

Lahontan Funding Area Needs Assessment Report

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Antelope Valley Integrated Regional Water Management Region

Community Characteristics ¹					Wastewater ²	Stormwater ²	Other ²		
Community	County	IRWM Region	Describe Community Characteristics (MHI, population, or other DAC indicators)	Describe involvement with local IRWM Governance	Describe any insufficient wastewater system issues	Identify stormwater/urban water runoff/ flood management issues	Identify drinking water, wastewater, or stormwater regulatory/ compliance issues	Identify other conditions/ issues (drought, etc.)	
1	Boron	Kern	Antelope Valley	\$45,382 (54% below \$50,000)	A representative of Boron Community Services District has attended Stakeholder meetings		Concerns regarding high arsenic levels in groundwater, Wells exceeding metals, nitrate/nitrite MCL and TDS secondary MCL identified		
2	Rosamond	Kern	Antelope Valley	\$56,952 (43% below \$50,000)	Rosamond Community Services District is a member of the RWMG		Wells exceeding arsenic and metals MCL and TDS secondary MCL identified		
3	Portions of City of Lancaster	Los Angeles	Antelope Valley	\$49,314 (51% below \$50,000)	City of Lancaster is a member of the RWMG, Within the Los Angeles County Waterworks District 40 (LACWD 40) service area, which is a member of the RWMG		Areas with localized flooding at street or drain	Wells exceeding arsenic, metals, and nitrate/nitrite MCL and TDS secondary MCL identified	
4	Quartz Hill	Los Angeles	Antelope Valley	\$58,409 (46% below \$50,000)	Quartz Hill Water District is a member of the RWMG			Wells exceeding metals, nitrate/nitrite MCL and TDS secondary MCL identified	
5	Portions of City of Palmdale	Los Angeles	Antelope Valley	\$56,699 (45% below \$50,000)	City of Palmdale & Palmdale Water District are members of the RWMG, Within the LACWD 40 service area, which is a member of the RWMG		Areas with localized flooding at street or drain	Wells exceeding metals, nitrate/nitrite MCL and TDS secondary MCL identified	
6	Littlerock	Los Angeles	Antelope Valley	\$37,241 (71% below \$50,000)	Littlerock Creek Irrigation District is a member of the RWMG, Within the LACWD 40 service area, which is a member of the RWMG			Wells exceeding metals, nitrate/nitrite MCL and TDS secondary MCL identified	Concern about growth of communities vs. water reliability for the Region. Water conservation concerns – Would like to see the creation and enforcement of xeriscaping ordinances designed for their community. Interested in opportunities for water recharge, banking, and conservation.
7	Lake Los Angeles	Los Angeles	Antelope Valley	\$42,803 (61% below \$50,000)	Within the LACWD 40 service area, which is a member of the RWMG	Want to transition from septic systems to sewer - they have some sewer lines installed but have not been used	Heavy rains cause flooding along local roads at Big Rock Creek Wash	Wells exceeding metals MCL and TDS secondary MCL identified	Interest in restoring Lake Los Angeles – could create reservoir for farming, fire usage, recreation, tourism/commercial, possible groundwater recharge site, possible use of recycled water.

Community Characteristics ¹					Wastewater ²	Stormwater ²	Other ²	
Community	County	IRWM Region	Describe Community Characteristics (MHI, population, or other DAC indicators)	Describe involvement with local IRWM Governance	Describe any insufficient wastewater system issues	Identify stormwater/urban water runoff/ flood management issues	Identify drinking water, wastewater, or stormwater regulatory/ compliance issues	Identify other conditions/ issues (drought, etc.)
8	North Edwards	Kern	Antelope Valley	\$59,511 (36% below \$50,000)	Limited recent involvement in IRWM activities		Wells exceeding arsenic and metals MCL identified	
9	Roosevelt	Los Angeles	Antelope Valley		Limited recent involvement in IRWM activities			Water conservation concerns – concerned with protecting their wells, protecting agricultural water rights, and preventing LACSD from “wasting water” on “new farms.”
10	Sun Village	Los Angeles	Antelope Valley	\$40,264 (58% below \$50,000)	Within the LACWD 40 service area, which is a member of the RWMG			
11	Mojave	Kern	Antelope Valley/Fremont Basin	\$31,111 (67% below \$50,000)	Mojave Public Utilities District borders with the Fremont Basin IRWM Region and is an active member of the Fremont Basin IRWM Region Regional Water Management Group (RWMG).			Water conservation concerns. Mojave School District is interested in constructing two new high schools in a water-efficient manner.

