure 3-29. The well/pump is of unknown age and has some corrosion on its exterior as shown in Figure 3-29.








**Figure 3-29: Well/Pump**

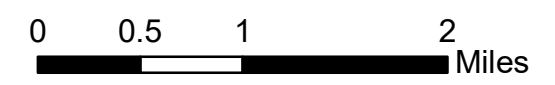
# Well C8 Drilling and Equipping Project

City of Banning

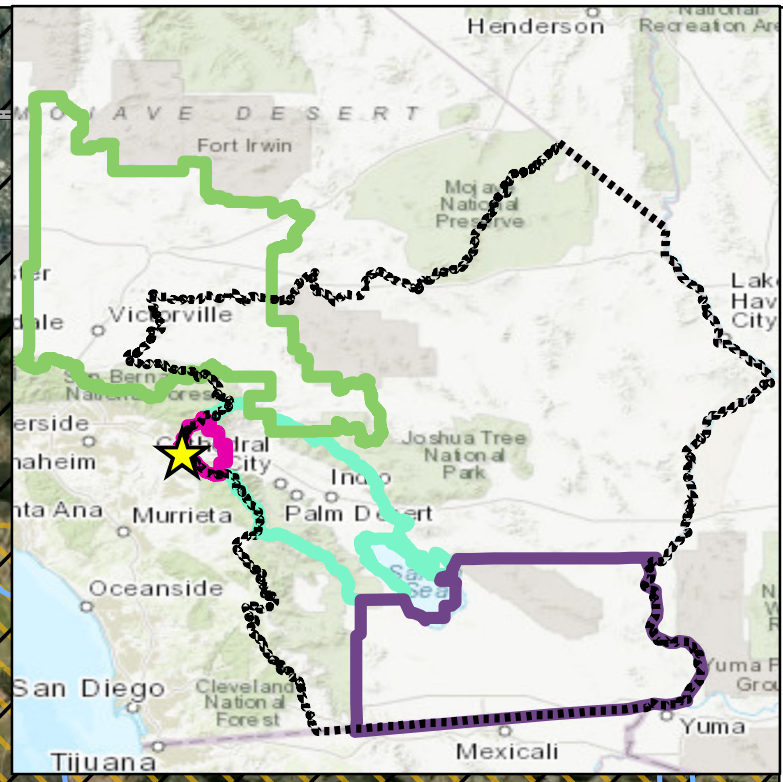
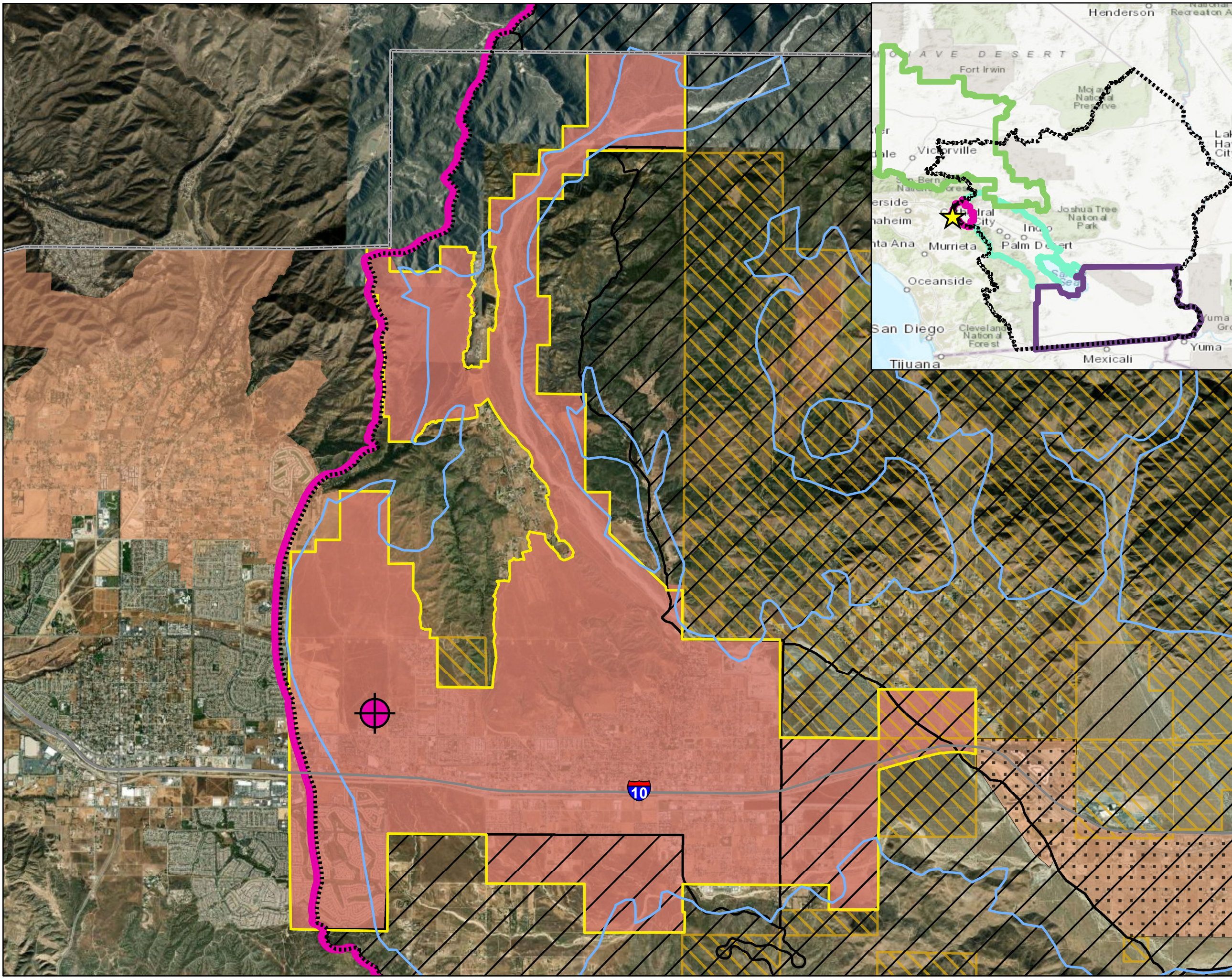
-  Well C8
-  Highways
-  Colorado River Funding Area
-  San Gorgonio IRWM Planning Region
-  Coachella Valley - San Gorgonio Pass Subbasin (7-021.04)
-  City of Banning

### Underrepresented Communities

-  Tribal Lands
-  < 85% CA. MHI, Pop <= 20K with UnEmp 2% > CA Avg. (EDA)
-  < 85% CA. MHI, Pop <= 20K with Local Financial Hardship (EDA)
-  < 60% CA. MHI (SDAC)
-  < 80% CA. MHI (DAC)



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Date Updated: November 4, 2021  
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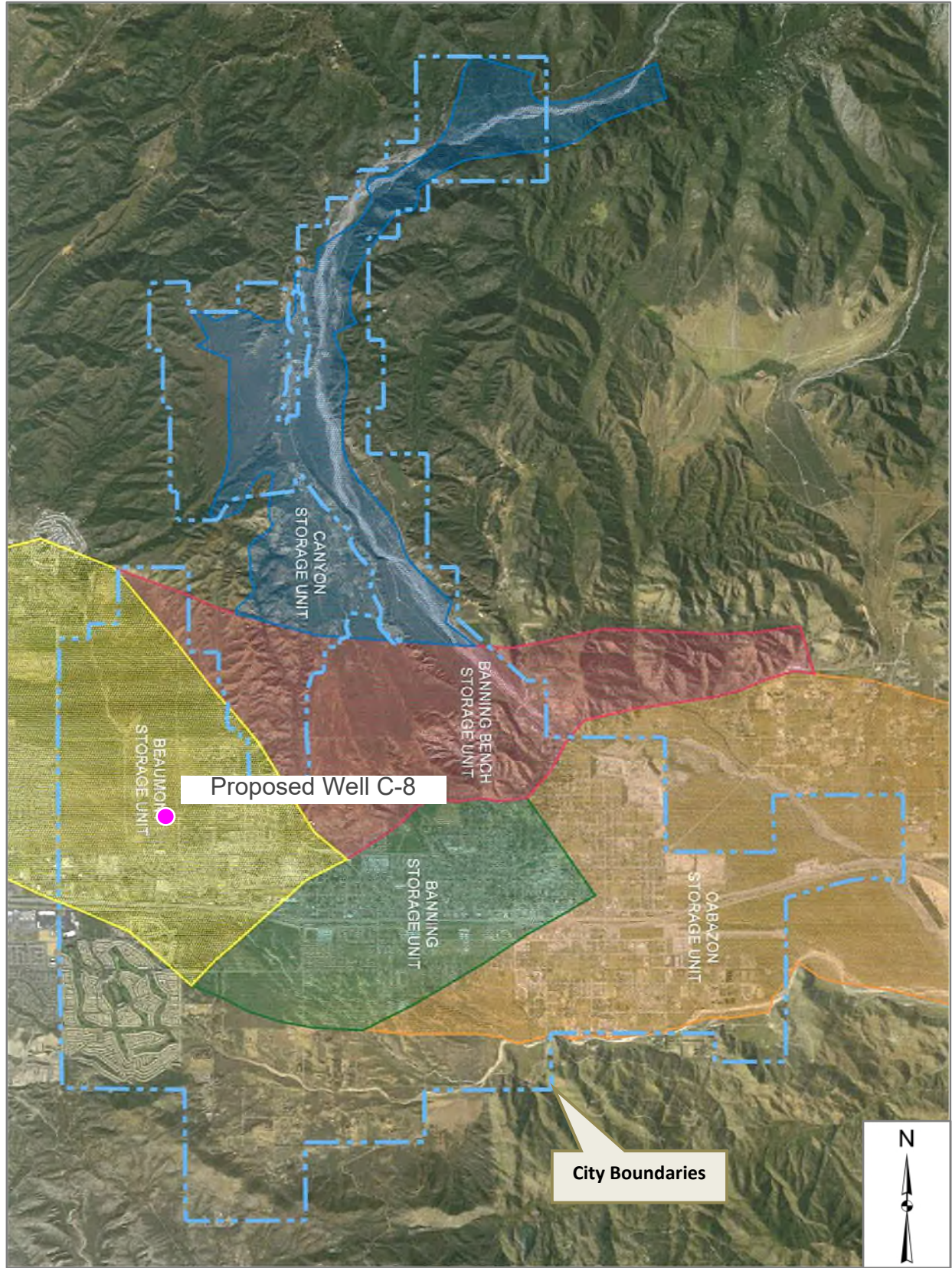
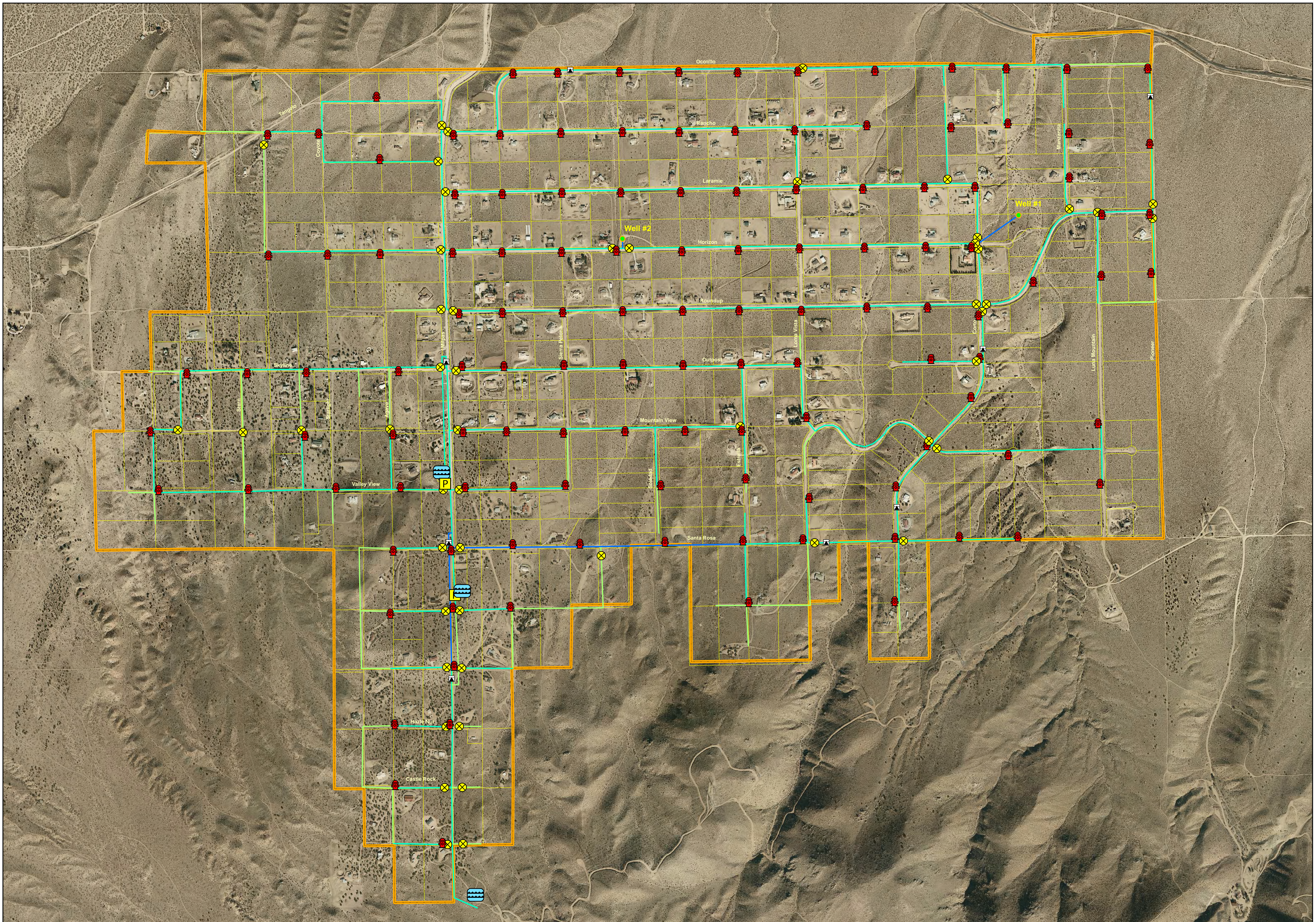



