

Appendix E. Summary of the Comprehensive List of Water Supply Options Considered in the Water Supply Evaluation

Water Supply Option or Strategy	Availability ^(a)	Dry Year Yield ^(b)		Average Annual Yield ^(c)		Peak Day Capacity, mgd ^(d)	Estimated Timing: Supply is Available to Zone 7 ^(e)	Total Costs <i>(does not reflect funding source)</i>			Included in Portfolio Analysis?	
		af	mgd	af	mgd			Capital Cost, \$ ^(f)	Annual Operation and Maintenance Cost, \$/year ^(g)	Total Amortized Cost, \$/acre-foot ^(h)		
Increased Yield from Existing Supplies												
Delta Fix <i>(increase long-term average yield of existing State Water Project contract from 60% to 75%)</i>	Depends on hydrologic conditions	no change	no change	12,100	10.8	0	2020 - 2030	\$97,000,000 to \$143,000,000	\$380,000 to \$420,000	\$600 to \$900	YES - This option is the foundation of the Current Plan	
Modified Operation of Lake Del Valle	Depends on hydrologic conditions	no change	no change	600	0.9	0	2015 - 2020	\$500,000 to \$1,000,000	\$48,000	\$140 to \$200	Not at this time, due to low yield. May be evaluated in the future pending success of planned water conservation and recycled water programs.	
Confirm BBID Contract	Available during all hydrologic conditions	3,000	2.7	3,000	2.7	0	2011 - 2015	\$50,000 to \$100,000	\$850,000	\$285	YES - This option is a "no regret" action, and was included in all portfolios.	
New or Additional Water Supplies												
Surface Water	Additional Water from the State Water Project <i>(increase contract above 80,619 af)</i>	Depends on hydrologic conditions	10% to 30% of Contract Amount	10% to 30% of Contract Amount	60% of Contract Amount	60% of Contract Amount	0	2015 - 2020	\$12,600 to \$15,800 per acre-foot	\$130	\$840 to \$1,050	Not at this time until more is known about the potential yields of the Delta Fix.
	Long-term Non-State Water Project Lease or Transfer <i>(not spot market water)</i>	Depends on hydrologic conditions	14,000	12.5	10,900	9.7	0.0	2015 - 2020	\$2,000,000	\$0	\$800 to \$1,300	YES - This option, along with Regional Desalination, were used to analyze the Intertie Portfolio.

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	Los Vaqueros Reservoir Expansion	Depends on hydrologic conditions	0 to 8,300	7.4	0 to 8,300	7.4	0	2015 - 2020	\$32,400,000 to \$212,000,000	\$420,000 to \$2,800,000	\$330 to \$2,200	Not at this time - the option does not appear to provide additional water supply.
Groundwater	Transfers via Purchase of Agricultural or M&I Land	--	--	--	--	--	--	--	--	--	--	Not at this time due to potentially insurmountable institutional and political barriers.
Stormwater Runoff and Rainfall Capture												
	Acquisition of Arroyo Mocho Water Rights	Depends on hydrologic conditions	< 200	< 0.18	900 to 1,800	0.8 to 1.6	0	2020 - 2030	\$1,800,000	\$12,000	\$100 to \$200	YES - Backup Portfolios (In-Valley and Intertie)
	Acquisition of Arroyo Las Positas Water Rights	Depends on hydrologic conditions	< 200	< 0.18	800 to 1,500	0.7 to 1.3	0	2020 - 2030	\$1,600,000	\$12,000	\$100 to \$200	YES - Backup Portfolios (In-Valley and Intertie)
	Acquisition of Tassajara and San Ramon Valley Creeks Water Rights	--	--	--	--	--	--	--	--	--	--	Not at this time as there does not appear to be an economically feasible way to capture water.
	End-User Local Rain Capture for Recharge <i>(Low Impact Development)</i>	--	--	--	--	--	--	--	--	--	--	Not at this time due to potential "end-user" regulatory issues (cannot count on end-user to comply).

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End-User Local Rain Capture for Irrigation <i>(residential, commercial, institutional roof top capture)</i>	Available during all hydrologic conditions <i>(storage is less than yield during driest year on record)</i>	220 to 860	0.2 to 0.8	220 to 860	0.2 to 0.8	0	2015 - 2040	\$94,000,000 to \$395,000,000	\$9,400,000 to \$39,500,000	\$73,600 to \$79,300	Not at this time due to potential "end-user" regulatory issues (cannot count on end-user to comply) and costs.
Recycled Water for Livermore-Amador Valley (Water Demand Reduction for Zone 7 Water Agency)											
Recycled Water - Direct and Indirect Use	Available during all hydrologic conditions	2,600-16,000 - depends on demand (needs additional analysis)	2.3 to 14.3	2,600-16,000 - depends on demand (needs additional analysis)	2.3 to 14.3	0 to 16.3	Builds up over time pending location of demand (needs additional analysis)	Varies according to project	Varies according to project	\$1,500 to \$2,400	YES - Backup Portfolio (In-Valley Portfolio)
End-User Graywater Reuse for Residential Irrigation	Available during all hydrologic conditions	1,200 to 5,400	1.1 to 4.8	1,200 to 5,400	1.1 to 4.8	2.2 to 10	Builds up over time from 2015 to buildout	\$20,000,000 to \$163,000,000	\$3,000,000 to \$24,000,000	\$3,700 to \$6,600	Not at this time due to potential "end-user" regulatory issues (cannot count on end-user to comply) and costs.
Groundwater Injection with Highly Treated Recycled Water <i>(recharge groundwater basin with recycled water treated with reverse osmosis technology)</i>	Available during all hydrologic conditions	Additional Supply in Main Basin: 2,800 af/yr	Additional Supply in Main Basin: 2.5	Additional Supply in Main Basin: 2,800 af/yr	Additional Supply in Main Basin: 2.5	0	2015 - 2020	\$34,000,000 to \$40,000,000	\$1,400,000	\$1,500 to \$1,600	YES - however, direct recycled water was used first due to costs.

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Agricultural Waste Stream Reuse	Available during all hydrologic conditions	< 100	< 0.1	< 100	< 0.1	> 0.2	--	--	--	--	Not at this time due to low yield.
Commercial/Industrial Waste Stream Reuse	--	--	--	--	--	--	--	--	--	--	Not at this time as it will likely be implemented by others in the Valley while meeting water conservation targets and goals.
Acquisition of Yara Yara Well	Available during all hydrologic conditions	280	0.25	280	0.25	0.75	2011 - 2015	\$4,000,000	\$28,000	\$1,140	Not at this time due to low yield and potentially poor water quality.
Desalination/Demineralization											
Bay Area Regional Desalination Project	Available during all hydrologic conditions	1,500-5,600	1.3-5	5,600 to 9,300	5 to 8.3	0	2015 - 2020	\$42,400,000	\$2,600,000 to \$4,400,000	\$1,400 to \$2,000	YES - This option, along with long-term non-SWP Leases or transfers, were used to analyze the Intertie Portfolio.
ACWD Entitlement Exchange via Demineralization	Available during all hydrologic conditions	4,100	3.7	4,100	3.7	0 to 3.7	2020 - 2025	\$80,000,000	\$6,000,000	\$2,900	YES - however, other options appear more cost effective.
Fringe Basin Development <i>(including Mocho Sub basin I)</i>	--	--	--	--	--	--	--	--	--	--	Not at this time due to low yields and potentially poor water quality.

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Operational Improvements												
Loss Reduction	Reduction of Mocho Demineralization Losses (20% to 15%)	Available during all hydrologic conditions	260	0.23	260	0.230	0	2011 - 2015	\$100,000	\$0	\$30	YES - this is a "no regret" action included in all portfolios.
	Reduction of Unaccounted-for Water	Available during all hydrologic conditions	1,300	1.2	1,300	1.2	2.4	2011 - 2015	\$500,000	\$100,000	\$100	YES - this is a "no regret" action included in all portfolios.
	Reduction of Well Startup Waste	Available during all hydrologic conditions	< 100	< 0.1	< 100	< 0.1	0	--	--	--	--	Not at this time due to low yield.
	Reduction of Cawelo and Semitropic Losses	--	--	--	--	--	--	--	--	--	--	Not at this time due to potentially insurmountable institutional and political barriers.

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			af	mgd	af	mgd			Capital Cost, \$ ^(f)	Annual Operation and Maintenance Cost, \$/year ^(g)	Total Amortized Cost, \$/acre-foot ^(h)	
Recharge Capacity	Enhance Existing In-Lieu Recharge Program	Depends on hydrologic conditions	0	0	Additional Recharge in Main Basin: 500 to 830 af/yr	Additional Recharge in Main Basin: 0.4 to 0.7	0	2011 - 2020	\$200,000	\$40,000 to \$66,400	\$100 to \$110 per acre-foot of additional storage	YES - this is a "no regret" action included in all portfolios.
	Aquifer Storage and Recovery in Main Basin	Depends on hydrologic conditions & system capacity	0	0	Additional recharge in Main Basin: 3,000 af/yr	Additional Supply in Main Basin: 2.7	0	2015 - 2020	\$2,400,000	\$600,000	\$260 per acre-foot of additional storage	Not at this time due to like benefit already planned as part of the Chain of Lakes.
	In Stream Infiltration via Swales	Depends on hydrologic conditions	0	0	Additional Supply in Main Basin: 830 af/yr	Additional Recharge in Main Basin: 0.7	0	2015 - 2020	\$7,800,000	\$1,560,000	\$2600 per acre-foot of additional storage	Not at this time due to like benefit already planned as part of the Chain of Lakes.
Water Conservation												
Potable Demand Reductions (Water Conservation Act of 2009)		Available during all hydrologic conditions	3,000 to 6,000	2.7 to 5.4	3,000 to 6,000	2.7 to 5.4	5.4 to 10.8	2015 - 2020	Depends on the methodology used by each water supply retailer.	Depends on the methodology used by each water supply retailer.	Depends on the methodology used by each water supply retailer.	YES - it was assumed that Zone 7 would continue to work with the water supply retailers to achieved water conservation targets; all portfolios were evaluated assuming 6,000 AF of demand reduction associated with the Water Conservation Act of 2009.

^(a) Availability refers to the hydrologic conditions the water supply is available.

^(b) DRY YEAR YIELD: The supply available during single dry or multiple dry years.

^(c) AVERAGE YIELD: The long-term average supply available over various hydrologic conditions.

^(d) Capacity available to help meet maximum day demands during the summer months. Unless limited by facilities, based on a peaking factor of 2.0 times the average supply.

^(e) Potential timing is the projected years that the supply would become available to Zone 7, after planning, design, CEQA, and construction.

^(f) Capital costs include all of the additional one-time costs to obtain, convey, treat, and deliver the water supply.