Sources:

1. Antelope Valley IRWMP 2019 Update (Woodard Curran, 2019)
2. Antelope Valley IRWMP 2007 Update Appendix D (RMC, 2013)

Lahontan Basin Integrated Regional Water Management Region

Community Characteristics					Drinking Water						Waste Water		Stormwater
Community	County	IRWM Region	Community Characteristics (MHI, population, or other DAC indicators)	Involvement with local IRWM Governance	Source(s) of water	Estimate # of private wells	Estimate # of public wells	Accessible for community (y/n)	Affordable for community (y/n)	Drinking water system issues	Type of system	Insufficient wastewater system issues	Stormwater/ urban water runoff/ flood management issues
1	Lassen Land and Trails Trust	Lassen County	Lahontan Basins Population: 1,363 MHI: 38,676	None	Groundwater	100	3,700	Y	Y	Areas of the basin have high conductivity and salinity concentrations. There are locally high total dissolved solids, hardness, nitrates, iron, boron, calcium, magnesium, sodium, ASAR, sulfate, and chloride that occur in the basin.			
2	Modoc	Modoc County	Lahontan Basins Population: 2,857 MHI: 48,269	None									Flood control / storage issues
3	Modoc Watermaster	Modoc County	Lahontan Basins Population: 2,857 MHI: 48,269	None	Groundwater	All private wells within watermaster service area. Overall, it was determined that due to any potential projects being located on private property, the Modoc County Watermaster Department is ineligible for DAC funding support.	None	Y	Y	Infrastructure needs. All wells located on private property.			
4	NRCS	Modoc County	Lahontan Basins Population: 2,857 MHI: 48,269	None									Agricultural run-off and infrastructure issues expressed.
5	Susanville Indian Rancheria	Lassen County	Lahontan Basins Population: 1,363 MHI: 38,676	Serve on RWMG board.	Groundwater	3	N/A	Y	Y	Project needs include lateral lines, pressure regulators, run-off and flood control measures and water line replacements; the biggest need being that of pressure regulators.			Flood control issues.
6	Susanville Sanitation District	Lassen County	Lahontan Basins Population: 1,363 MHI: 38,676	None							Sewer	Project needs include primary and secondary clarifiers at SSD's wastewater facility site.	

Tahoe-Sierra IRWM Region

Community Characteristics					Drinking Water							Wastewater		Stormwater	Water System Financing		
Community	County	IRWM region	Comm-unity characteristics (i.e., MHI, population, or other DAC indicators)	Involvement with local IRWM Governance	Source(s) of water	Estimate # of private wells	Estimate # of public wells	Water supply treatment (i.e., carbon, RO, etc.)	Accessible for community (y/n)	Affordable for community (y/n)	Identify any drinking water system issues	Type of system	Insufficient wastewater system issues	Identify stormwater/ urban water runoff/ flood management issues	Identify the rate structure (i.e., block, tiered)	Describe system financing needs (i.e., operation and maintenance costs)	
1	STPUD	El Dorado	Tahoe Sierra	DAC	STPUD is lead agency	Groundwater	500	21	Carbon, HIPOx, Bayoside E33, low-profile aeration	Y	Y	Impaired wells	Secondary Treatment	None	Potential impacts associated with extraction and injection of the water to the groundwater basin. (Tahoe Valley South Subbasin)	Water customers are either charged a Metered Rate (base rate + consumption) or a Non-Metered Flat Rate.	Need Capital Improvement Funds for Water Infrastructure