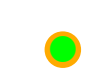







Figure 3.8: Groundwater Basins in the City (Subbasins of San Gorgonio Pass Basin)

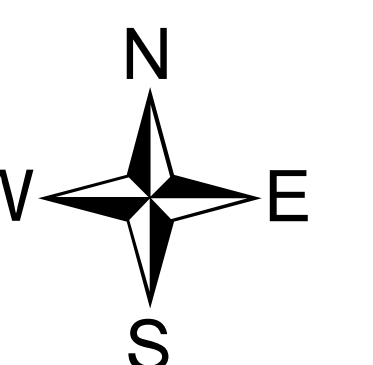
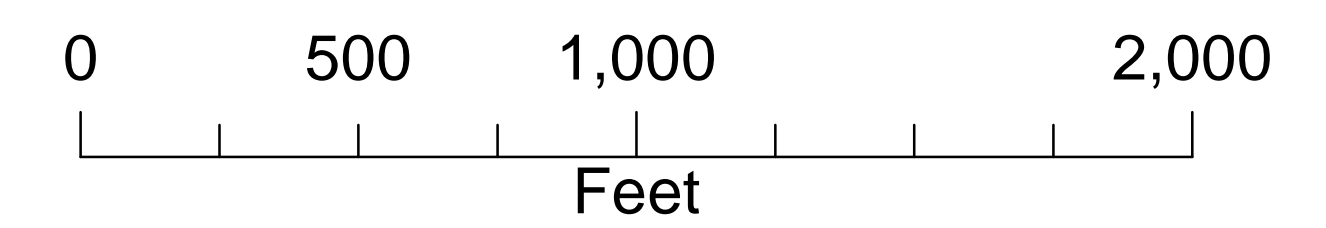


-  Booster Pump
-  Reservoir
-  Fire Hydrant
-  Well
-  Isolation Valve
-  Pressure Reduction Valve

- Pipe Diameters
-  4 inch
  -  6 inch
  -  8 inch

# Juniper Riviera County Water District

Attachment 5A



# Well No. 03

## Profiling and Modification Project

### Juniper Riviera CWD

Pressure Reducing Valve

Well No. 03

Juniper Riviera CWD Wells

Pipelines

Local Roads

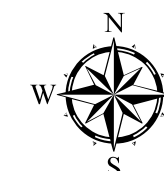
Juniper-Riviera County Water District

### Underrepresented Communities

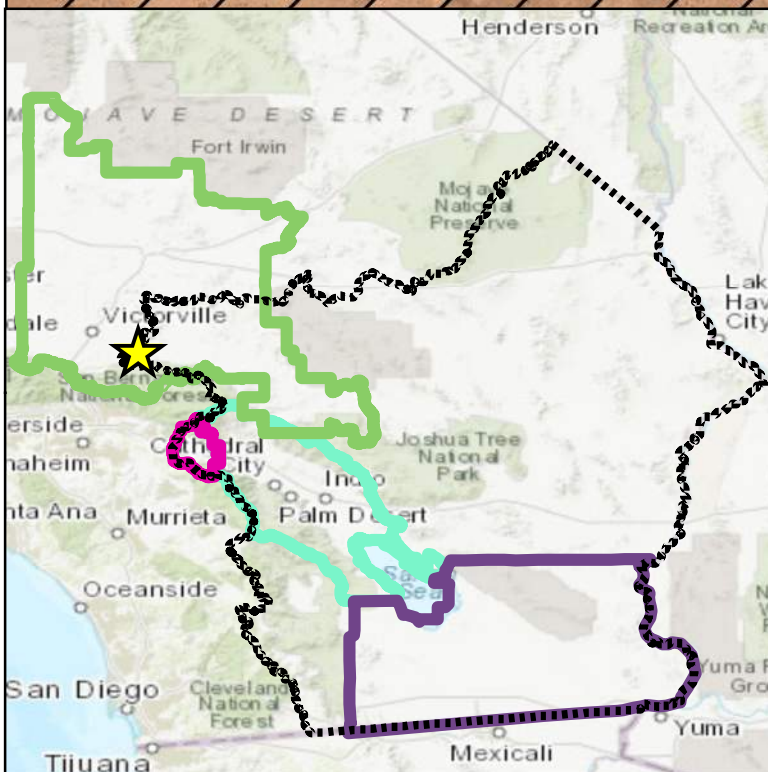
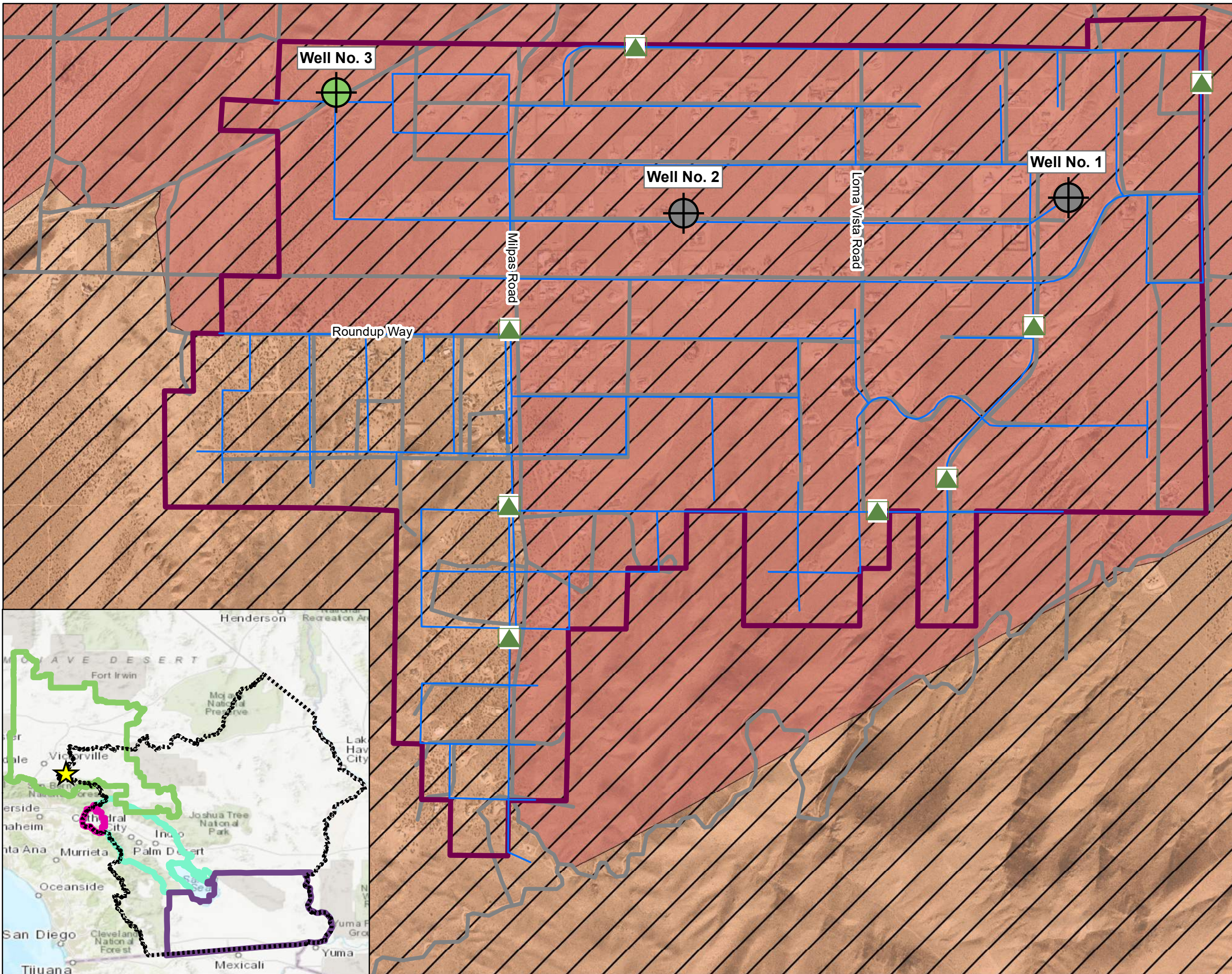
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< 60% CA. MHI (SDAC)