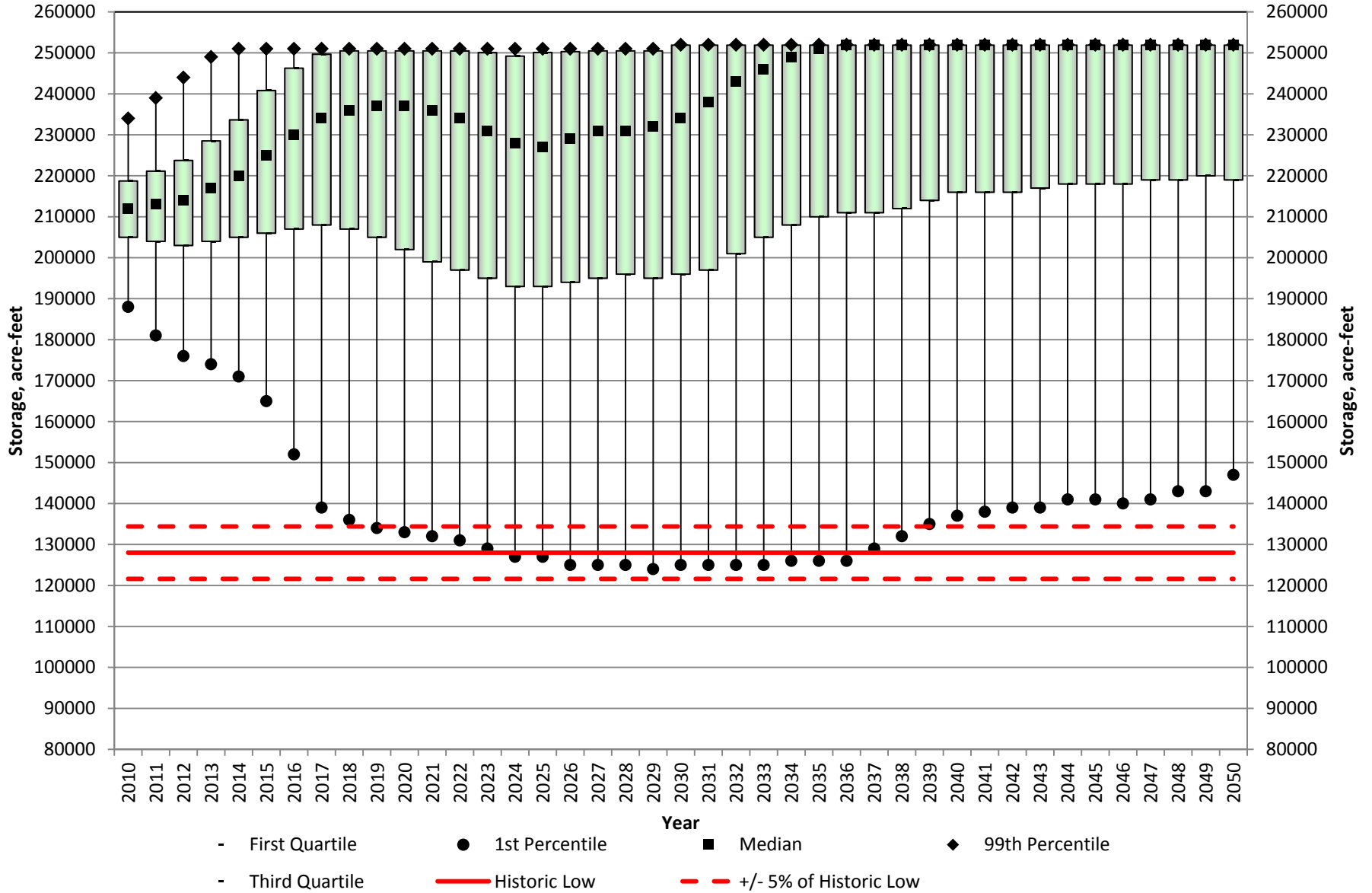
^(g) Operation and Maintenance costs include all of the annual expenses necessary to maintain the supply (e.g., power and chemical costs).

^(h) For comparative purposes, all costs were amortized based on 6 percent interest over a 30 year term.

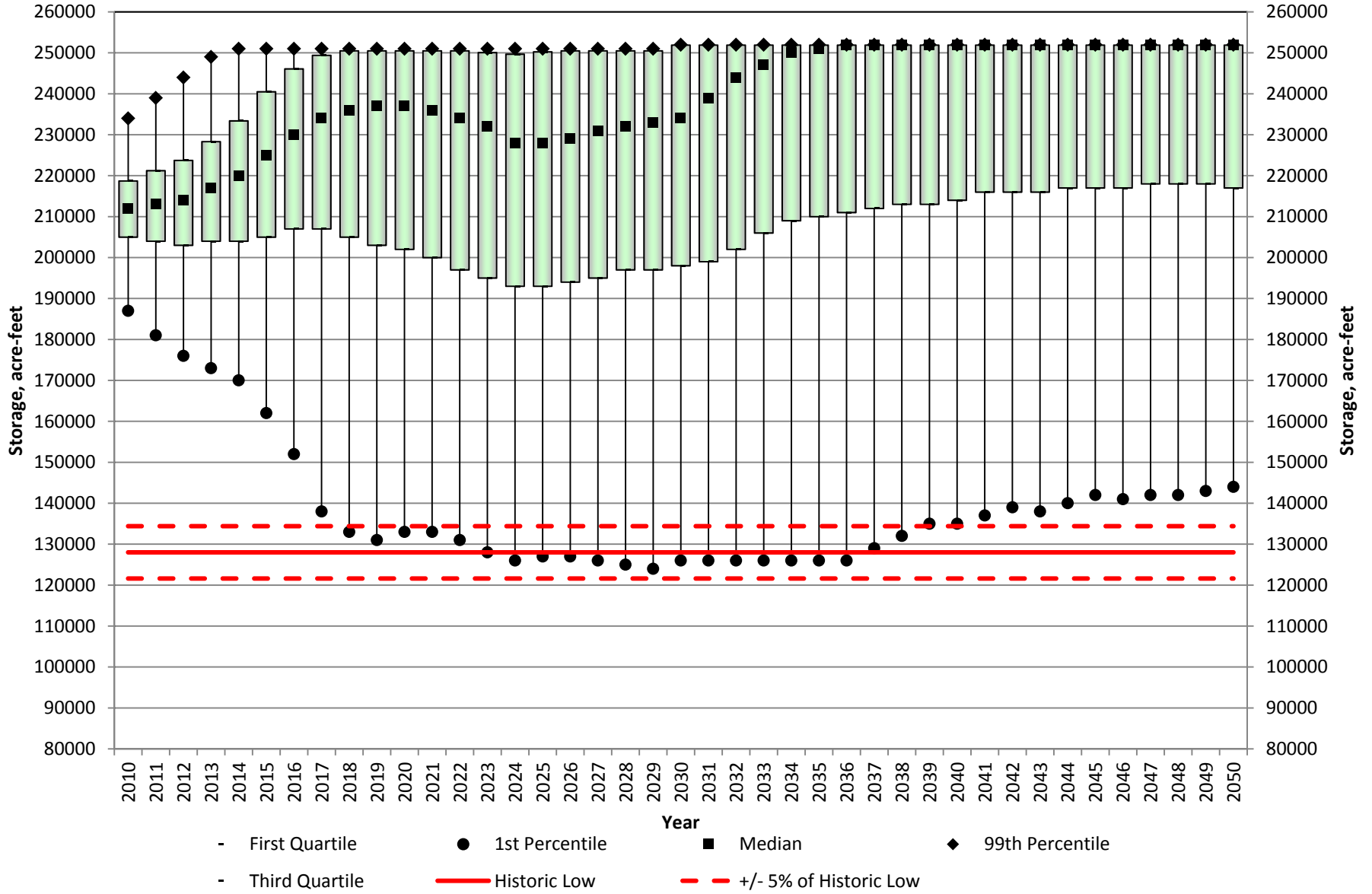
APPENDIX F: KEY SUPPORTING STORAGE AND FACILITY OUTAGE FIGURES