Fremont Basin Integrated Regional Water Management Region

Community Characteristics					Drinking Water			Wastewater	Stormwater	Other		
Community	County	IRWM Region	Describe Community Characteristics (MHI, population, or other DAC indicators)	Describe involvement with local IRWM Governance	Source(s) of water	Estimate number of public wells	Identify any drinking water system issues	Type of system	Identify stormwater/urban water runoff/ flood management issues	Identify drinking water, wastewater, or stormwater regulatory/ compliance issues	Identify other conditions/ issues (drought, etc.)	
1	California City	Kern	Fremont Basin	MHI \$48,776 (places 2016), Population 13,360	California City is a member of the Fremont Basin Regional Water Management Group (RWMG)	Private wells and water from California City (groundwater from Fremont Valley Basin and imported water from AVEK)		Aging infrastructure and severe water loss	Sewer and septic	Areas prone to flooding during large storms, particularly around Cache Creek	Well exceeding old Chrom-6 MCL, and arsenic	
2	Mojave	Kern	Fremont Basin / Antelope Valley	MHI \$34,280 (places 2016), Population 4,239	Mojave Public Utilities District is an active member of the Fremont Basin IRWM Region RWMG	Private wells and water from Mojave Public Utilities District (MPUD) (groundwater from Fremont Valley Basin and imported water from AVEK)		Well 30 out of service due to Nitrate exceeding MCL	Sewer and septic	Areas prone to severe flooding during large storms	Well 30 out of service due to Nitrate exceeding MCL	
3	Cantil	Kern	Fremont Basin	Within a Block Group with MHI \$28,264 (2016)	Rancho Seco, Inc. (water supplier) member of Fremont Basin Stakeholder Group	Private wells and groundwater from Rancho Seco (Fremont Valley Basin)	1	Rancho Seco in need of a cover for boost pump to keep it from freezing	Septic	Areas prone to severe flooding during storms		Dust issues – in need of soil stabilization and revegetation
4	Randsburg, Johannesburg, and Red Mountain	Kern	Fremont Basin	Randsburg CDP MHI \$26,314 (places 2016), Population 156	Rand Communities Services District (RCWD) (water supplier) member of Fremont Basin Stakeholder Group	Private wells and groundwater from RCWD		In need of automated system, new water meters for 300 connections, distribution system isolation valves, shut off valves for fire hydrants, and lockable sampling taps	Septic		Arsenic MCL exceedances	

Inyo-Mono Integrated Regional Water Management Region

Community Characteristics					Drinking Water			Other		Water System Financing	
Community	County	IRWM Region	Describe Community Characteristics (MHI, population, or other DAC indicators)	Describe involvement with local IRWM Governance	Source(s) of water	Water supply treatment (i.e., carbon, RO, etc.)	Identify any drinking water system issues	Identify drinking water, wastewater, or stormwater regulatory/compliance issues	Identify other conditions/ issues (drought, etc.)	Describe system financing needs (i.e., operation and maintenance costs)	
1	Bridgeport Indian Colony	Mono	Inyo-Mono	Serves 45 people	MOU Signatory	BPUD		Arsenic in Water	Arsenic	Need drinkable water with pressure behind it. Chlorine odors minimal but pressure is a bigger issue. BIC would like their own system. Cost analysis for own system v. continuing w/BPUD. Would need a grant to maintain the system unless expansion brings in money from outside sources. Need money for design costs. Study on possible consolidation/interconnect with BPUD.	
2	Lone Pine Paiute-Shoshone Reservation	Inyo	Inyo-Mono	Serves 350 people	MOU Signatory					Concerned about water rights (pumping, drinking water, irrigation water, surface water)	Upgrades needed to distribution system. Funding needed to aid in upgrade improvements
3	White Mountain MWC	Mono	Inyo-Mono	Serves 80 people	Non MOU Signatory				Working on compliance with AB 54		Funding needed to construct additional well to aid in redundancy
4	Bridgeport Public Utility District	Mono	Inyo-Mono	Serves 600, including second homes	MOU Signatory	Groundwater		Arsenic in Water	Arsenic		Currently have an app for arsenic treatment funding-additional funds needed; need approximately \$2.5 million for metering of the system. Arsenic and metering are top two needs; arsenic treatment and metering of businesses to residential; plan in place for both issues just waiting on the financial end; aging piping
5	Lundy Mutual Water Company	Mono	Inyo-Mono		MOU Signatory	Groundwater				No current operator; a person in town is certified but is not part of the staff.	Lundy Mutual does not have any of the required TMF elements; they are also currently running without a certified operator; assistance is needed to bring all paperwork and certification up to speed; funding is needed for aging infrastructure which does not include the capacity for fire flow; aging piping and storage tank; no pressure or capacity for fire flow; system electronics run through phone line
6	Fort Independence Indian Reservation	Inyo	Inyo-Mono	Serves 43 people	MOU Signatory	Well age = 36yrs		Uranium			Control system improvements; automating and moving away from manual (SCADA); close open loops in system; rehabing wells due to age