< 80% CA. MHI (DAC)










0 0.1 0.2 0.4 Miles

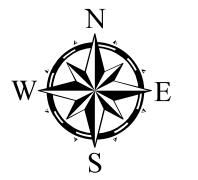
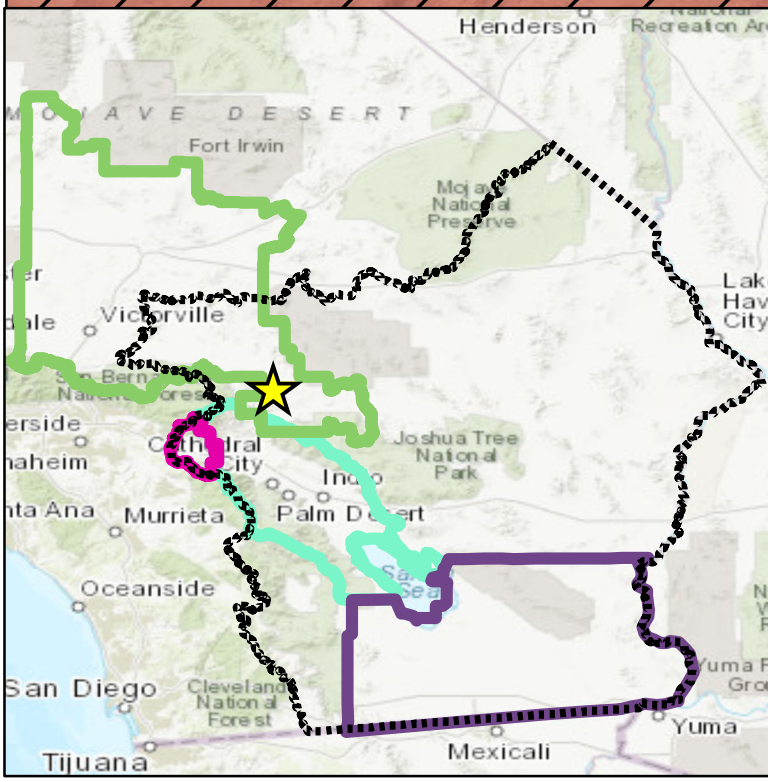
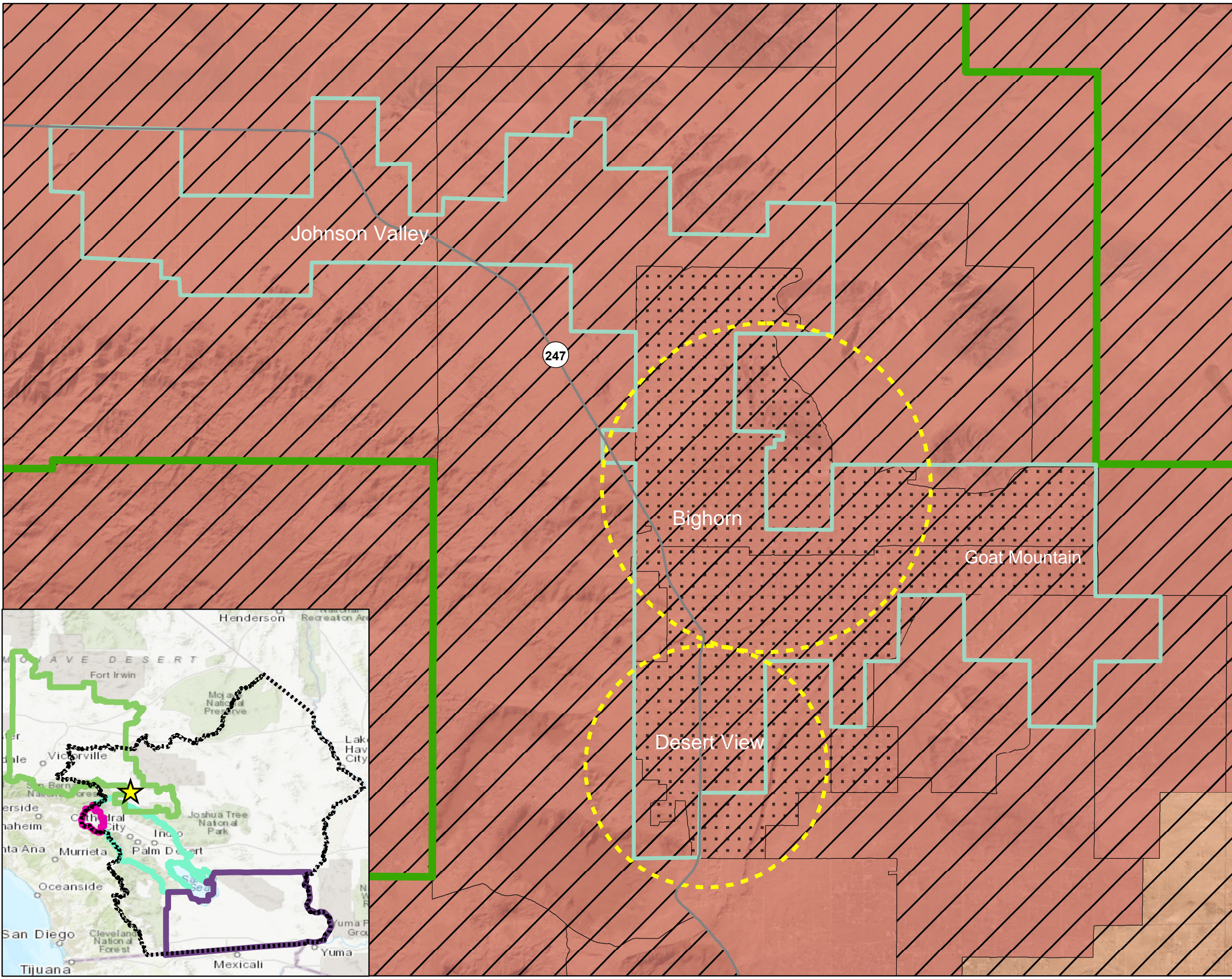


Attachment 6A  
**Residential Water Meter Replacement Program Project**

**Bighorn-Desert View Water Agency**

-  Area of Proposed Meter Replacement
-  Bighorn-Desert View Water Agency Service Area
-  Mojave IRWM Planning Region
-  Highways

- Underrepresented Communities**
-  < 85% CA. MHI, Pop <= 20K with UnEmp 2% > CA Avg. (EDA)
  -  < 85% CA. MHI, Pop <= 20K with Local Financial Hardship (EDA)
  -  < 60% CA. MHI (SDAC)
  -  < 80% CA. MHI (DAC)



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 Department: Woodard & Curran

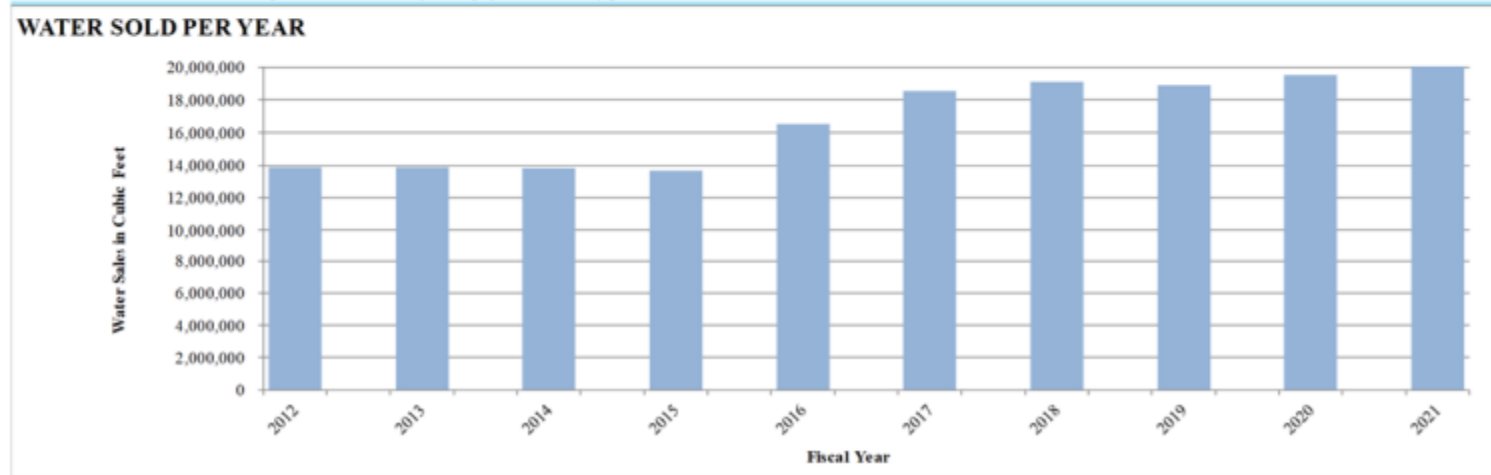
Attachment 6B: BDVWA Fiscal Year 2020/2021 Audit

**Bighorn Desert View Water Agency  
Water Sold and Produced  
Last Ten Fiscal Years**

**Schedule 4**

Water Sold and Produced										
READ CYCLE EVEN MONTHS	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Routes 1-6, 15, 16 and bulk accts 30 thru 35 and 40										
Cubic Feet	\$ 6,307,928	6,313,798	6,452,122	6,384,904	7,231,125	8,194,345	8,558,114	10,929,073	11,426,664	14,687,873
Acre Feet	144.80	144.90	148.10	146.60	166.00	188.10	196.48	250.90	262.32	337.19
READ CYCLE ODD MONTHS	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Routes 7-14										
Cubic Feet	\$ 7,559,768	7,589,015	7,348,915	7,282,630	9,320,813	10,324,766	10,519,454	7,951,582	8,080,386	10,130,967
Acre Feet	173.50	174.20	168.70	167.20	214.00	237.00	241.49	182.54	185.50	232.58
Total Sales in Cubic Feet	<u>13,867,696</u>	<u>13,902,813</u>	<u>13,801,037</u>	<u>13,667,534</u>	<u>16,551,938</u>	<u>18,519,111</u>	<u>19,077,568</u>	<u>18,880,655</u>	<u>19,507,050</u>	<u>24,818,840</u>
Total Sales in Acre Feet	<u>318.30</u>	<u>319.10</u>	<u>316.80</u>	<u>313.80</u>	<u>380.00</u>	<u>425.10</u>	<u>437.97</u>	<u>433.44</u>	<u>447.82</u>	<u>569.76</u>
Total All Production in Acre Feet	<u>411.89</u>	<u>426.78</u>	<u>393.30</u>	<u>355.82</u>	<u>452.74</u>	<u>499.67</u>	<u>558.98</u>	<u>549.05</u>	<u>559.93</u>	<u>677.01</u>







Bulk accounts are for individual's that haul their own water (routes 30-34) and commercial water haulers (route 35 and 36). Commercial billed monthly but totals in even month cycle only.  
 Closed accounts are included with billing cycle regardless of route  
 Construction water use varies from year to year and is billed very month (route 40) and counted with even month cycle only  
 Water sales have increased in FY2015/16 due to annexation of the Improvement District Goat Mountain with 050 accounts.  
 Total Production varies from Consumption due to bi-monthly billing cycle and monthly production measurements.