KEY SUPPORTING STORAGE FIGURES FROM THE RISK MODEL

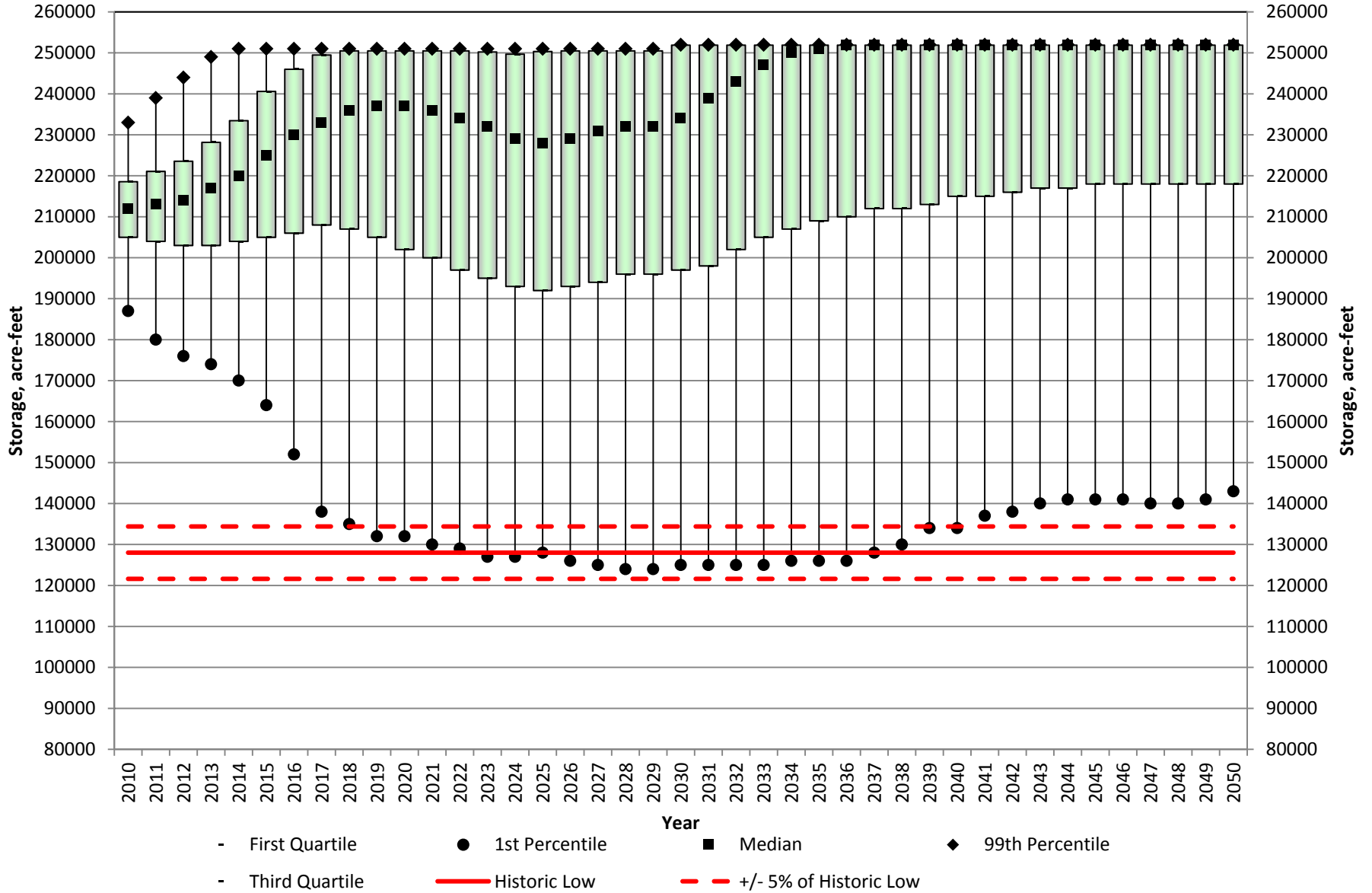
Current Plan - Main Basin Storage: 85%



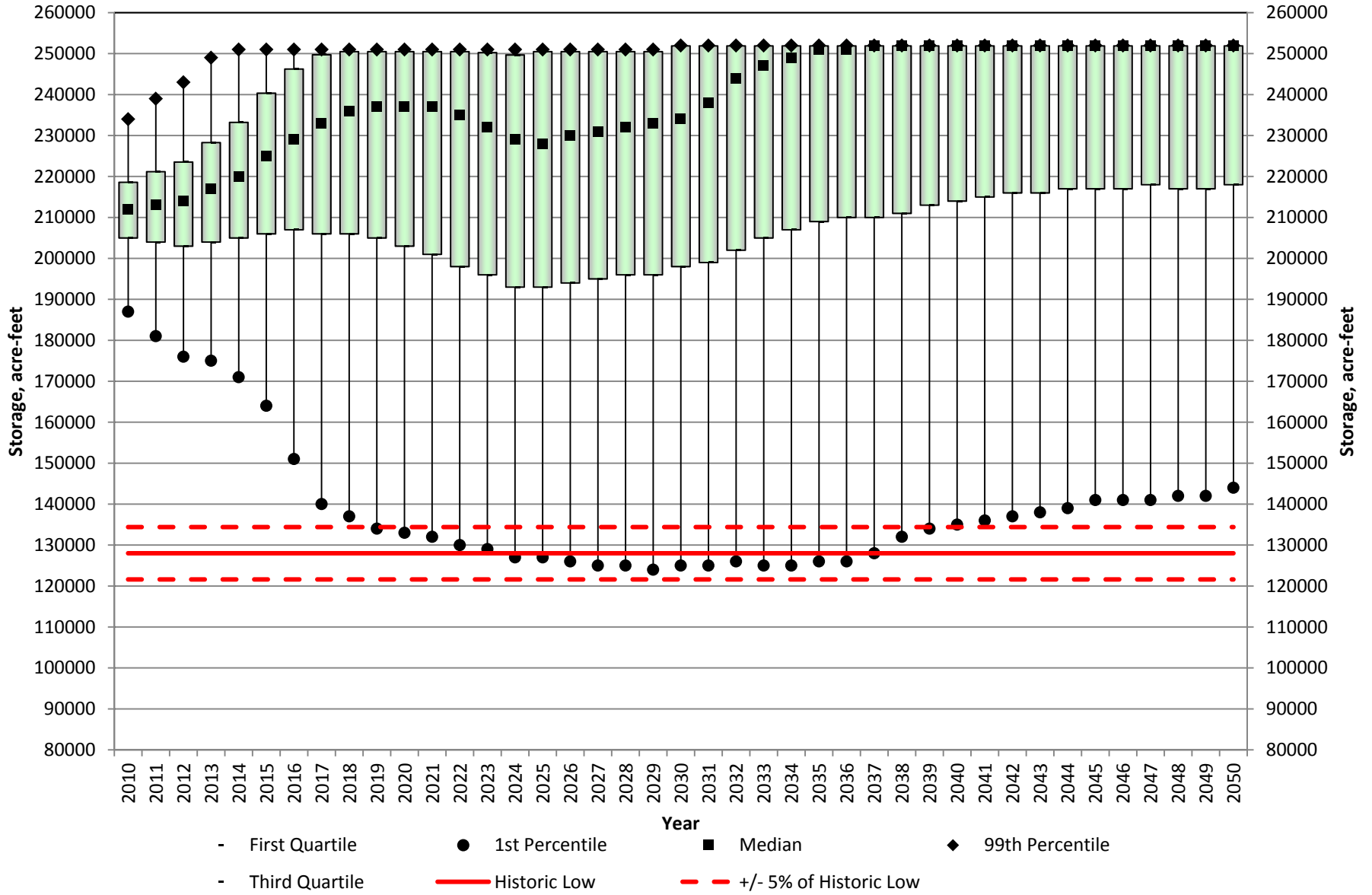
Current Plan - Main Basin Storage: 90%



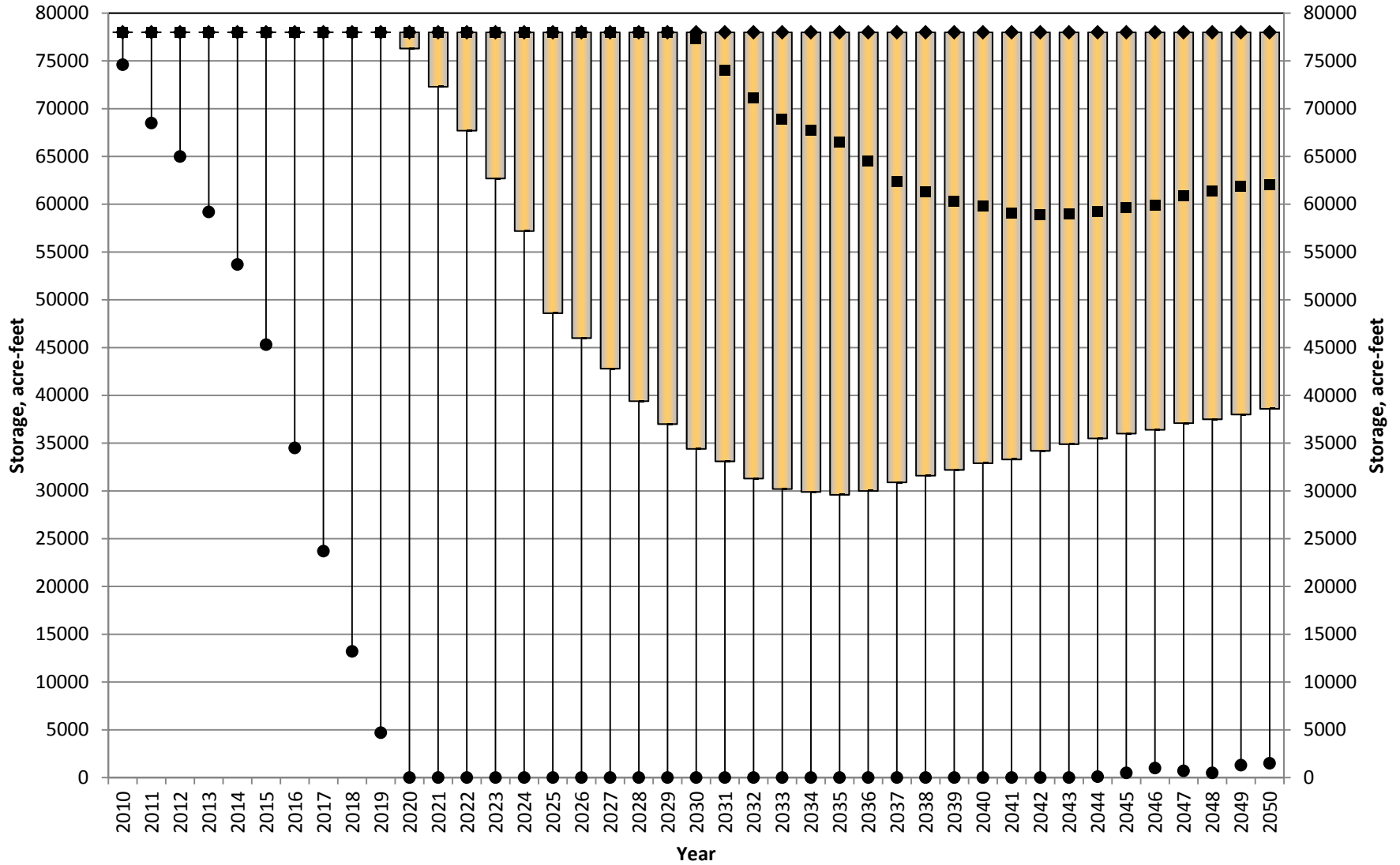
Current Plan - Main Basin Storage: 95%



Current Plan - Main Basin Storage: 99%

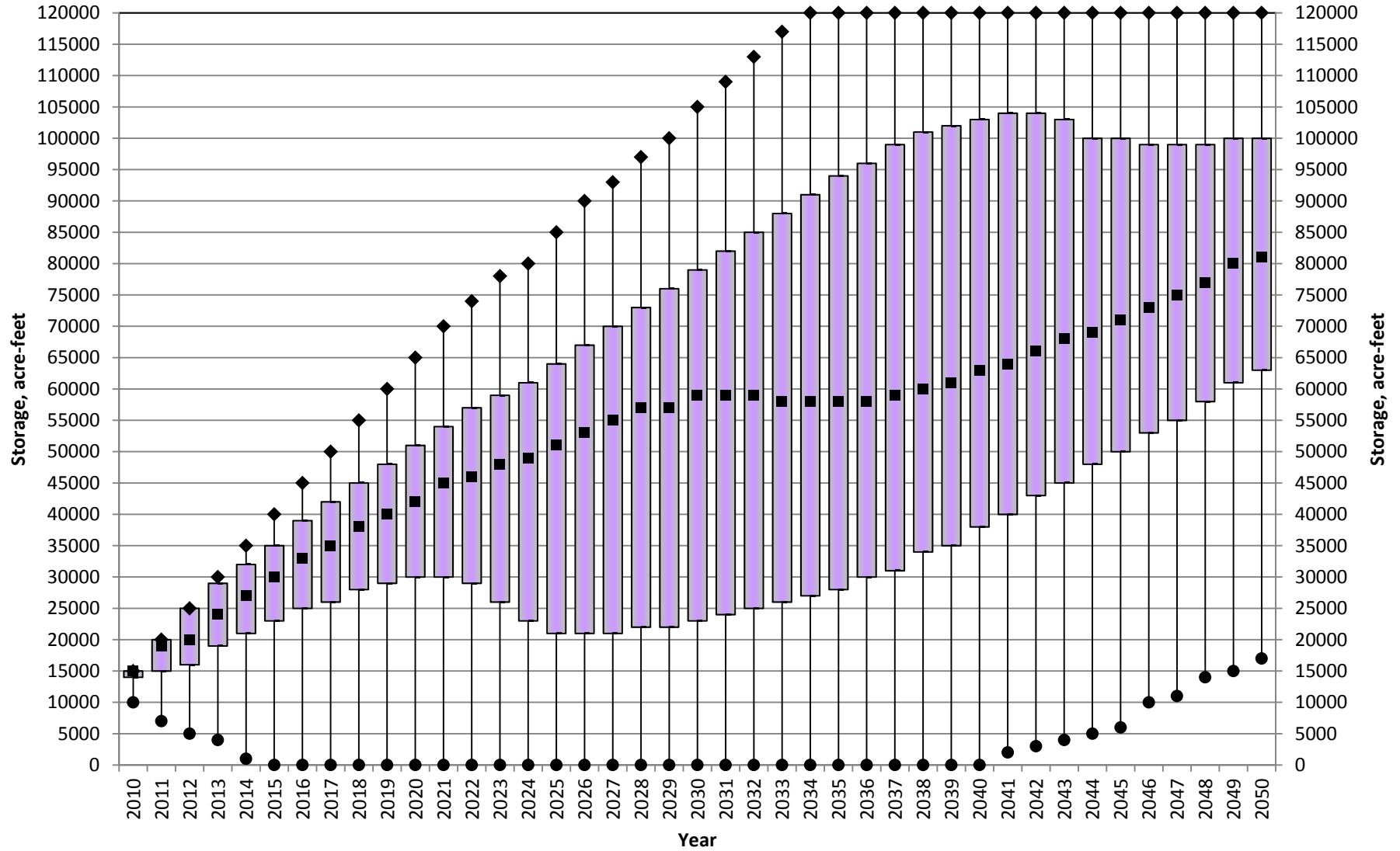


Current Plan - Semitropic: 85%



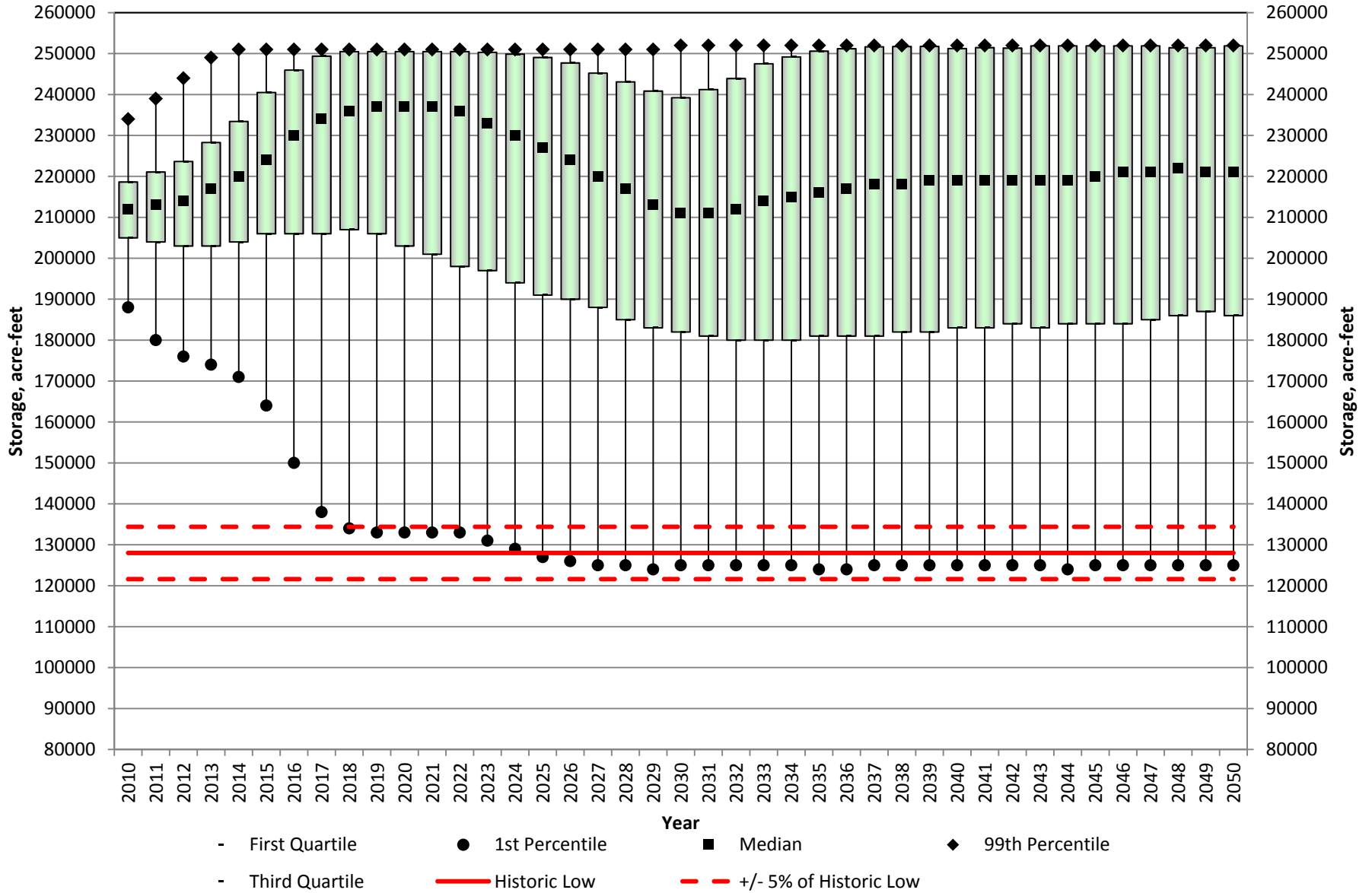
- First Quartile ● 1st Percentile ■ Median ◆ 99th Percentile - Third Quartile