Community Characteristics					Drinking Water			Other		Water System Financing
Community	County	IRWM Region	Describe Community Characteristics (MHI, population, or other DAC indicators)	Describe involvement with local IRWM Governance	Source(s) of water	Water supply treatment (i.e., carbon, RO, etc.)	Identify any drinking water system issues	Identify drinking water, wastewater, or stormwater regulatory/compliance issues	Identify other conditions/ issues (drought, etc.)	Describe system financing needs (i.e., operation and maintenance costs)
7	Mountain Meadows Mutual Water Company	Mono	Inyo-Mono		Non-MOU Signatory					Well 5 project used up all reserves; emergency reserve needed without uranium problems; backup generator system; need upgrades to tank 3 pump; training
8	Birchim CSD	Mono	Inyo-Mono	Serves 150 people	MOU Signatory	Groundwater			Tank corrosion	Hydropneumatic tank needs to be replaced; security buildings for well 5 & 6; adding another well instead of tank; pump replacement for well 3 due to inefficiency; main repairs for leaks (hydrants); close dead ends; basic system improvements
9	Wheeler Crest CSD	Mono	Inyo-Mono	Serves 100 people	MOU Signatory	Artesian spring, groundwater				Hilltop infrastructure – 1950s with little information available; currently using IRWMP money for Well 5; improvements to hilltop system; upgrades to lines, connections; cost per person for hilltop improvements is too high; changes to line to avoid people's homes instead of under; transmission line for artesian well or drilling new well to fix movement from well to tank; hydro study to locate valves and hydrants for future metering; transducer in the wells to monitor water level
10	Lower Rock Creek Mutual Water Company	Mono	Inyo-Mono	Serves 276 people	Non-MOU Signatory					New well for additional supply; water storage tank (underground) replacement for age; liner for tank leak; standby generator for power loss; new pressure reducers (current ones are discontinued)
11	Bishop Paiute Tribe	Inyo	Inyo-Mono		MOU Signatory					Conservation open area; habitat improvement; toilet replacement; replace irrigation lines; planning tools; increase planning staff; mapping services inside the public works dept; engineering/hydrologic review of system; gps units - supplies (printer, plotter) for mapping and planning; allows for understanding of system needs and future budget issues; in house engineering to bring down contractor costs
12	Indian Creek Westridge CSD	Inyo	Inyo-Mono	Serves 1,043 people	Non-MOU signatory					Hydropneumatic tank issue needs to be replaced; security buildings for well 5 & 6; adding another well instead of tank; pump replacement for well 3 due to inefficiency; main repairs for leaks (hydrants); close dead ends; basic system improvements; add main line to add hydrants on Pa Me Lane (1000')

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13	Aspendell MWC	Inyo	Inyo-Mono	Serves 300 people	Non-MOU Signatory			Arsenic / Nitrates		Arsenic issues in well 1 – No ability to blend; complete leak detection; curb stops detection; cross connection protection; well development (arsenic/nitrate)
14	Sierra North CSD		Inyo-Mono	Serves 45 people	Non-MOU Signatory	Groundwater				Replace 3 tanks; replace distribution and electrical system; change system to no longer need pressure tank; cycling pumps. They also need assistance with inventorying the current system
15	Inyo County Public Works – Lone Pine	Inyo	Inyo-Mono	Serves 1,800 people	MOU Signatory	Groundwater				Water tank maintenance and repair; meter replacement; transmission main - review/replacement (not sure of age); leak detection survey; hydraulic analysis; dedicated sampling sites; outside rate study (consultant) – Prop 218 process; increase storage capacity
16	Inyo County Public Works – Independence	Inyo	Inyo-Mono	Serves 574 people	MOU Signatory	Groundwater				New meters (automatic meter reading system); billing software as needed; new transmission main (1928); leak detection survey; installation of new well (mandated) interconnect with DWP well and system; sampling stations; outside rate study (consultant) – Prop 218 process; increase storage capacity
17	Inyo County – Laws	Inyo	Inyo-Mono	Serves 30 people	MOU Signatory	Groundwater				New hydropneumatic tank (10,000+); new meters (automatic reading system & billing software); monitor of auxiliary well and automation of well needs/changes; outside rate study (consultant) – Prop 218 process; build additional storage capacity
18	Keeler CSD	Inyo	Inyo-Mono	Serves 65 people	MOU Signatory	Groundwater	POU	Arsenic	Arsenic	Need alarm for water level in tank; leak detection; spare/replacement parts for pumps; arsenic remediation (treatment options); developing alternate sources; solar pump to free up money for arsenic treatment; – (2018 – Currently doing rate structure and rate study changes. Need GM lost theirs 3-4 months ago. He managed arsenic point of use treatment program and kept logs. He also did water quality collections. Have created a procedure for the arsenic treatment POU; environmental health department is going to give a permit soon. Currently under emergency regulations trying to make it permanent. Inyo county is the primacy agency and