Source: Bighorn Desert View Water Agency Accounting Staff

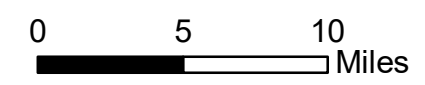
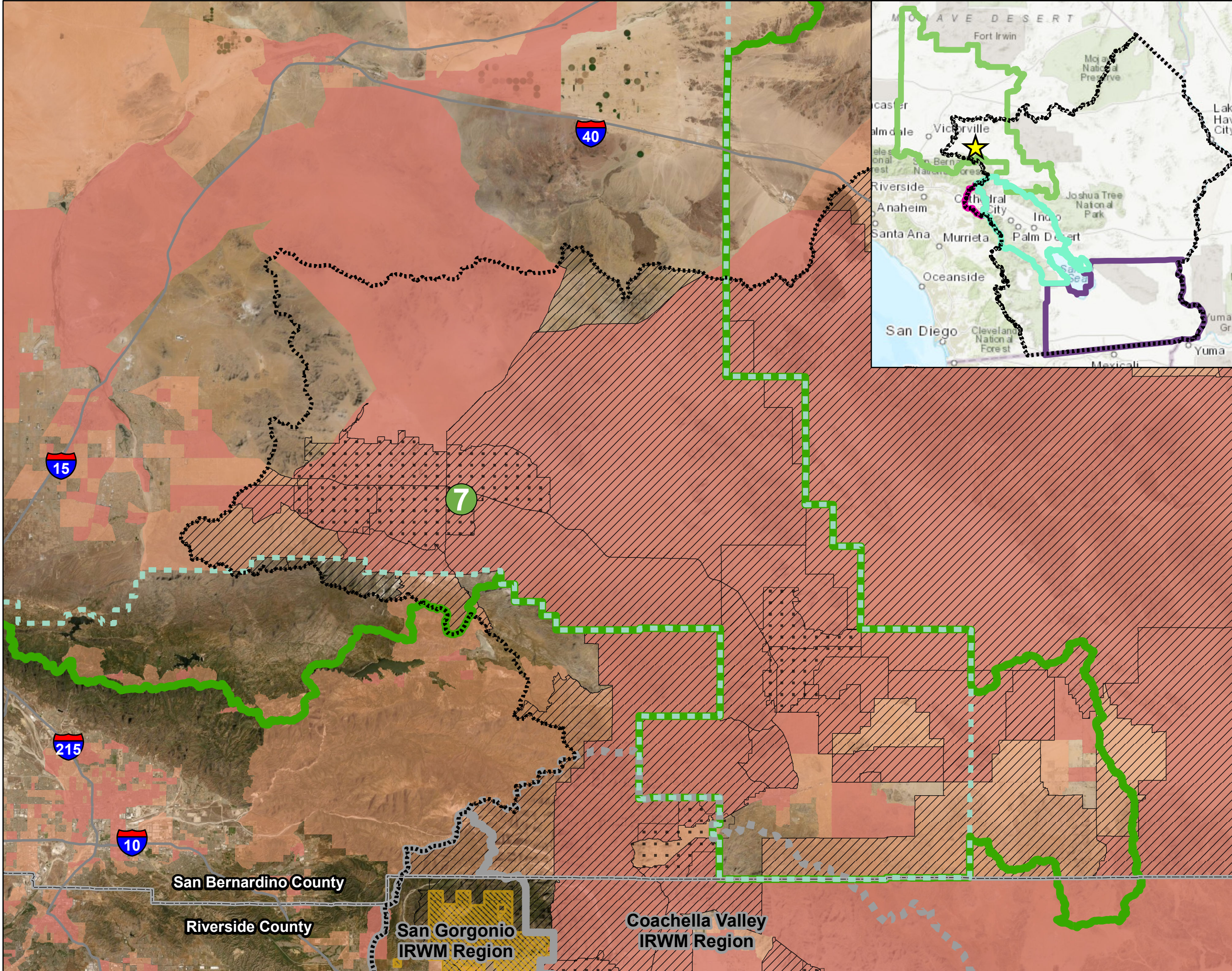
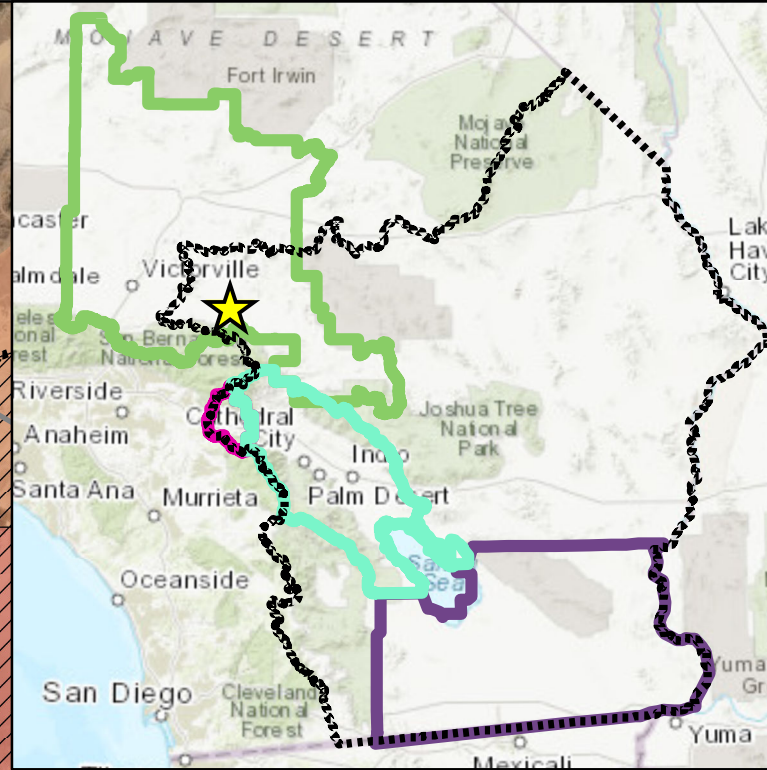
Attachment 7A  
**Lucerne Valley  
 Groundwater Recharge  
 Project**

**Mojave Water District**

-  Project Location
-  Highways
-  Mojave IRWM Planning Region
-  Mojave Water Agency Service Area
-  Colorado River Funding
-  County Lines

**Underrepresented Communities**

-  Tribal Lands
-  < 85% CA. MHI, Pop <= 20K with UnEmp 2% > CA Avg. (EDA)
-  < 85% CA. MHI, Pop <= 20K with Local Financial Hardship (EDA)
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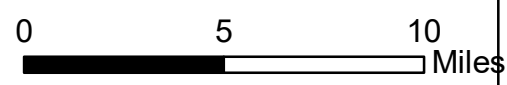
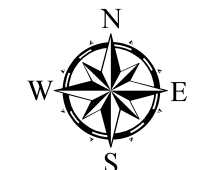
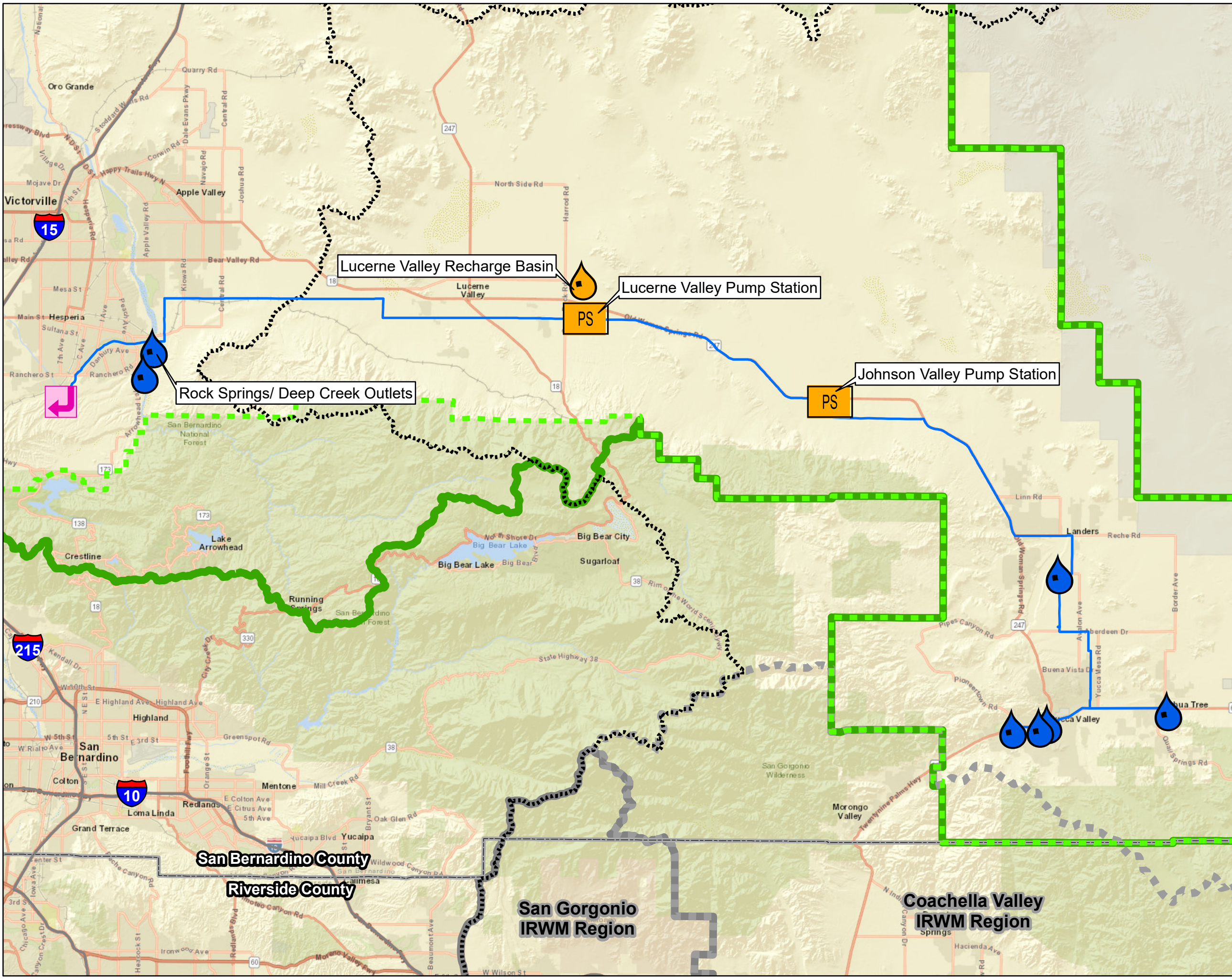
Attachment 7B – MWA's Conceptual Recharge Basin Layout