Current Plan - Cawelo: 85%

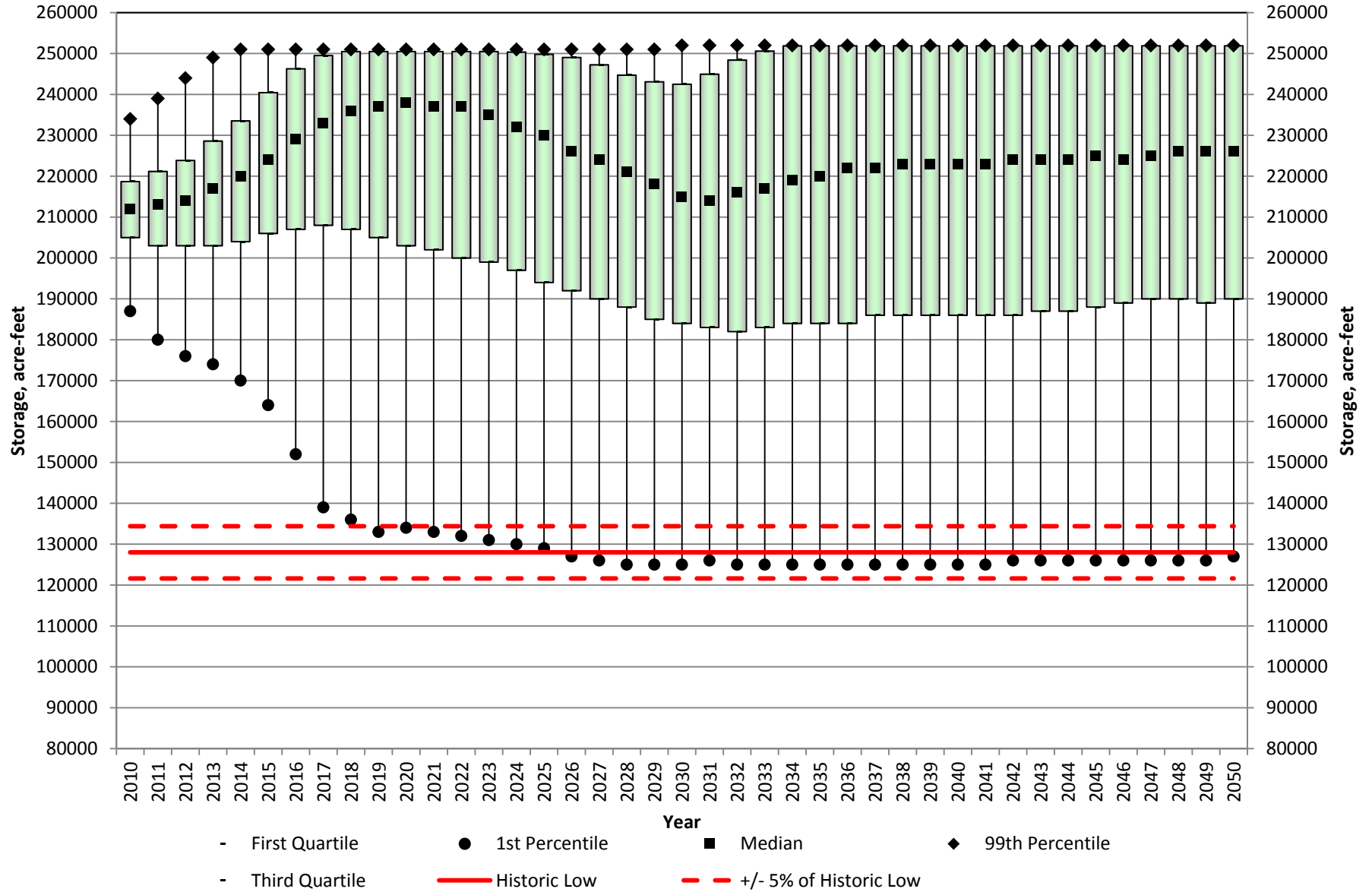


- First Quartile ● 1st Percentile ■ Median ◆ 99th Percentile - Third Quartile

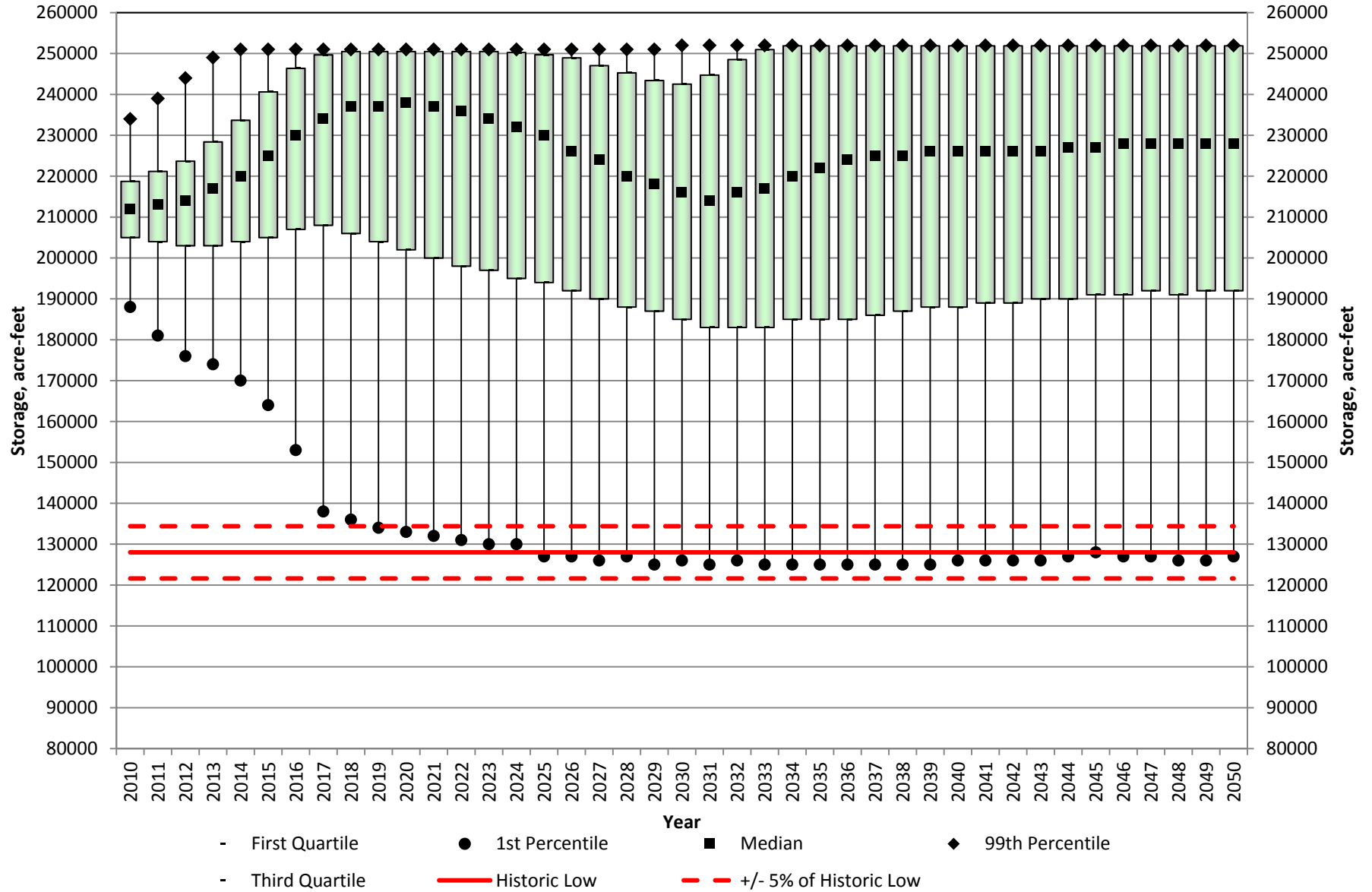
In-Valley - Main Basin Storage: 75%



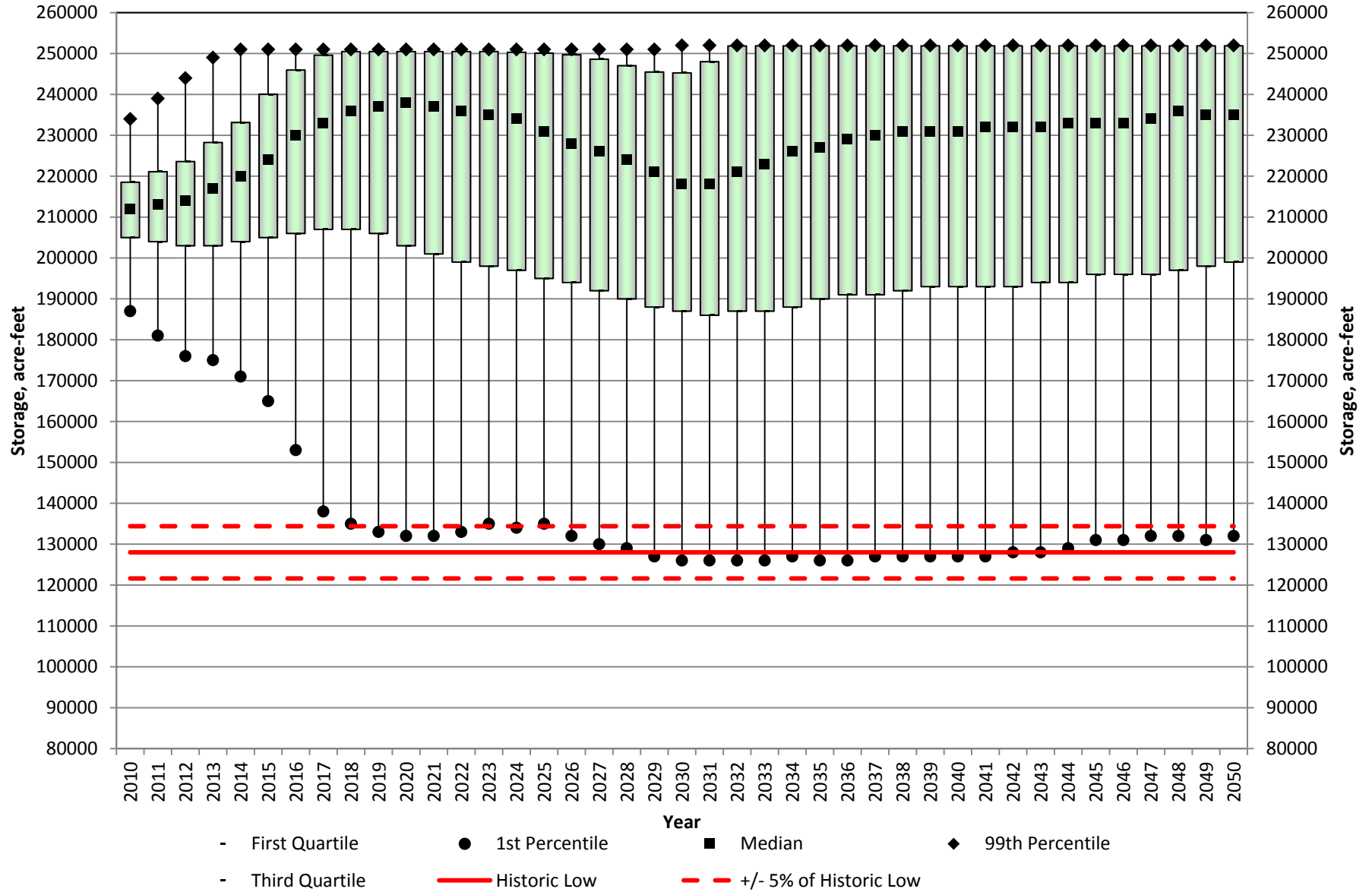