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										sat in on the interview. Inyo Co. says if homeowner does not agree with POU treatment keeler bylaws include bylaw to shutoff of service. Arsenic treatment is on every dwelling unit. Mapping the piping and review quality of piping (asbestos pipes?); need accurate as-builts; flooding issues - fortify area around the well/tank/arsenic treatment (SECURITY); interconnect with LADWP to provide water; improve infrastructure for an increase in tourism - expand system;)	
19	Big Pine Paiute Tribe of the Owens Valley	Inyo	Inyo-Mono	Serves 600 people	MOU Signatory	Groundwater				TMF done in 2013? Intertie benefits both tribe and Big Pine CSD. Intertie has fire flow benefit looking for financing for design of project. Tribes perspective concerns of permits and certifications of operators. 2 pressure zones so PRV and booster pump will probably be needed at intertie. water quality requirements of EPA versus state may be an issue. They are putting in new well next year. both agencies support intertie. 4" line going up street need to connect at Blake road and Highway 395.	Replace water mains; replace hydrants; drill well for backup supply; additional money for security of facilities; storage tank maintenance; backup generator for lift station and wells; solar/supplemental power supply; treatment facility for sewer system (currently in ponds); update irrigation system (replace or repair piping - leaks); SCADA or electronic monitoring; study of fish hatchery water use efficiency (pumping is changing water flow and drawing down the aquifer) - hydrologic study - belongs to Fish & Game with wells on DWP land
20	Inyokern CSD	Kern	Inyo-Mono	Serves 984 people	Non-MOU Signatory	Groundwater				Office staff to get administrative needs under control; monitoring/reporting violation current; lead and copper monitoring sites; on-site administrative training; rate study for rate increase	
21	City of Bishop	Inyo	Inyo-Mono	Serves 3,900 people	MOU Signatory					Install another tank; increase line size into town on main transmission line; improve cooperation with other water systems; chlorination system for Well 2; open up dead ends; continue to replace lines and upgrade system; chlorine sensing monitor to determine residuals in system; automatic backup power at each well site	
22	Sierra East Mobile Home Park	Inyo	Inyo-Mono	Serves 60 people	Non-MOU Signatory	Groundwater				Immediate need for a portable generator; new storage tank; replace aging distribution lines; cooling system for hot well; arsenic treatment; new chlorinator; buy land for new wells; drill a new cold well with higher capacity; storage for fire flow; new pumps and well casings; security for wells; O &M	

Community Characteristics					Drinking Water			Other		Water System Financing
Community	County	IRWM Region	Describe Community Characteristics (MHI, population, or other DAC indicators)	Describe involvement with local IRWM Governance	Source(s) of water	Water supply treatment (i.e., carbon, RO, etc.)	Identify any drinking water system issues	Identify drinking water, wastewater, or stormwater regulatory/ compliance issues	Identify other conditions/ issues (drought, etc.)	Describe system financing needs (i.e., operation and maintenance costs)
										costs for running the system; thermal heating using hot well
23	Death Valley National Park	Inyo	Inyo-Mono	Serves 150 people	Non-MOU Signatory					Scotty's Castle/ Mesquite/ Grapevine – arsenic treatment and removal; drill wells to replace spring flow; new RO plant; upgrade and replace distribution lines
24	Sierra Breeze	Inyo	Inyo-Mono	Serves 150 people	Non-MOU Signatory					Underground pipe and valve replacement; tank repaired and cleaned; flushing program; nitrate removal system to bring well back on line; well capping or well abandonment; metering to move to tiered rate system; electronic filing system, upgrade telemetry
25	Searles Domestic Water Company	Inyo	Inyo-Mono	Serves 1,800 people	Non-MOU Signatory	Groundwater		having issues with new arsenic treatment plant		Aging infrastructure – starting with the oldest distribution mains
26	Benton Paiute Tribe	Mono	Inyo-Mono	Serves 100 people	Non-MOU Signatory					Storage tank replacement 100,000 gallon; put RO system at the control tank and water tank so that drinking water is safe at all locations; generator; control room electric; telemetry; possible need for new well – possibly drying up 1972
27	Eastern Sierra CSD	Inyo	Inyo-Mono	Serves 8,275 people	MOU Signatory					Backup generator; solar power to run the system; equipment – backhoe; lift station renovation; interconnect with the city for emergency; document management- electronic filing to decrease storage and allow for backups; additional sludge drying beds; barrier replacement around lagoon
28	Meadow Creek MWC	Inyo	Inyo-Mono		Non-MOU Signatory					Backup generator; system improvements – aging infrastructure and pipelines; new wells; refurbishing one well; hiring additional staff – general manager
29	Wilson Creek MWC	Inyo	Inyo-Mono	Serves 46 people	Non-MOU Signatory					New well siting – land purchase or transfer; well drilling and well abandonment
30	Pine Creek Village	Inyo	Inyo-Mono	Serves 400 people	Non-MOU Signatory					Recently updated; owners provide all needs