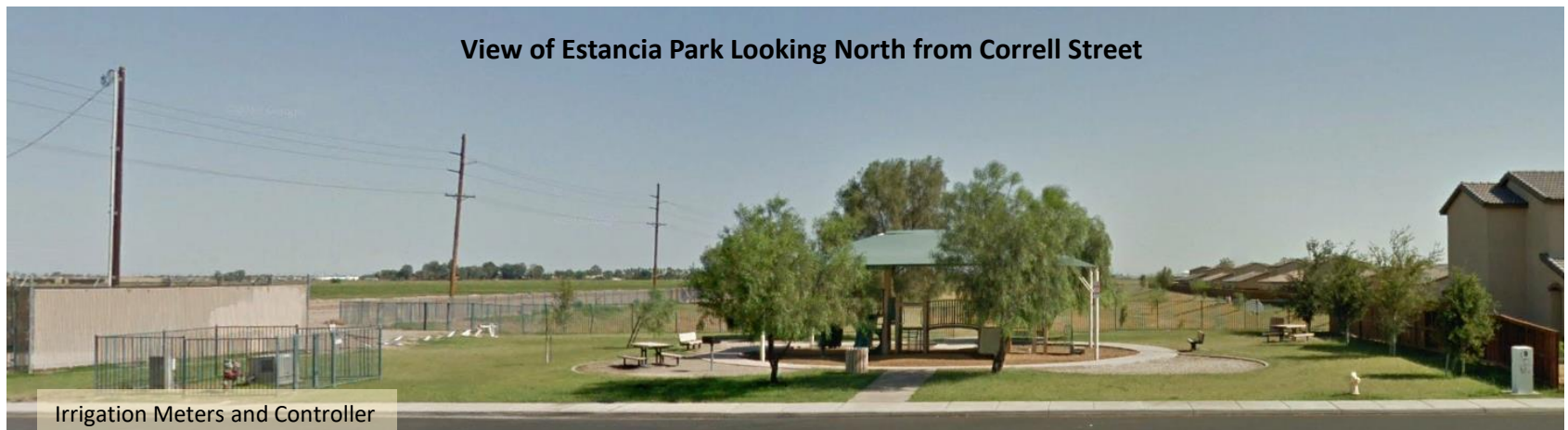
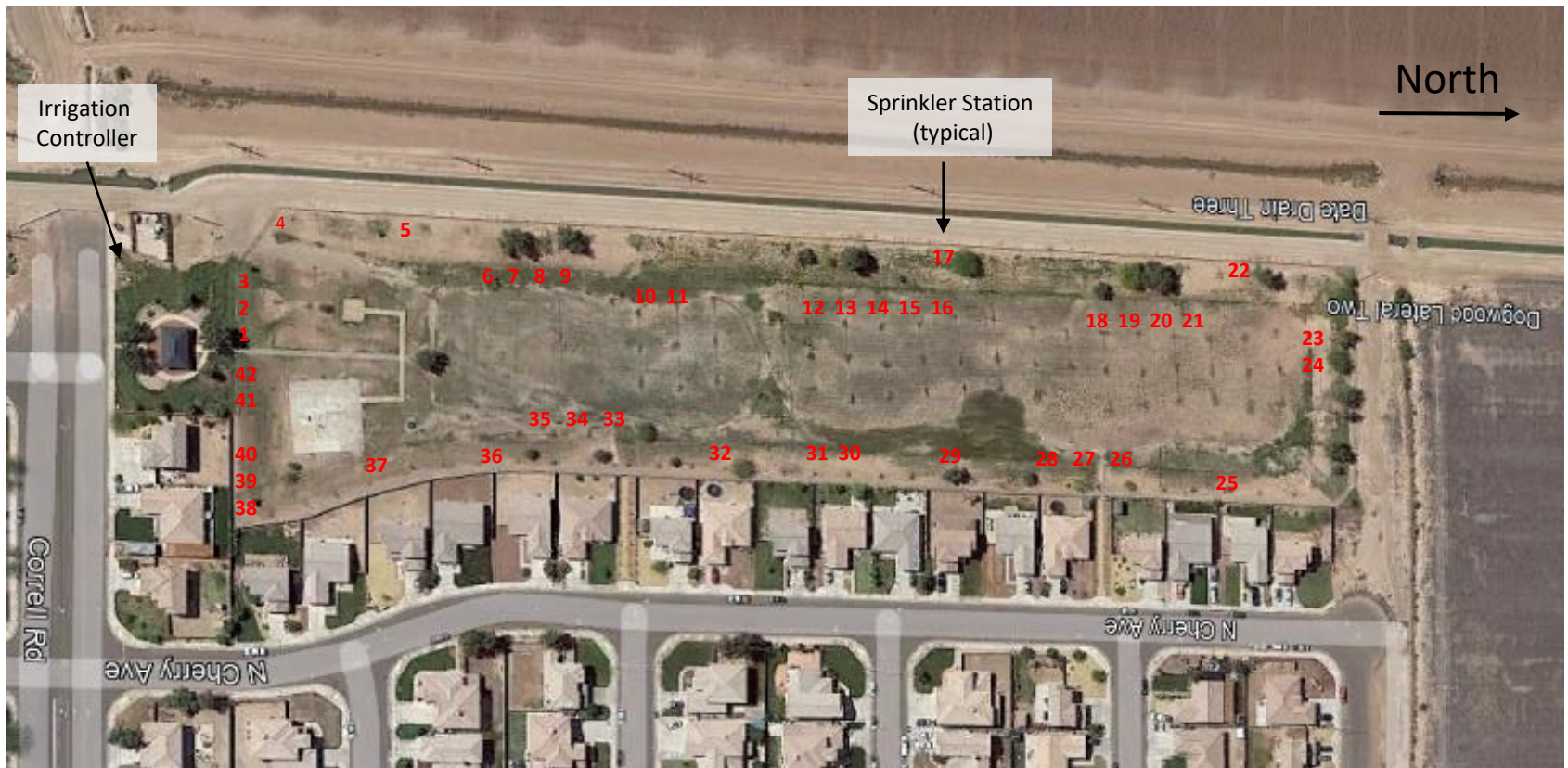
# Morongo Basin Pipeline Recharge Facilities

## Mojave Water Agency

-  Existing Recharge Basin
-  Proposed Recharge Basin
-  SPW Turnout
-  Pump Station
-  Morongo Basin Pipeline
-  Colorado River Funding Area
-  Mojave Water Agency Service Area
-  County Lines
- IRWM Planning Region**
-  Mojave