In-Valley - Main Basin Storage: 80%



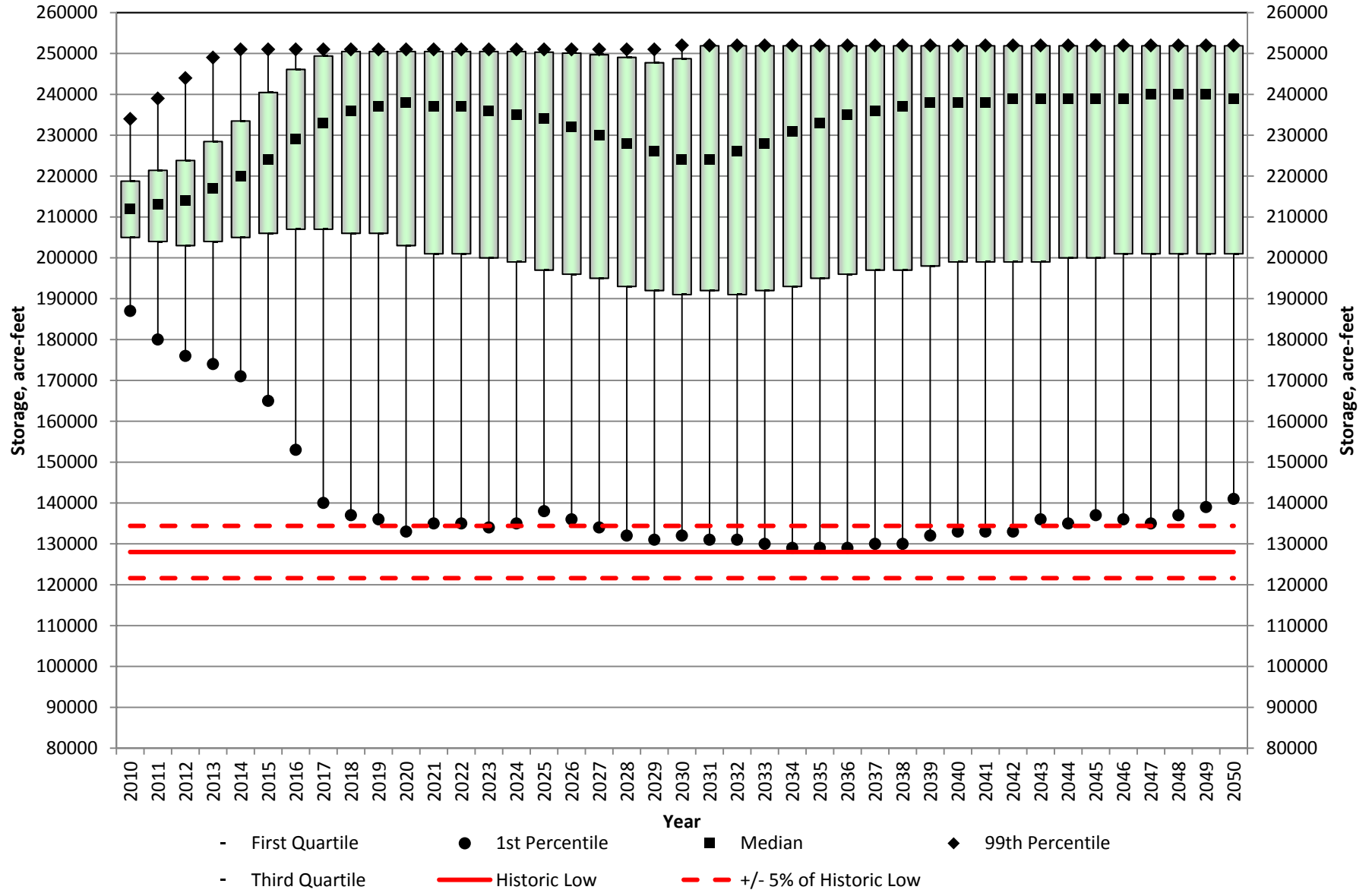
In-Valley - Main Basin Storage: 85%



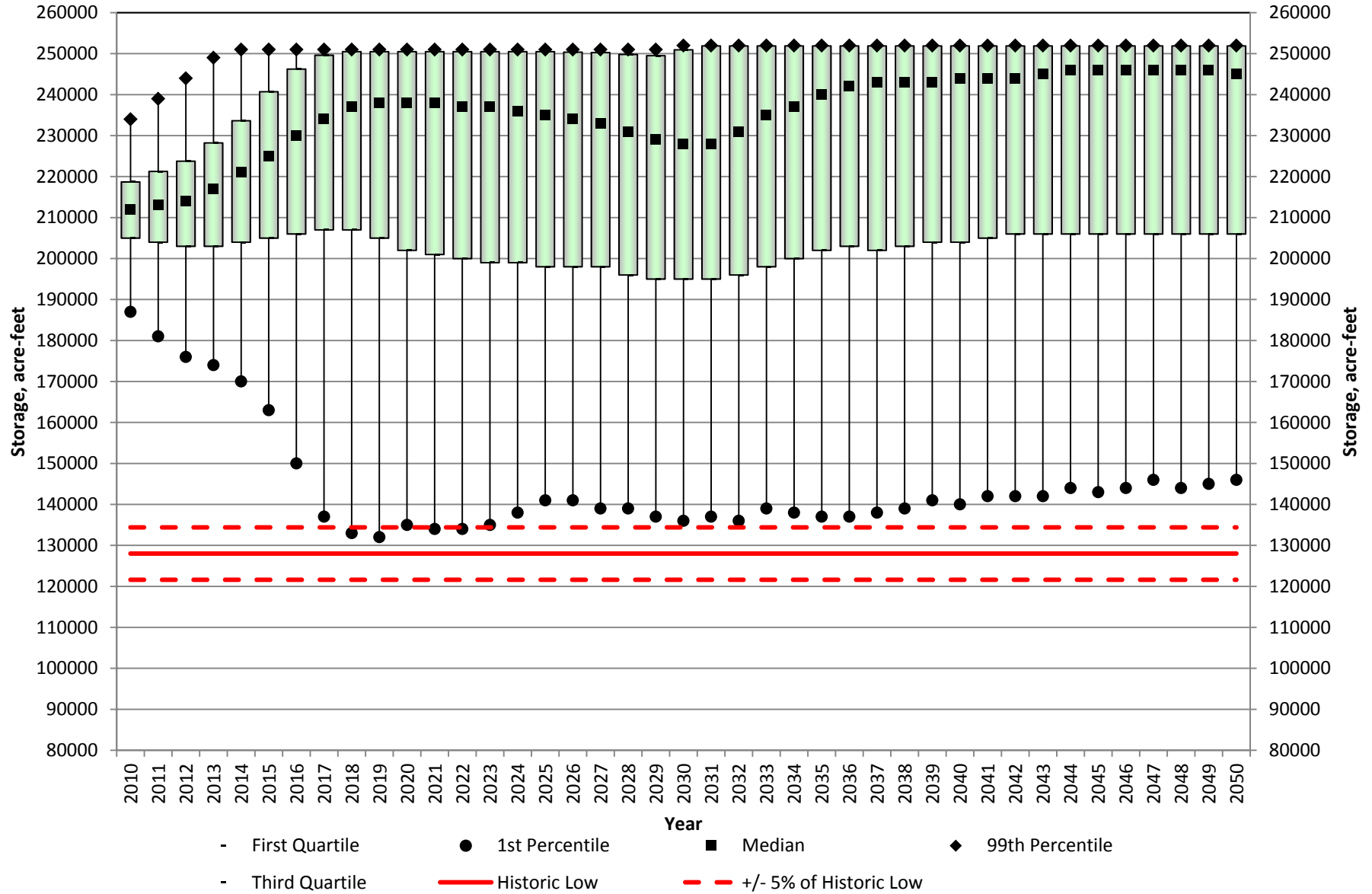
In-Valley - Main Basin Storage: 90%



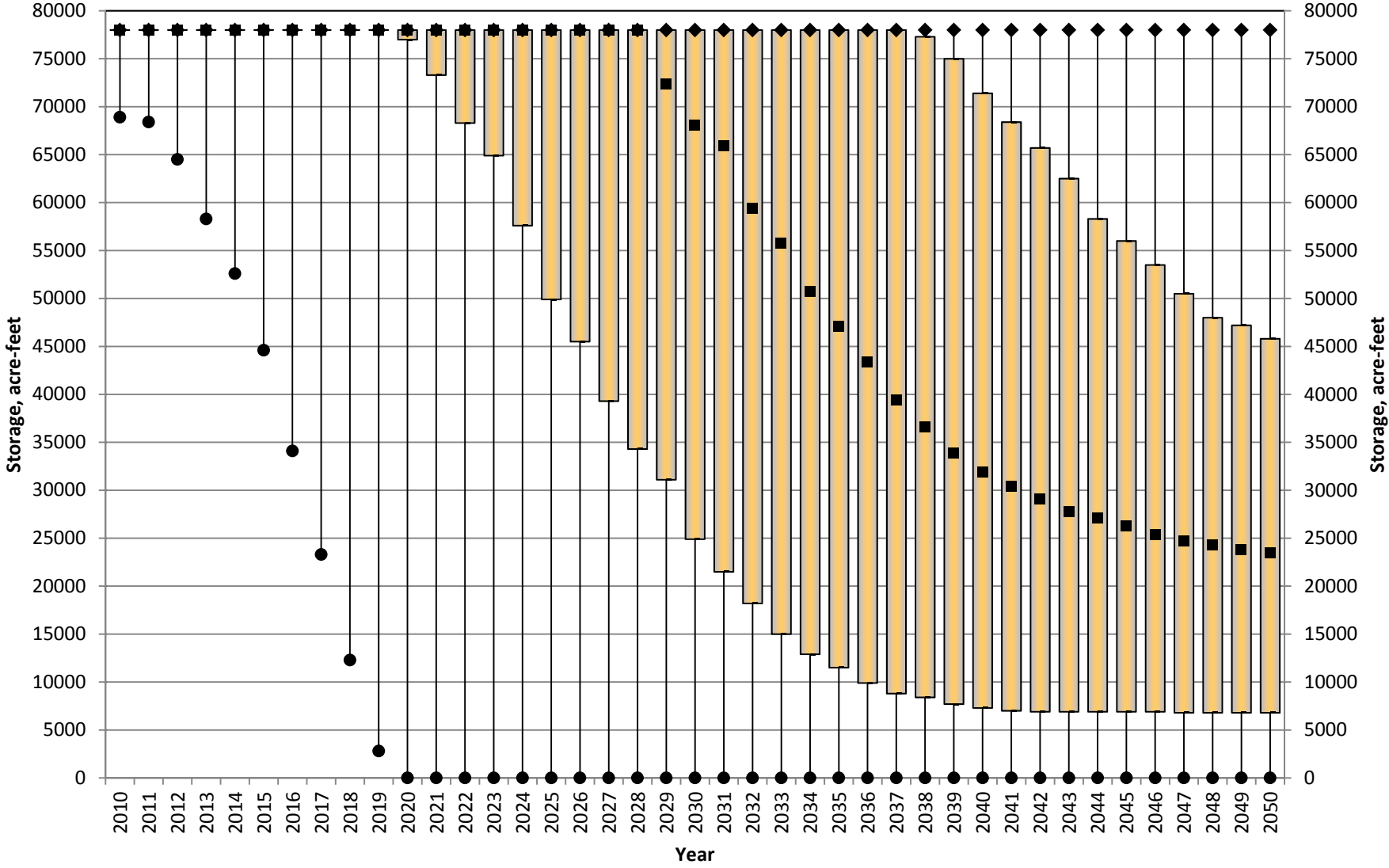