Community Characteristics					Drinking Water			Other		Water System Financing
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31	Big Pine CSD	Inyo	Inyo-Mono	Serves approximately 1,000 people	MOU Signatory	Groundwater				Valve changes; aging water main replacements – larger sizing; tank sizing for fire flow rating – low priority; wastewater treatment plant upgrades and improvements; collection system replacements – root damage – (NOV 2018 – replace water mains and hydrants, additional security measures and SCADA. Backup generator for lift station and wells, treatment facility for sewage)
32	Cartago MWC	Inyo	Inyo-Mono	Serves 85 people	Non-MOU Signatory	Groundwater				Improve fire flow – new pumping system to increase capacity; electrical upgrades
33	North Lone Pine CSD	Inyo	Inyo-Mono	Serves less than 100 people	Non-MOU Signatory					Main and lateral replacements; hydrant installation; system stand alone computer system
34	Darwin CSD	Inyo	Inyo-Mono	Serves 40 people	Non-MOU Signatory	Spring				New manifold at the spring; replacing aging transmission lines outside of the town – leaking metal
35	Timbisha Shoshone Tribe	Inyo	Inyo-Mono	Serves 30 people	Non-MOU Signatory					Water utility ordinance development; financial administration development; fire training – installation of hydrants and development of system; future development of reservation to increase population – need additional water infrastructure; commercial building development – water infrastructure; LEED design and build; revitalizing mesquite tree area – reirrigation; centennial – parcel selection and water infrastructure development; economic and residential infrastructure in Death Valley junction; wells, piping, O&M, tanks, pumps
36	Lone Pine CSD	Inyo	Inyo-Mono	Serves 2,000 people	Non-MOU Signatory					Upgrade old sewer lines; annex reservation from systems
37	Olancha RV Park	Inyo	Inyo-Mono		Non-MOU Signatory					System size is too small for need; additional/ replacement wells; replace pipeline; larger hydrants for fire use

Mojave Integrated Regional Water Management Region

Community Characteristics				Drinking Water	Other	Water System Financing	
Community	County	IRWM region	Describe community characteristics (i.e., MHI, population, or other DAC indicators)	Source(s) of water	Identify drinking water, wastewater, or stormwater regulatory/ compliance issues	Describe system financing needs (i.e., operation and maintenance costs)	
1	Apple Valley Foothill County Water District	San Bernardino County	Mojave	Serves 620 people	Groundwater		Highest Priority is to build a new storage tank, replace all life-cycled piping and valves, and loop the 9 dead ends. Recommended an interconnection with a neighboring water district. Also would benefit from some TA on rates analysis and establish capital improvement plan; also needs a solar back up system and another well
2	Apple Valley Heights County Water District	San Bernardino County	Mojave	Serves 700 people	Groundwater		The replacing all of the piping and valves to final all looped piping and possibly replace the three 20,000-gallon tanks with a larger tank to meet fire flow issues; build a district office with secure equipment storage as well; form interconnection with a neighboring water district; onsite technical assistance on the budgeting and capital improvement plan; emergency generators; photovoltaic solar module backup; office facilities; company service truck and backhoe; a new well and storage.
3	Bar H MWC	San Bernardino County	Mojave	Serves 260 people	Groundwater		Needs certified operator; needs 50,000-gallon storage tank; fire hydrant upgrade; new motors and pumps for the wells
4	Bar-Len Mutual Water Company	San Bernardino County	Mojave	Serves 120 people	Groundwater		Storage tank; emergency generator; replace pipelines; add loop to system; solar for pumping; backup well and storage; better inventory
5	Bighorn-Desert View Water Agency	San Bernardino County	Mojave	Serves 3,850 people	Groundwater		Automation like SCADA w/ security, transfer switching, generator, wells refurbishment, solar backup, energy efficiency, backho, engineering of system's tie-in w/ consolidation of Landers system, long range funding for major CIP issue, future Johnson Valley system build-out, possible treatment or new wells, flood control percolation
6	Cedarprines Park Mutual Water Company	San Bernardino County	Mojave	Serves 2,500 people – DAC	Groundwater		New well development and rehabilitation of existing low or non producing wells; calculate Fire Flow
7	Center Water Company	San Bernardino County	Mojave	Serves 1,000 people	Groundwater		Aging infrastructure, pipelines deteriorating, two new wells and an extra 50,000 gallons of storage, emergency generators, funding to remove the dead ends in the system, solar panel back-up and storage construction equipment would also be beneficial. Due to the fact that water level is currently at 20' below ground, a sewer system would be an important part of source water protection. It is recommended that the aging infrastructure and pipelines be addressed first.
8	Chamisal MWC	San Bernardino County	Mojave	Serves 120 people	Groundwater		Emergency generators, photovoltaic solar module backup, office facilities, company service truck and backhoe, a new well and storage. Corporate review for policies and procedures to be developed, perform a rates analysis, budgeting and capital improvement planning.