# Attachment 8A – Sprinkler Stations

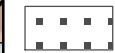





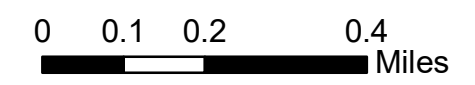
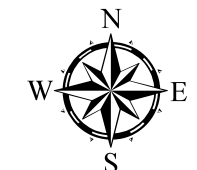
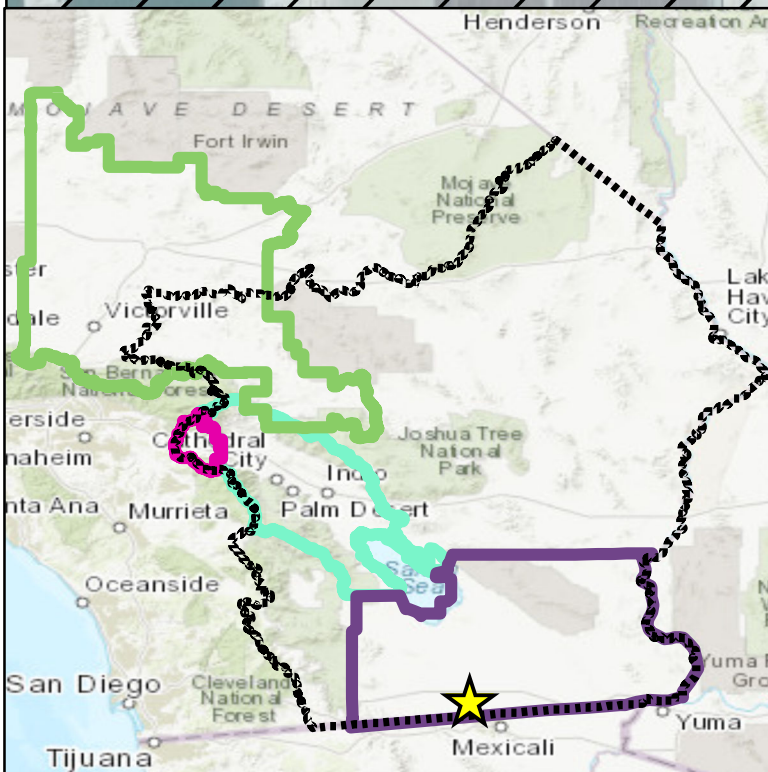
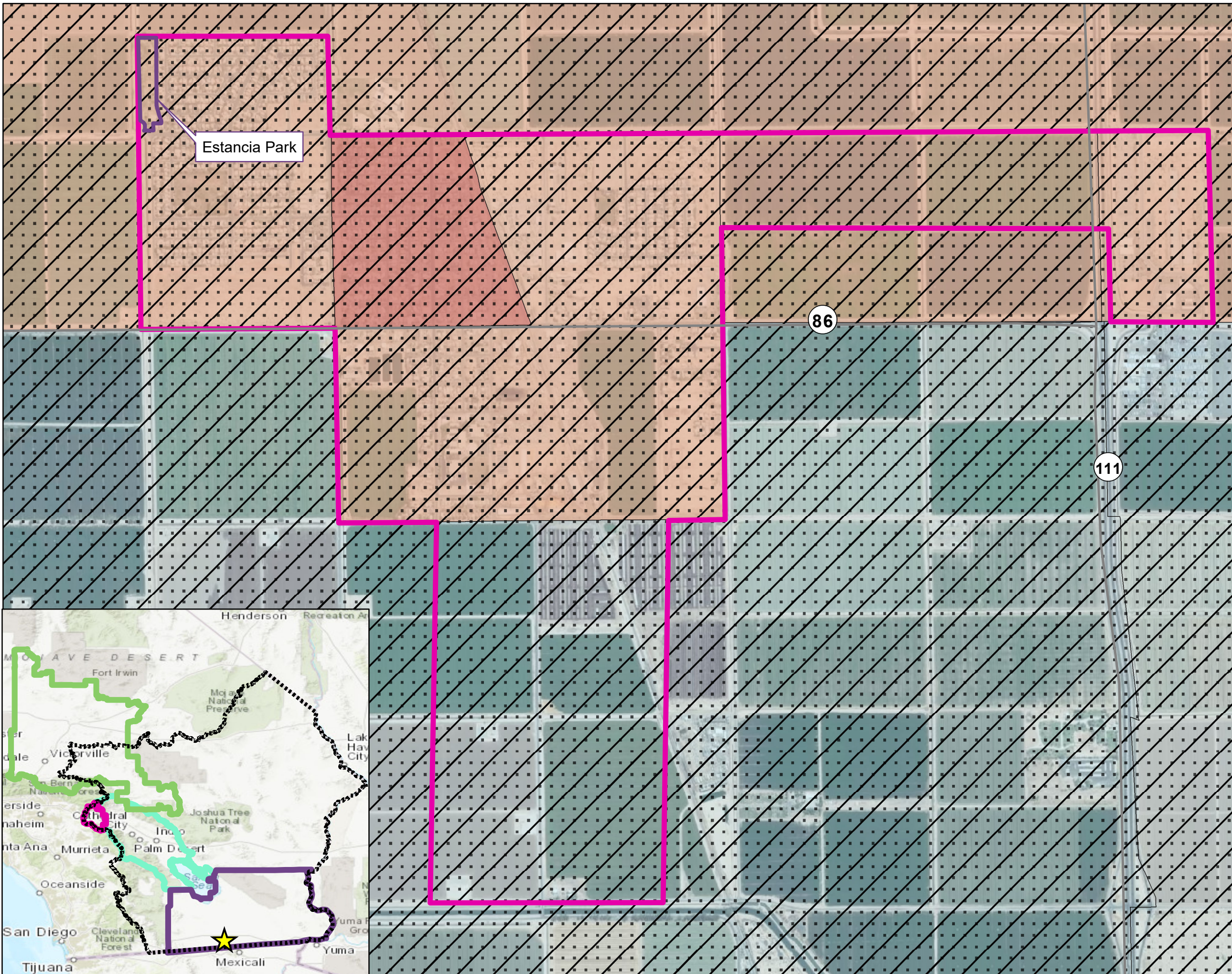
Attachment 8B  
**Estancia Park  
 Sprinkler System Project**

Heber Public Utility District

-  Estancia Park
-  Heber PUD Service
-  Major Roads

**Underrepresented Communities**





-  < 85% CA. MHI, Pop <= 20K with UnEmp 2% > CA Avg. (EDA)
-  < 85% CA. MHI, Pop <= 20K with Local Financial Hardship (EDA)
-  < 60% CA. MHI (SDAC)
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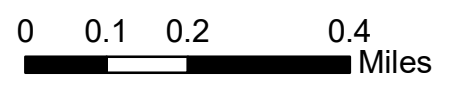
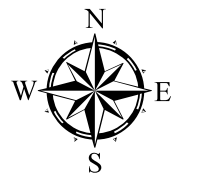
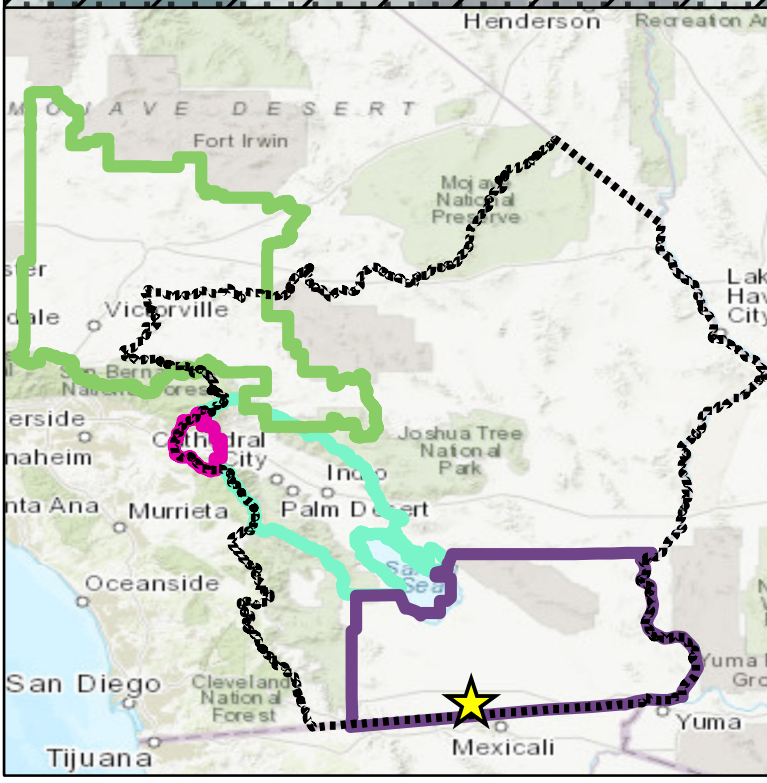
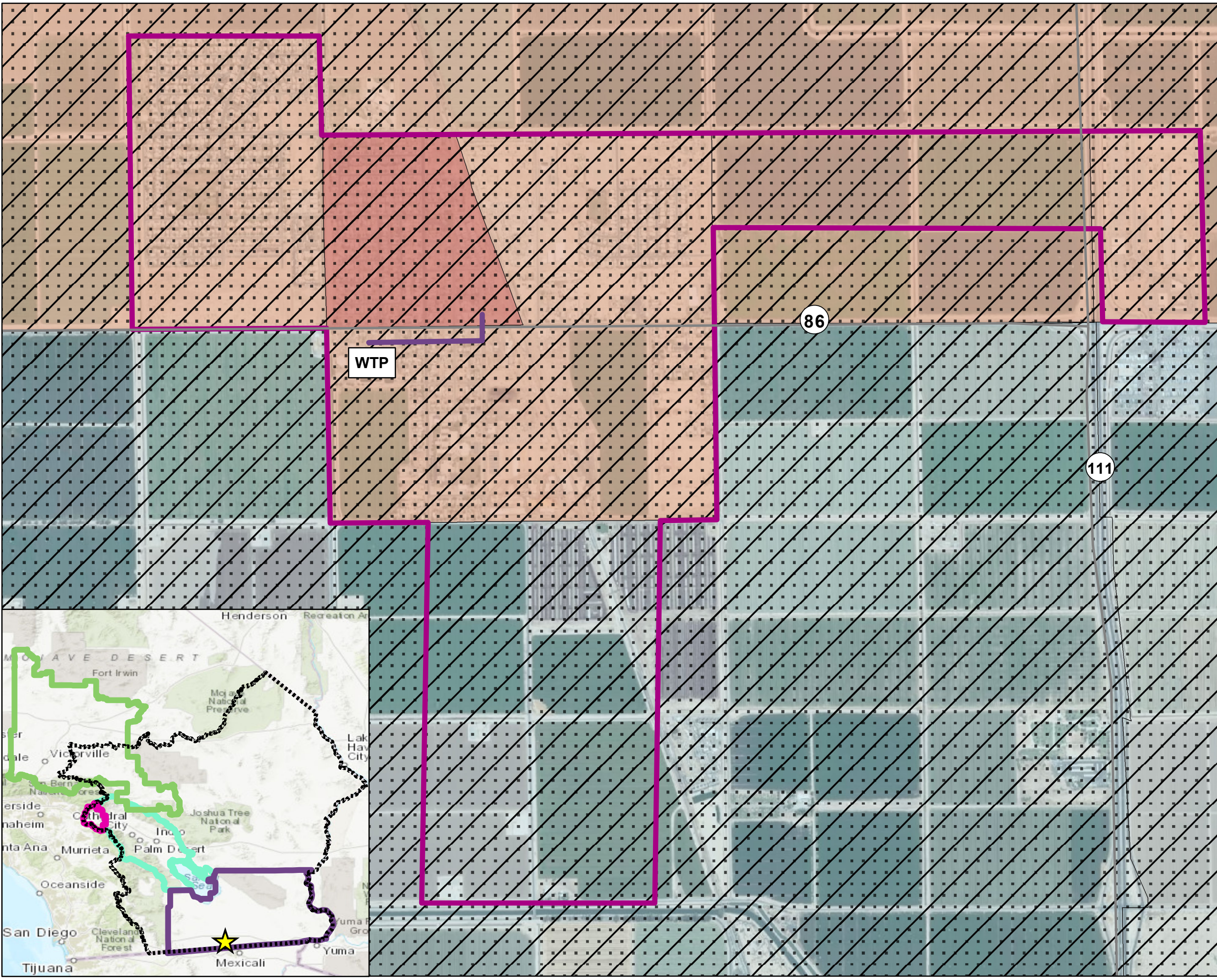
Attachment 9A  
**Water Pipeline Installation  
 from WTP to  
 Heffernan and Main Street  
 Project**