In-Valley - Main Basin Storage: 95%



In-Valley - Main Basin Storage: 99%

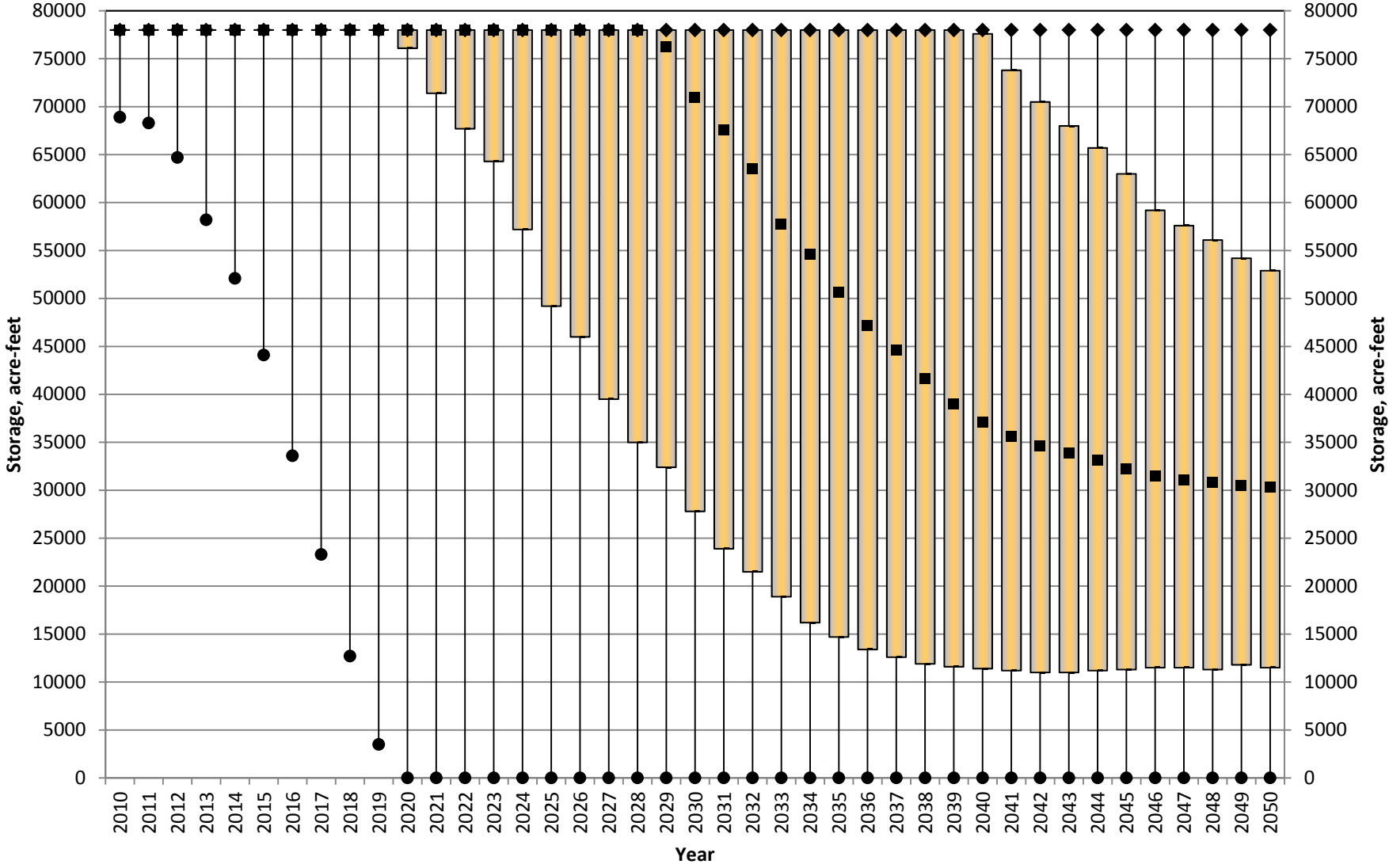


In-Valley - Semitropic: 75%



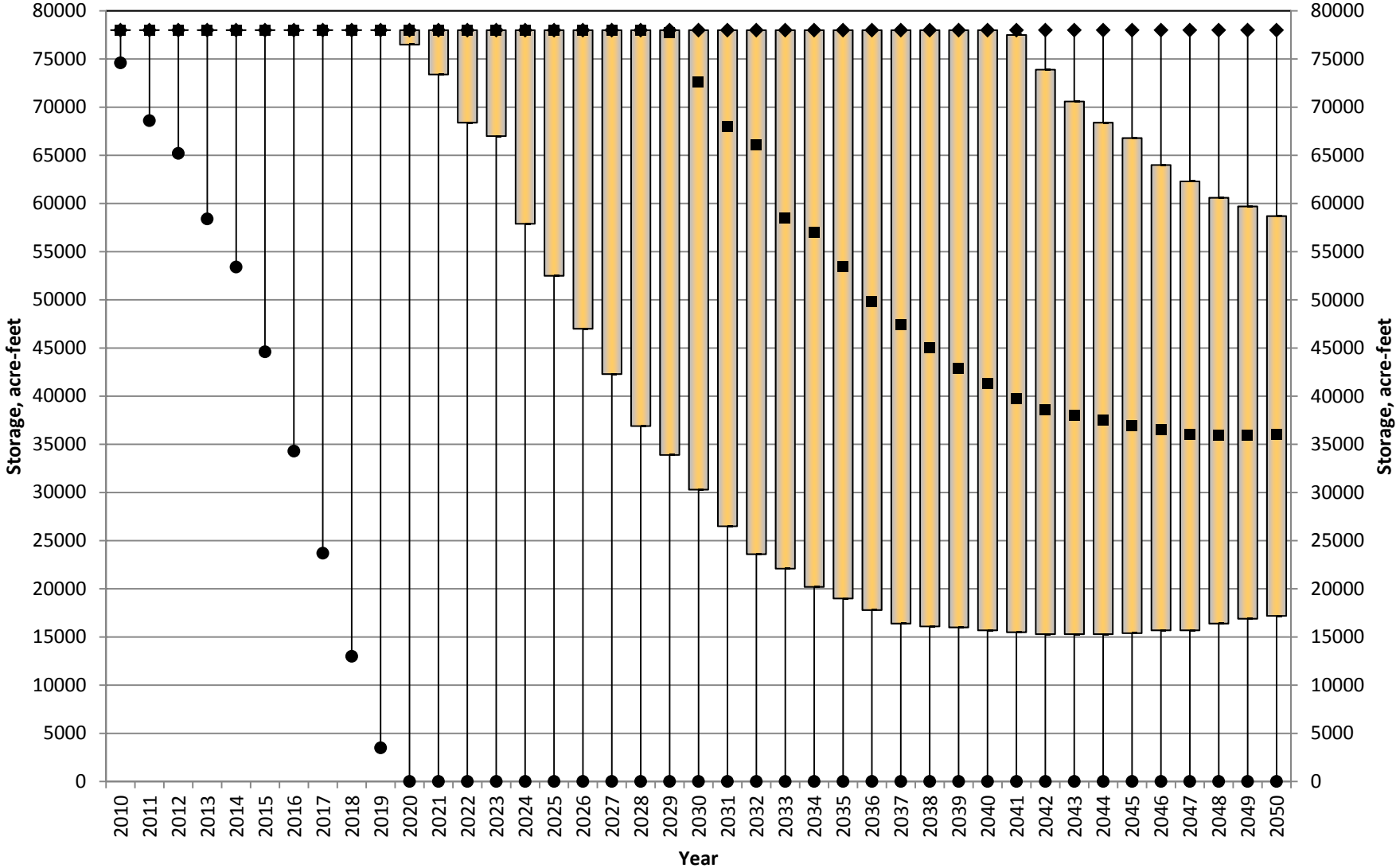
- First Quartile ● 1st Percentile ■ Median ◆ 99th Percentile - Third Quartile