Community Characteristics				Drinking Water	Other	Water System Financing
Community	County	IRWM region	Describe community characteristics (i.e., MHI, population, or other DAC indicators)	Source(s) of water	Identify drinking water, wastewater, or stormwater regulatory/ compliance issues	Describe system financing needs (i.e., operation and maintenance costs)
9	Desert Dawn MWC	San Bernardino County	Mojave	Serves 120 people	Groundwater	Desert Dawn MWC is not in favor of receiving any funding or assistance from an outside source at this time. If funding were provided it would be used to purchase a portable generator for their wells.
10	Desert Springs MWC	San Bernardino County	Mojave	Serves 325 people	Groundwater	Recently changed part of the system to pvc; 55-year-old pipeline – needs to be replaced on four streets; larger storage tank (5,000+ gallon) for emergencies; better fencing/security for wells and pump stations
11	Gordon Acres	San Bernardino County	Mojave	Serves 195 people	Groundwater	Rebuild entire system, emergency generator, office facilities, company truck for emergencies, back-hoe, dump truck, solar power at well site, SCADA system upgrade, new well, future storage
12	Green Valley Mutual Water Company	San Bernardino County	Mojave	Serves 350 fulltime and 2,400 seasonal – DAC	Groundwater	SCADA, Master Plan, increase Storage & production, generator, fireflow concerns, water rights consolidation, snow plow for service truck & tractor.
13	Helendale Community Services District Wate & Wastewater Division	San Bernardino County	Mojave	Serves 5,716 people	Groundwater	Could use source protection plan, biggest meter replacement AMI type (2812), 11% unaccounted for loss, 72 dead lines, wastewater digester, fractures in lines
14	Hi Desert Mutual Water Company	San Bernardino County	Mojave	Serves 80 people	Groundwater	Storage tank, replace pipelines, add loop to system, solar for pumping, backup well & storage, policies & procedures, leak detection, possible treatment plan in the future
15	Joshua Basin Water District	San Bernardino County	Mojave	Serves less than 10,000 people	Groundwater	Pipeline replacement (rate study – Prop 218 notice going out 7% increase); groundwater recharge – interconnect with Mojave Water Agency – need to build the recharge site for importing the water; central sewer system installation to change water quality; waiting on USGS study on nitrates in basin – need density of septic systems that is acceptable for the region to protect water quality;
16	Jubilee Mutual Water Company	San Bernardino County	Mojave	Serves 855 people	Groundwater	1. replace steel main from tanks to pump station; 2. update pump station to variable speed motors (2) and repipe; 3. replace motor & pump at well 4 (1997); 4. Emergency generator for wells; 5. Install water mains on Joshua, Cherokee, Fairlane, and Santa Fe, Visalia, Foothill & Arroyo; 6. Backhoe, tractor, dump truck; 7. tool shed; 8. solar panels for wells; 9. designated company work truck; 10. new telemetry (SCADA) for well/tank transmission (radio wireless system) HIGHER PRIORITY; 11. new pump station – steel pipe needs replacement (HIGHER PRIORITY); build up emergency funding