Heber Public Utility District

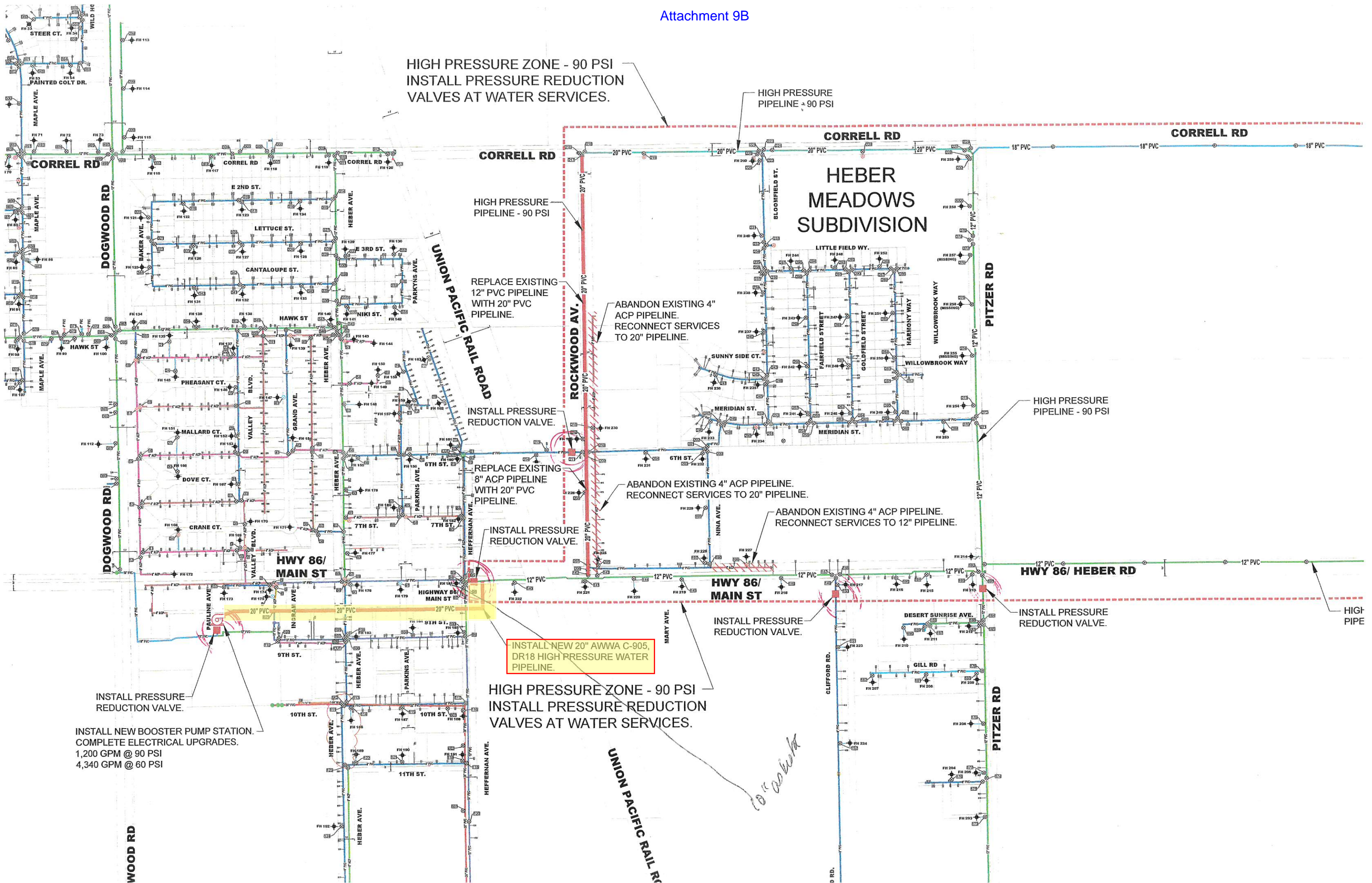
-  Water Line Project
-  Major Roads
-  Heber PUD Service Area
-  WTP Water Treatment Plant

**Underrepresented Communities**

-  < 85% CA. MHI, Pop <= 20K with UnEmp 2% > CA Avg. (EDA)
-  < 85% CA. MHI, Pop <= 20K with Local Financial Hardship (EDA)
-  < 60% CA. MHI (SDAC)
-  < 80% CA. MHI (DAC)



File Name: CRFAMap\_UrbanMultibenefit\_URCTibe\_SetAside  
 File Location: \\w\shared\Projects\RM\CA\SD\0574 - CVWD\0574-003.09 CRFA DAC Grant Admin\02  
 Project\Work\15\_Drought PSP DAC\Setaside\GIS  
 Date Updated: November 4, 2021  
 Department: Woodard & Curran



HIGH PRESSURE ZONE - 90 PSI  
 INSTALL PRESSURE REDUCTION  
 VALVES AT WATER SERVICES.

HIGH PRESSURE  
 PIPELINE - 90 PSI

CORRELL RD

CORRELL RD

CORRELL RD

**HEBER  
 MEADOWS  
 SUBDIVISION**

HIGH PRESSURE  
 PIPELINE - 90 PSI

REPLACE EXISTING  
 12" PVC PIPELINE  
 WITH 20" PVC  
 PIPELINE.

ABANDON EXISTING 4"  
 ACP PIPELINE.  
 RECONNECT SERVICES  
 TO 20" PIPELINE.

HIGH PRESSURE  
 PIPELINE - 90 PSI

INSTALL PRESSURE  
 REDUCTION VALVE.

REPLACE EXISTING  
 8" ACP PIPELINE  
 WITH 20" PVC  
 PIPELINE.

ABANDON EXISTING 4" ACP PIPELINE.  
 RECONNECT SERVICES TO 20" PIPELINE.

ABANDON EXISTING 4" ACP PIPELINE.  
 RECONNECT SERVICES TO 12" PIPELINE.

INSTALL PRESSURE  
 REDUCTION VALVE.

INSTALL NEW 20" AWWA C-905,  
 DR18 HIGH PRESSURE WATER  
 PIPELINE.

INSTALL PRESSURE  
 REDUCTION VALVE.

INSTALL PRESSURE  
 REDUCTION VALVE.

HIGH PRESSURE ZONE - 90 PSI  
 INSTALL PRESSURE REDUCTION  
 VALVES AT WATER SERVICES.

INSTALL PRESSURE  
 REDUCTION VALVE.

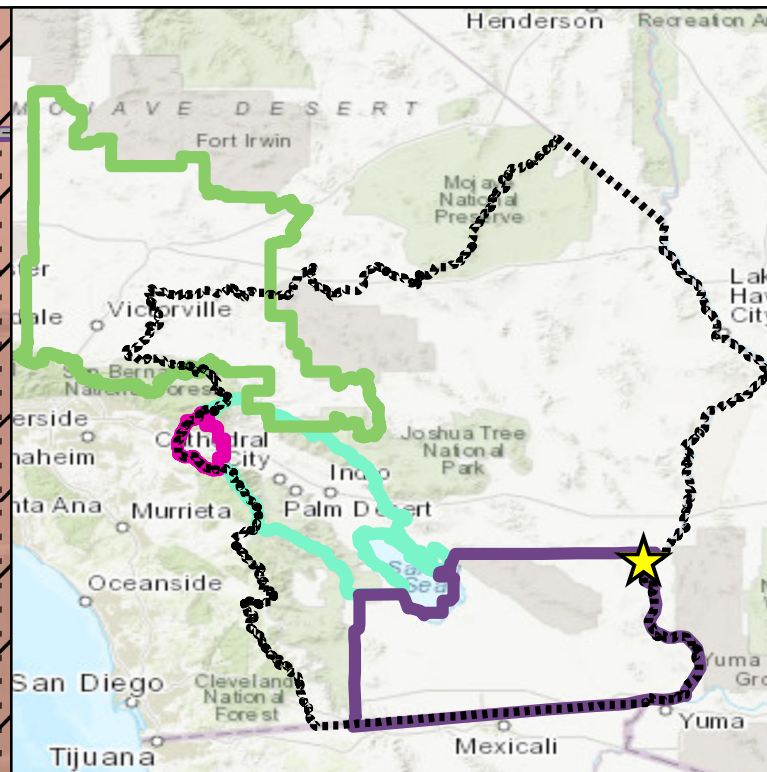
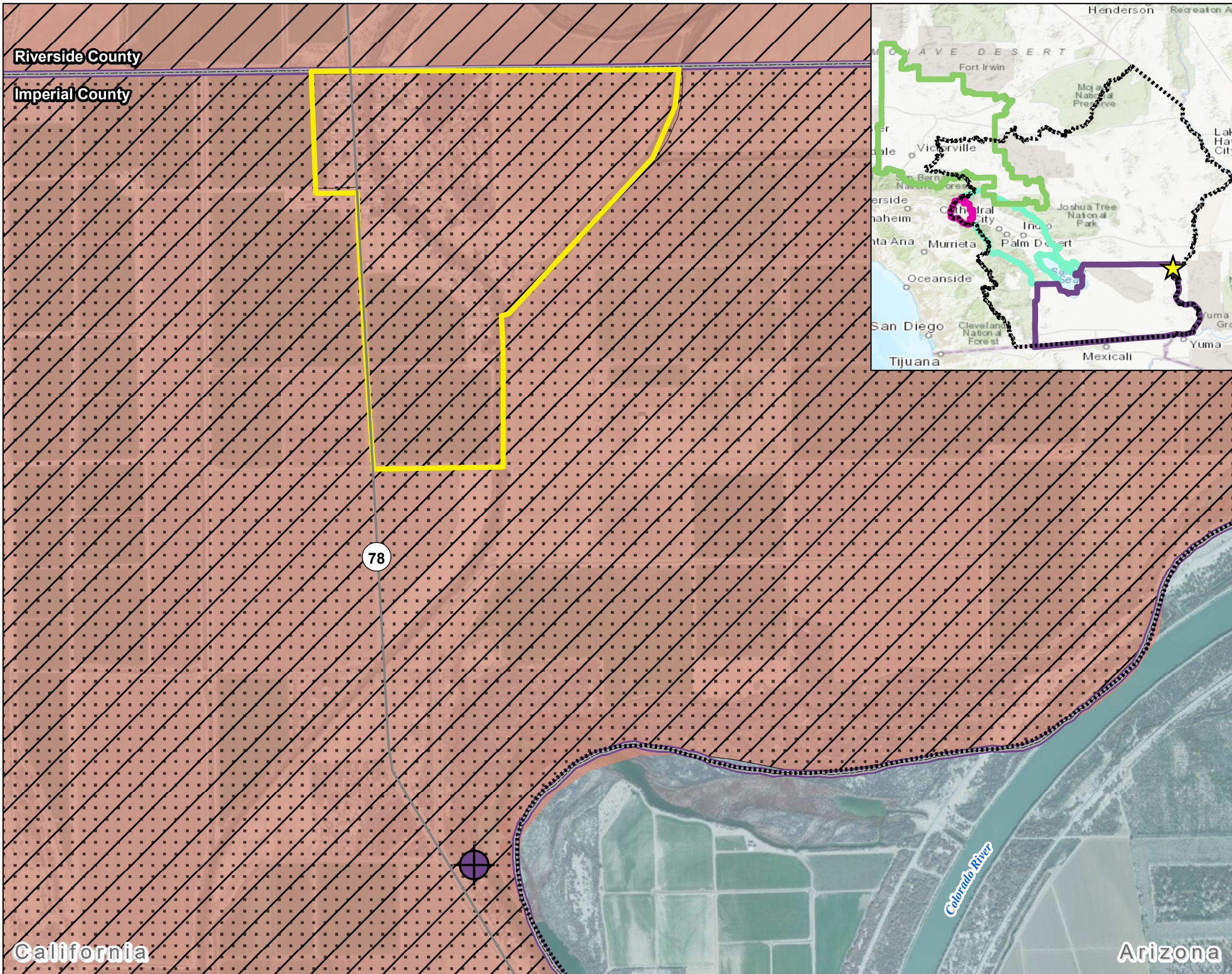
INSTALL NEW BOOSTER PUMP STATION.  
 COMPLETE ELECTRICAL UPGRADES.  
 1,200 GPM @ 90 PSI  
 4,340 GPM @ 60 PSI