In-Valley - Semitropic: 85%



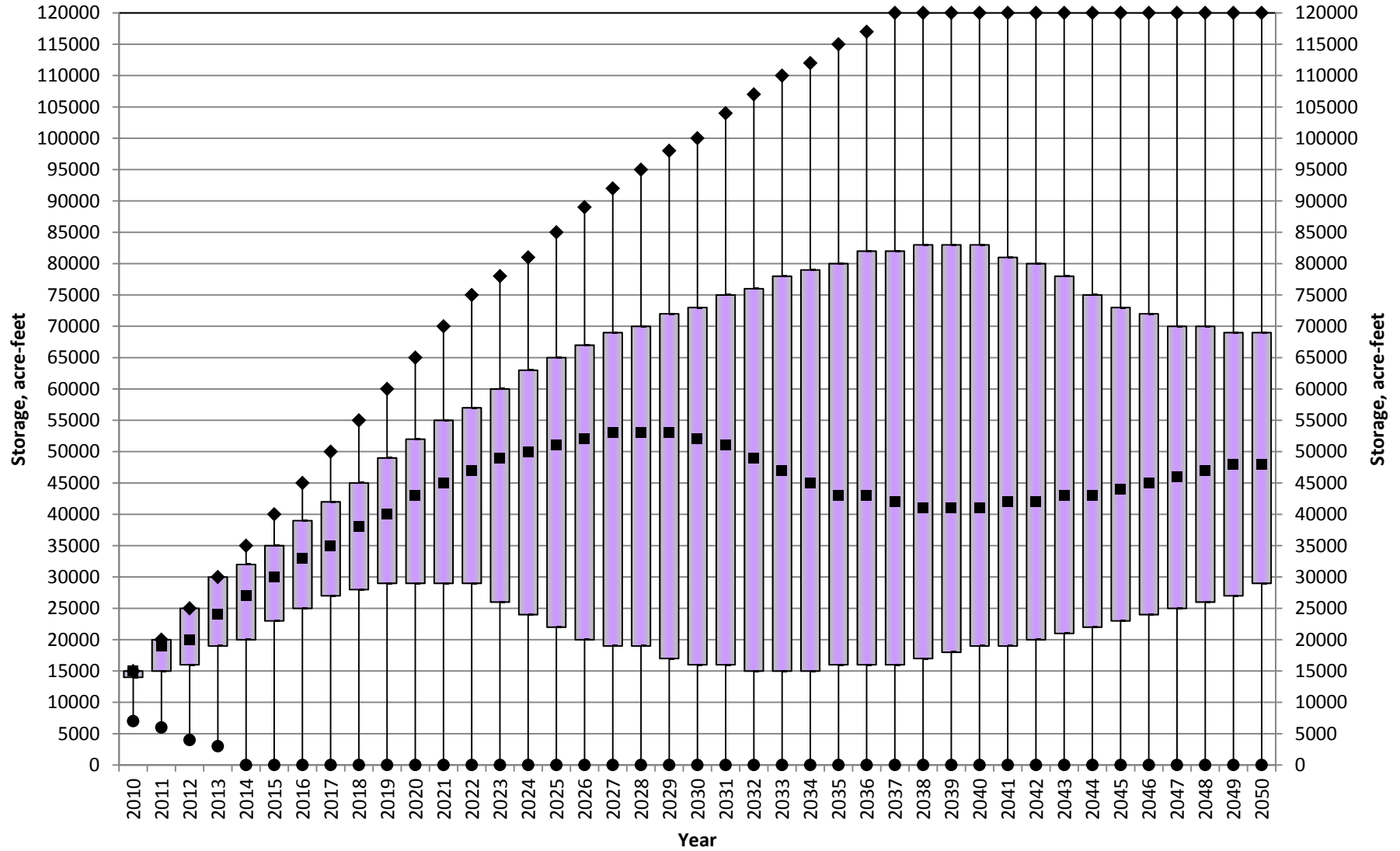
- First Quartile ● 1st Percentile ■ Median ◆ 99th Percentile - Third Quartile

In-Valley - Semitropic: 90%



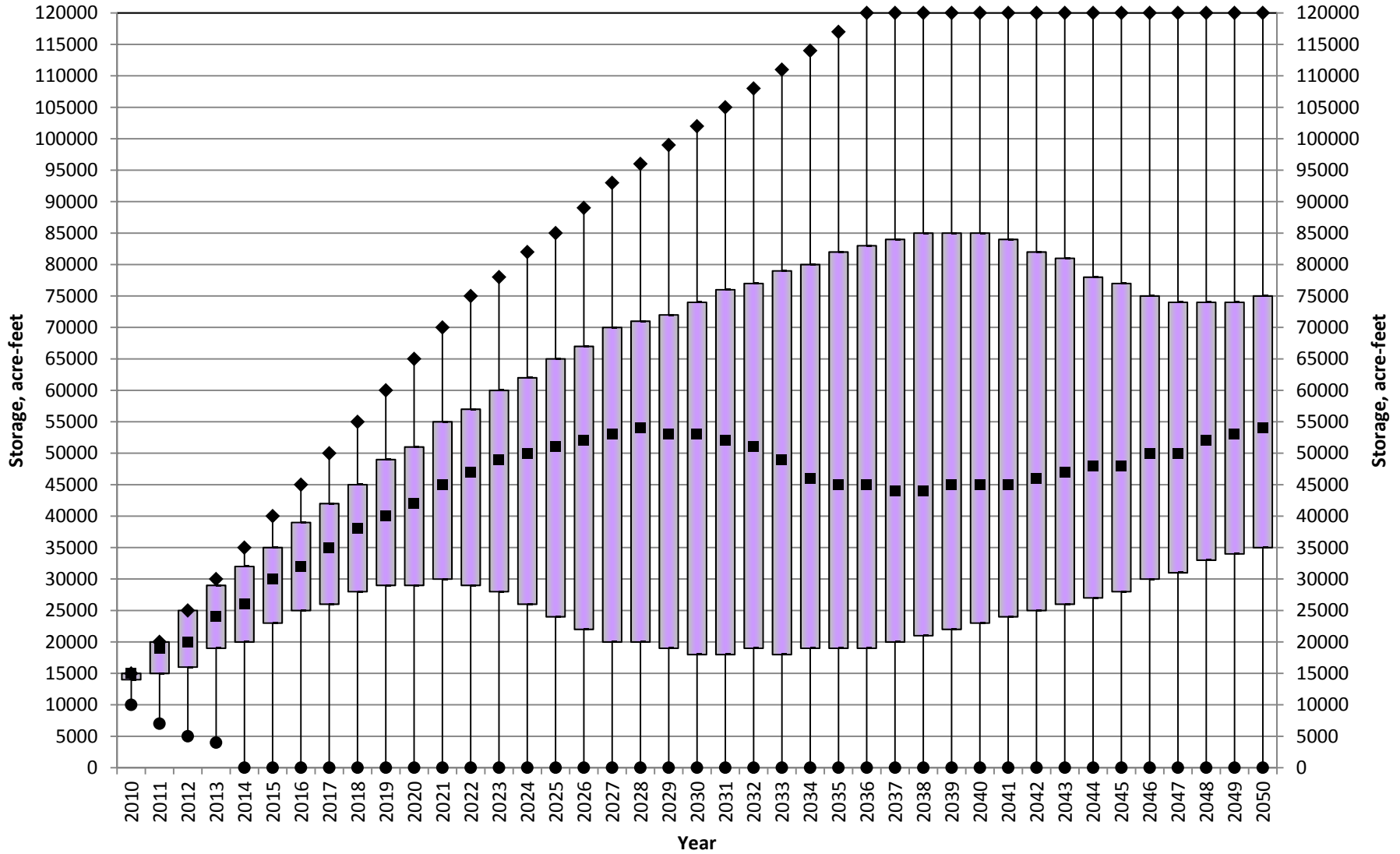
- First Quartile ● 1st Percentile ■ Median ◆ 99th Percentile - Third Quartile

In-Valley - Cawelo: 85%



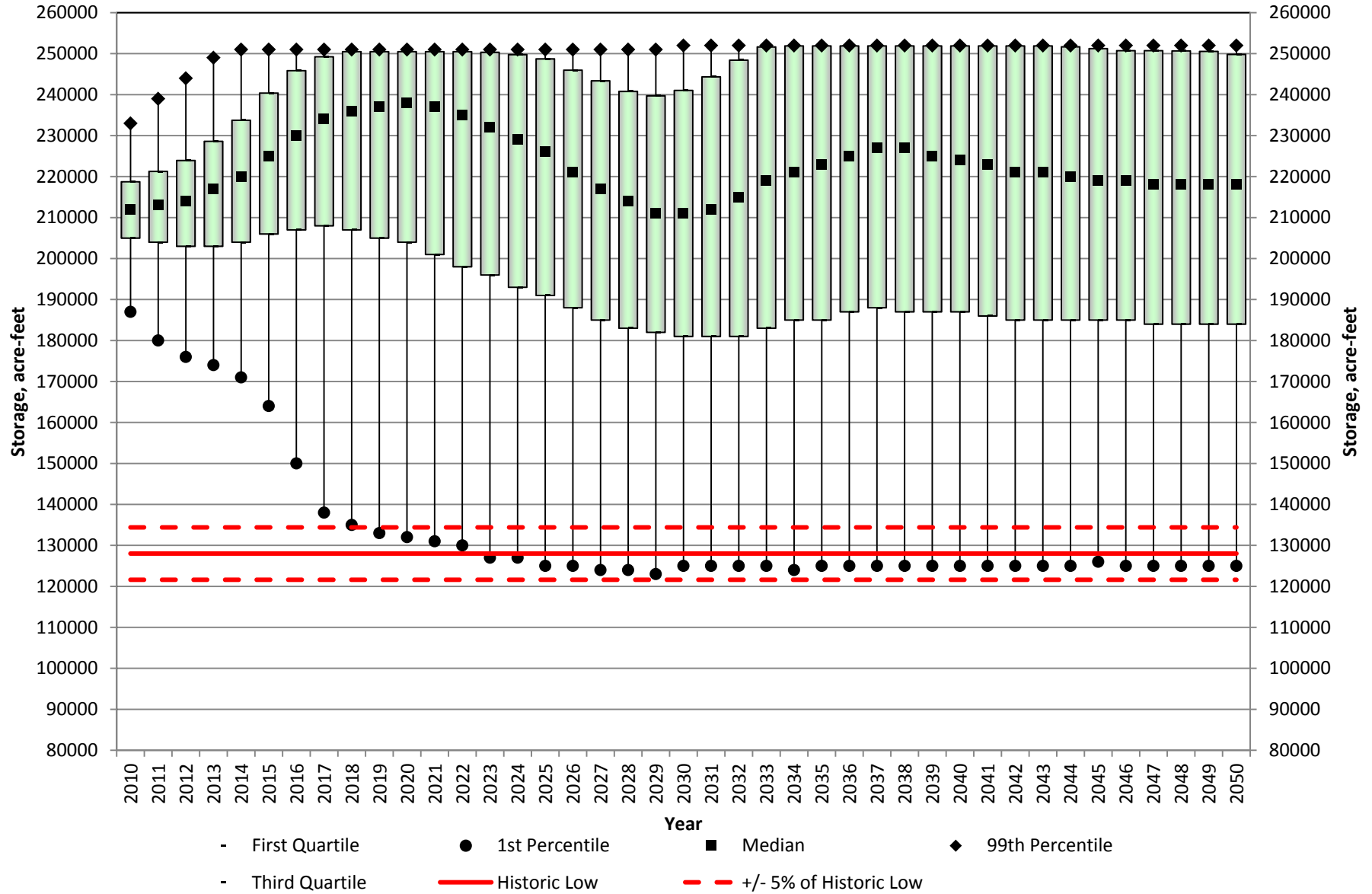
- First Quartile
● 1st Percentile
■ Median
◆ 99th Percentile
- Third Quartile