Community Characteristics				Drinking Water	Other	Water System Financing	
Community	County	IRWM region	Describe community characteristics (i.e., MHI, population, or other DAC indicators)	Source(s) of water	Identify drinking water, wastewater, or stormwater regulatory/ compliance issues	Describe system financing needs (i.e., operation and maintenance costs)	
17	Juniper Riviera Conty Water District	San Bernardino County	Mojave	Serves 385 people	Groundwater		New well including property & tie in, reservoir, profile existing off-line well, backhoe, dump truck, work truck, hot-tap tool, upgrade electrical panels, SCADA, backup generator, mainline for interconnect, upgrade PRV stations& booster stations, CIP to replace system, sample sites, continual for grading on pipelines for coverage.
18	Lucerne Vista MWC	San Bernardino County	Mojave	Serves 160 people	Groundwater		Lucerne Vista MWC needs immediate assistance in setting up a functioning system office. At the very least, the system should have a computer and enough in O&M funding to pay for resources to keep the system running. The system also needs new meters for their wells which have been damaged by wind and sand.
19	County Service Area 42, Oro Grande	San Bernardino County	Mojave	Serves 700 people	Groundwater		(2018 NA – The one and only 246,000 gallon reservoir needs to be replaced. It would be advisable to add another tank for redundancy. Another well would be advisable) (2016 NA – Install new reservoir in the wells field area so the three wells in that location could feed into them, then the water could be treated at the location. The system needs to update or upgrade the existing customer meters. A SCADA system is desirable at the time.)
20	County Service Area 70, Cedar Glen	San Bernardino County	Mojave	DAC – Serves 1,170 people	Groundwater		New sources needed to avoid CLAWA, replacing pipelines. Masterplan would be useful. Two new Wells, at least one new reservoir, and the replacement of 10 miles of 8" mainlines.
21	Navajo Mutual Water Company	San Bernardino County	Mojave	DAC – Serves 200 people	Groundwater		Backup generator, house boosters
22	NA – 12/23/13	San Bernardino County	Mojave	*No title designating water agency	Groundwater	Chromium 6 MCL – 10 micrograms/liter. 5–6 tests done over many years starting in 2001. Recent range is 12–30 micrograms/liter. Depending on the well if there is a change up or down. Tests done at different times of the year. Majority of wells are close to downtown area – one well further out at 15 micrograms/ liter. Two highest wells are furthest east. Twentynine palms also has chromium problem. Engineer proposed treating one source to zero and blend with others. Start with water quality analysis on wells. Possibly changing the casing in each well. Currently only chlorinating at each well. Treat at each site. Joshua Tree sub-basin and Copper basin are both contaminated. Natural contamination – so no cleanup assistance. Entitlement does not meet demand from Mojave Water Agency.	Pipeline replacement (rate study – Prop 218 notice going out 7% increase); groundwater recharge – interconnect with Mojave Water Agency – need to build the recharge site for importing the water; central sewer system installation to change water quality; waiting on USGS study on nitrates in basin – need density of septic systems that is acceptable for the region to protect water quality;

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23	NA – AVHCWD	San Bernardino County	Mojave		Groundwater		Rebuild entire system, emergency generator, office facilities, company truck for emergencies, back-hoe, dump truck, solar power at well site, SCADA system upgrade, new well, future storage
24	NA – Chamisal MWC	San Bernardino County	Mojave		Groundwater		Rebuild entire system, emergency generator, office facilities, company truck for emergencies, back-hoe, dump truck, solar power at well site, SCADA system upgrade, new well, future storage
25	CSA 70W – Pioneertown	San Bernardino County	Mojave	Serves 349 people	Groundwater	Arsenic, flouride, iron, and color	Funding for Hi-Desert Water District pipeline project, upgrade AMR meters to AMI, additional storage capacity, & if pipeline can't be funded then need another clean well & possible treatment for arsenic, flouride, iron & color
26	Strawberry Lodge MSWC	San Bernardino County	Mojave	Serves 640 people	Groundwater		Replace remainder of steel mainlines. Additional storage is needed, leak detection, SCADA, new well, meter all properties, complete pipe replacement, need to loop the system
27	Valley of Enchantment MWC	San Bernardino County	Mojave	Serves 1,850 people	Groundwater		First mainline replacement, branches replacement, 40% transite, undersized mains, SCADA upgrades with new computers, tank rehab, replace reservoir with a tank and a new well. Note ; 60–100 gpm from Crestline – Lake Arrowhead Water Agency (CLAWA)
28	West End MWC	San Bernardino County	Mojave	Serves 63 people	Groundwater		Focus on water quality and state mandated regulations, funding assistance for chlorination system. Create a separate inlet and outlet for the storage tank, geological survey and treatment options for water quality issues (hexavalent chromium MCL)
29	WW+B33:B38 SRFA	San Bernardino County	Mojave	Serves 26,000 people	Groundwater	Because of a high nitrate issue a compliance order was issued and a schedule for compliance in 2007. A cease-and-desist order was issued due to past secondary biosolids disposal on alfalfa field. This practice is not done anymore. The Wastewater treatment plant performed some upgrades and the nitrate plume is being monitored.	Hydrogen sulfide/Odor control is needed at the influent pump station. The structure has double matted rebar first mat of rebar is showing and degrading. This structure needs to be rehabilitated if possible or rebuilt. No preliminary engineering or design has been done on this structure. The office sits above the drywell of this structure. Hydrogen sulfide smell is quite strong in this building. The grit chamber was installed in 1998 it also has degraded concrete and needs rehabilitation. Concrete has been worn away down to aggregate. This structure needs a bypass and rehabilitation. Concrete work needs to be rehabilitated and the mechanical structure needs replacing. Aerobic digesters need to be gutted and rehabilitated. In 1972 and 1985 Solar drying beds were installed without concrete liners. They need concrete bottoms, sand, gravel, and rock into french drain no liner to separate rock layer; need liners.