*10" ACP*

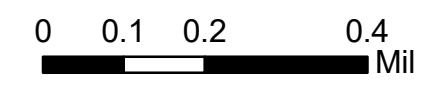
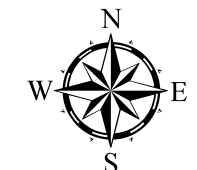
UNION PACIFIC RAIL RD

# Bicarbonate Contaminant Treatment

## Palo Verde County Water District



- Project Location
- Major Roads
- Palo Verde Community
- Colorado River Funding
- IRWM Planning Region**
- Imperial Valley
- Underrepresented Communities**
- < 85% CA. MHI, Pop <= 20K with UnEmp 2% > CA Avg. (EDA)
- < 85% CA. MHI, Pop <= 20K with Local Financial Hardship (EDA)
- < 60% CA. MHI (SDAC)






File Name: CRFAMap\_UrbanMultibenefit\_URCTIbe\_SetAside  
 File Location: \\w\shared\Projects\RM\CA\SD\0574 - CVWD\0574-003.09 CRFA DAC Grant Admin\02\_P  
 Project Work\15\_Drought PSP DAC\Setaside\GIS  
 Date Updated: November 4, 2021  
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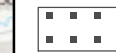
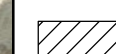


Attachment 10B

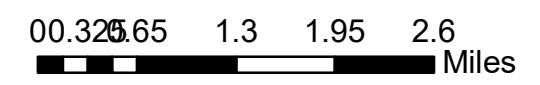
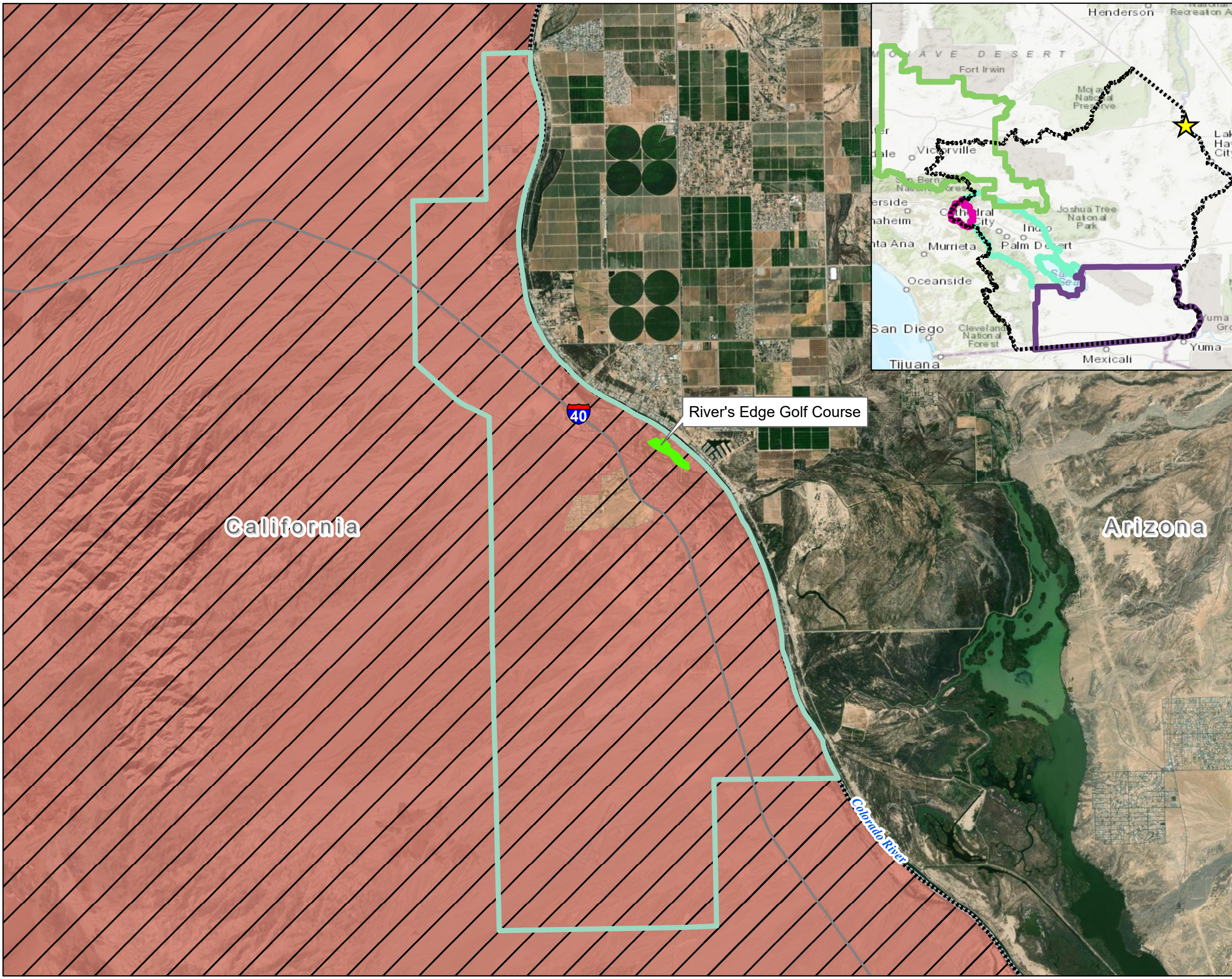


Attachment 11A  
**Golf Course  
 Irrigation Project**

City of Needles

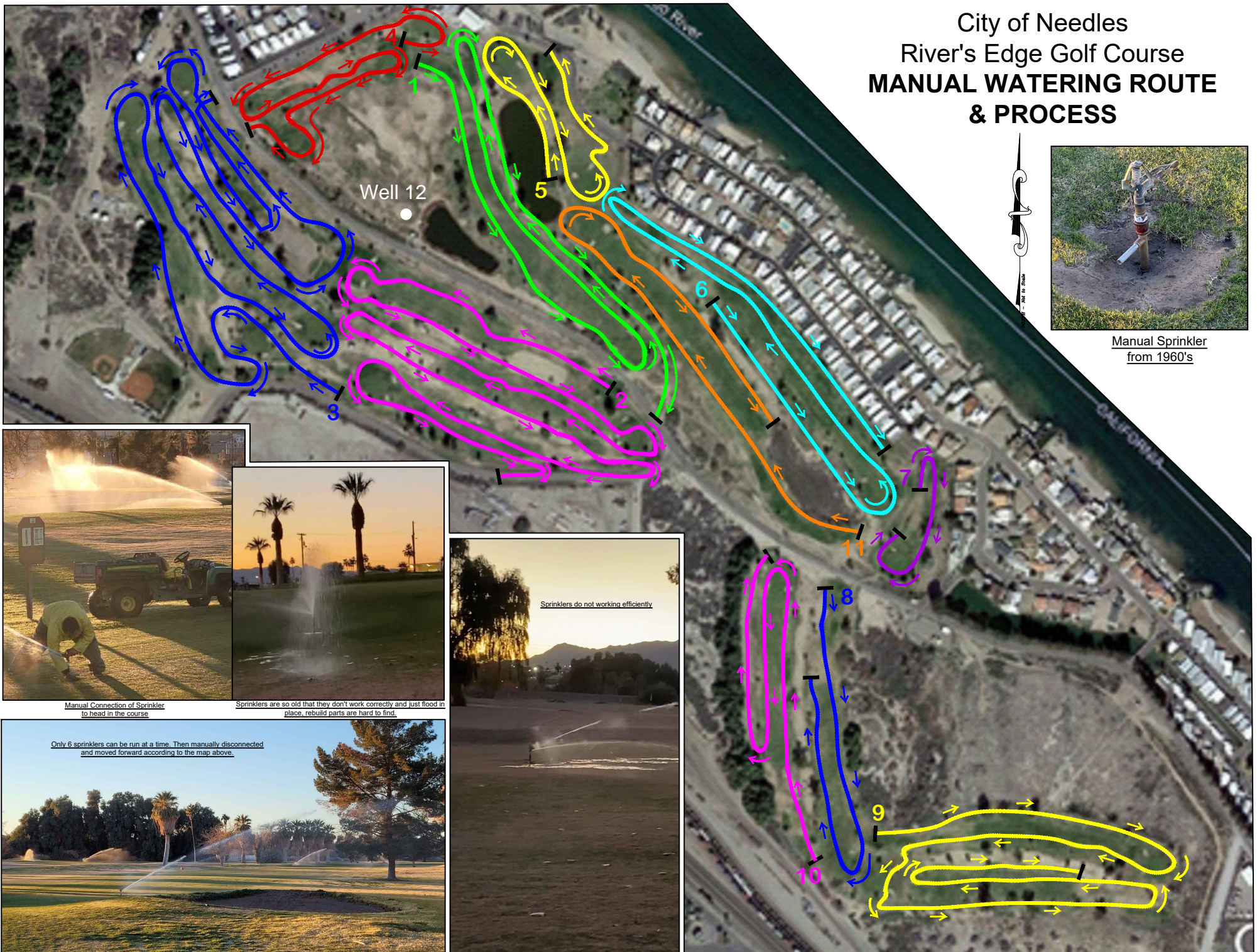
-  Rivers Edge Golf Course
-  City of Needles
-  Highways

- Underrepresented Communities**
-  < 85% CA. MHI, Pop <= 20K with UnEmp 2% > CA Avg. (EDA)
  -  < 85% CA. MHI, Pop <= 20K with Local Financial Hardship (EDA)
  -  < 60% CA. MHI (SDAC)
  -  < 80% CA. MHI (DAC)



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 Date Updated: November 4, 2021  
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# City of Needles River's Edge Golf Course MANUAL WATERING ROUTE & PROCESS



Manual Sprinkler  
from 1960's



Manual Connection of Sprinkler  
to head in the course



Sprinklers are so old that they don't work correctly and just flood in  
places, rebuild parts are hard to find.



Sprinklers do not working efficiently



Only 6 sprinklers can be run at a time. Then manually disconnected  
and moved forward according to the map above.