In-Valley - Cawelo: 90%

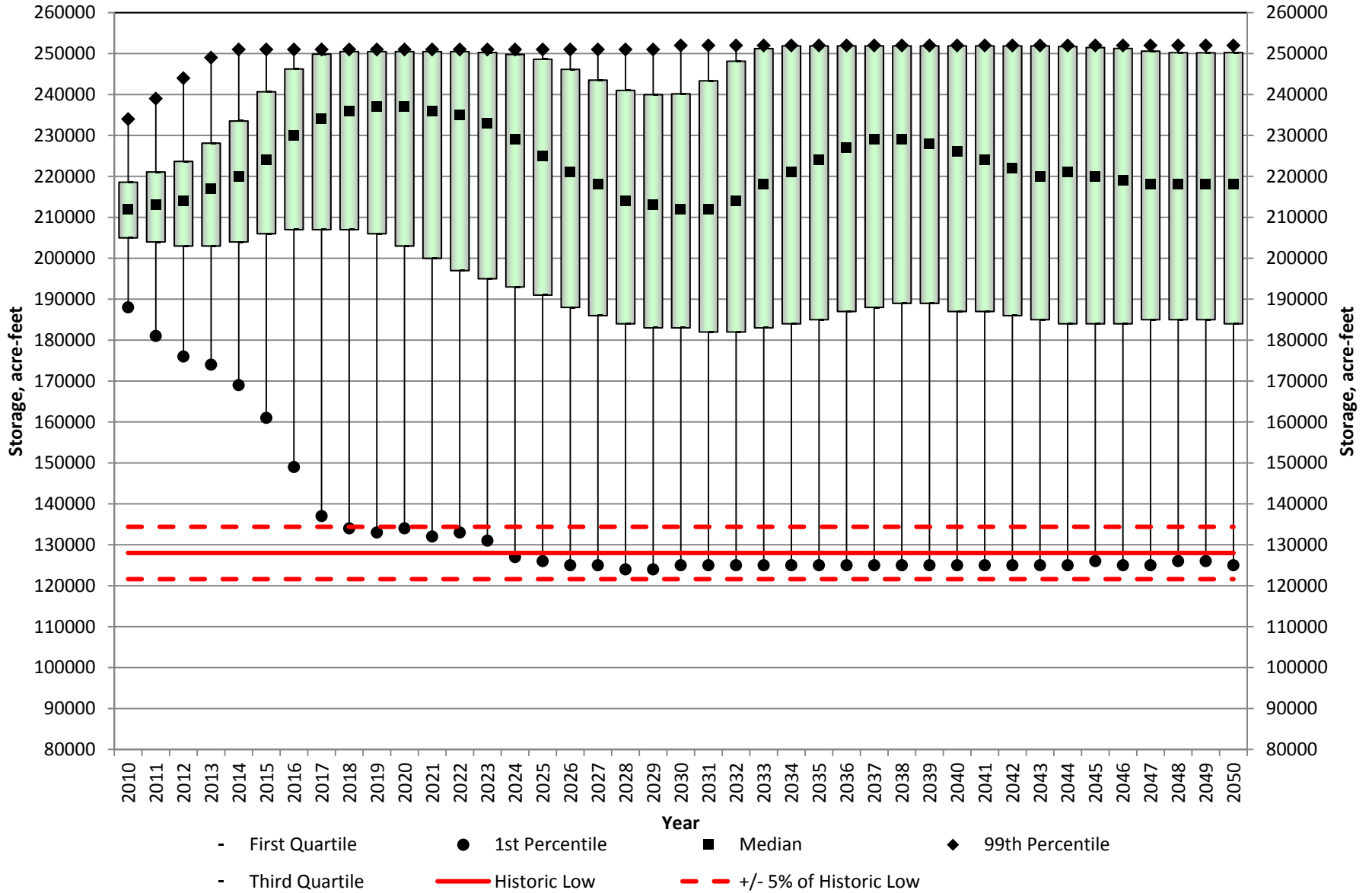


- First Quartile ● 1st Percentile ■ Median ◆ 99th Percentile - Third Quartile

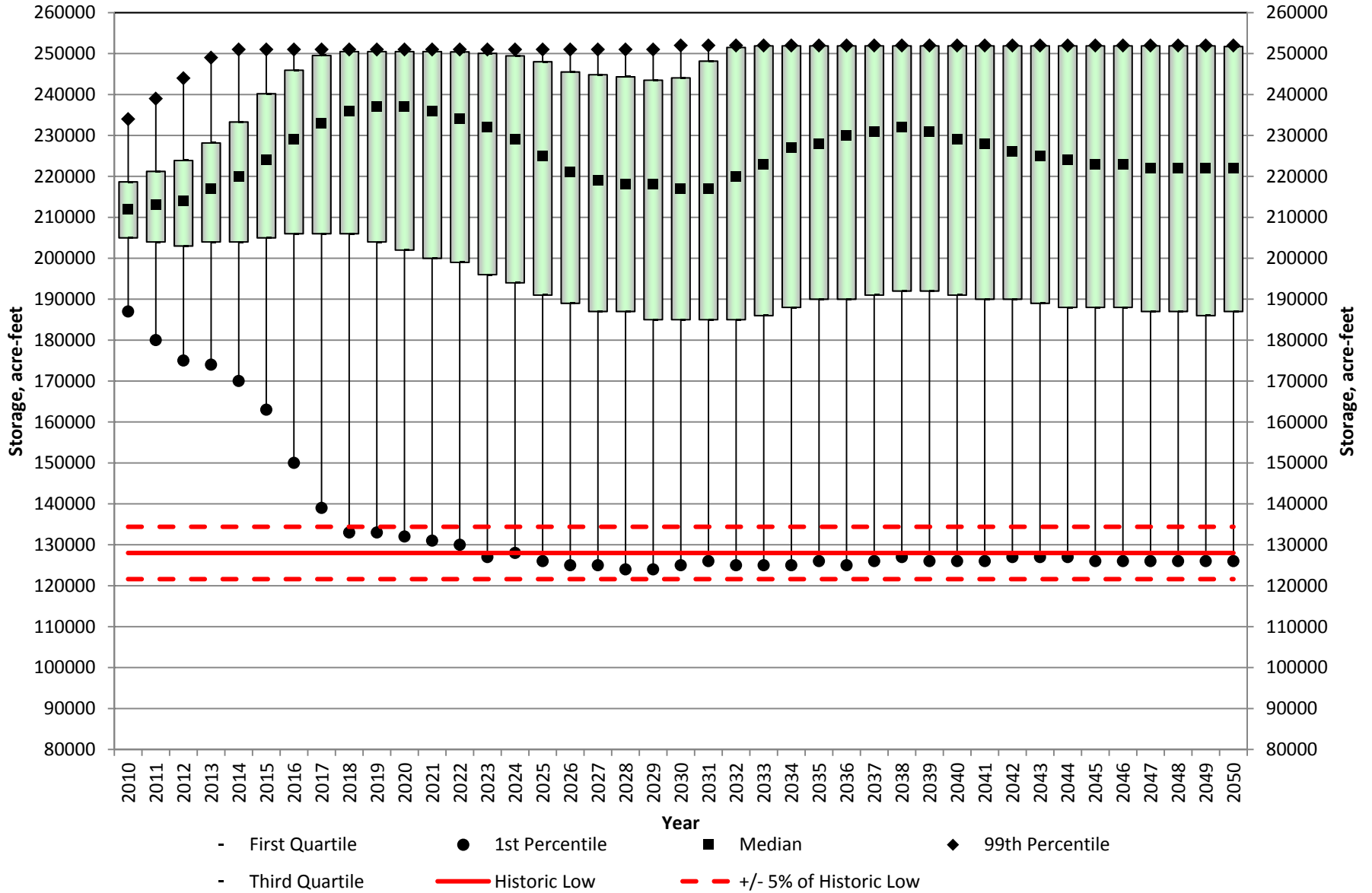
Intertie - Main Basin Storage: 75%



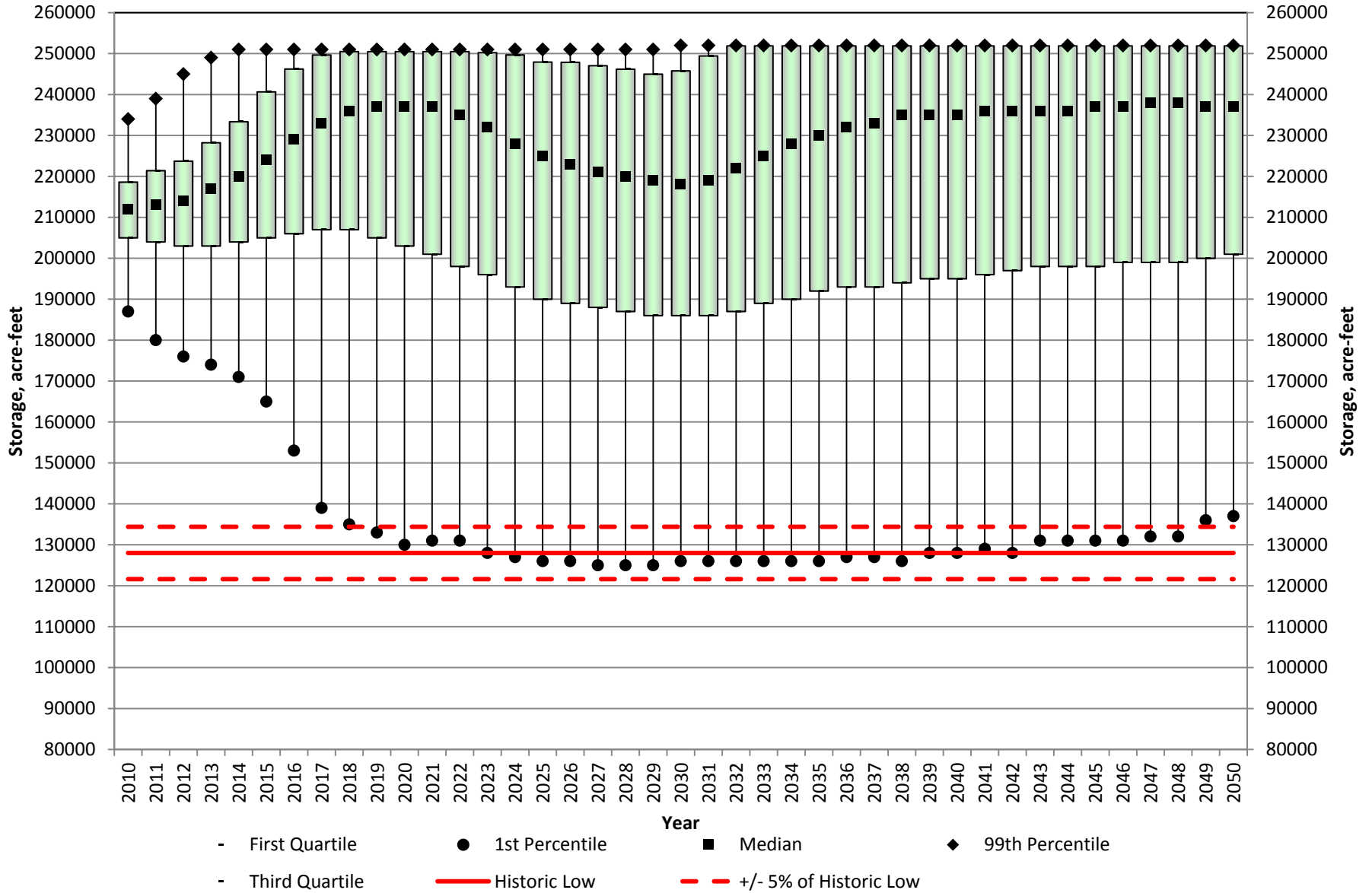
Intertie - Main Basin Storage: 80%



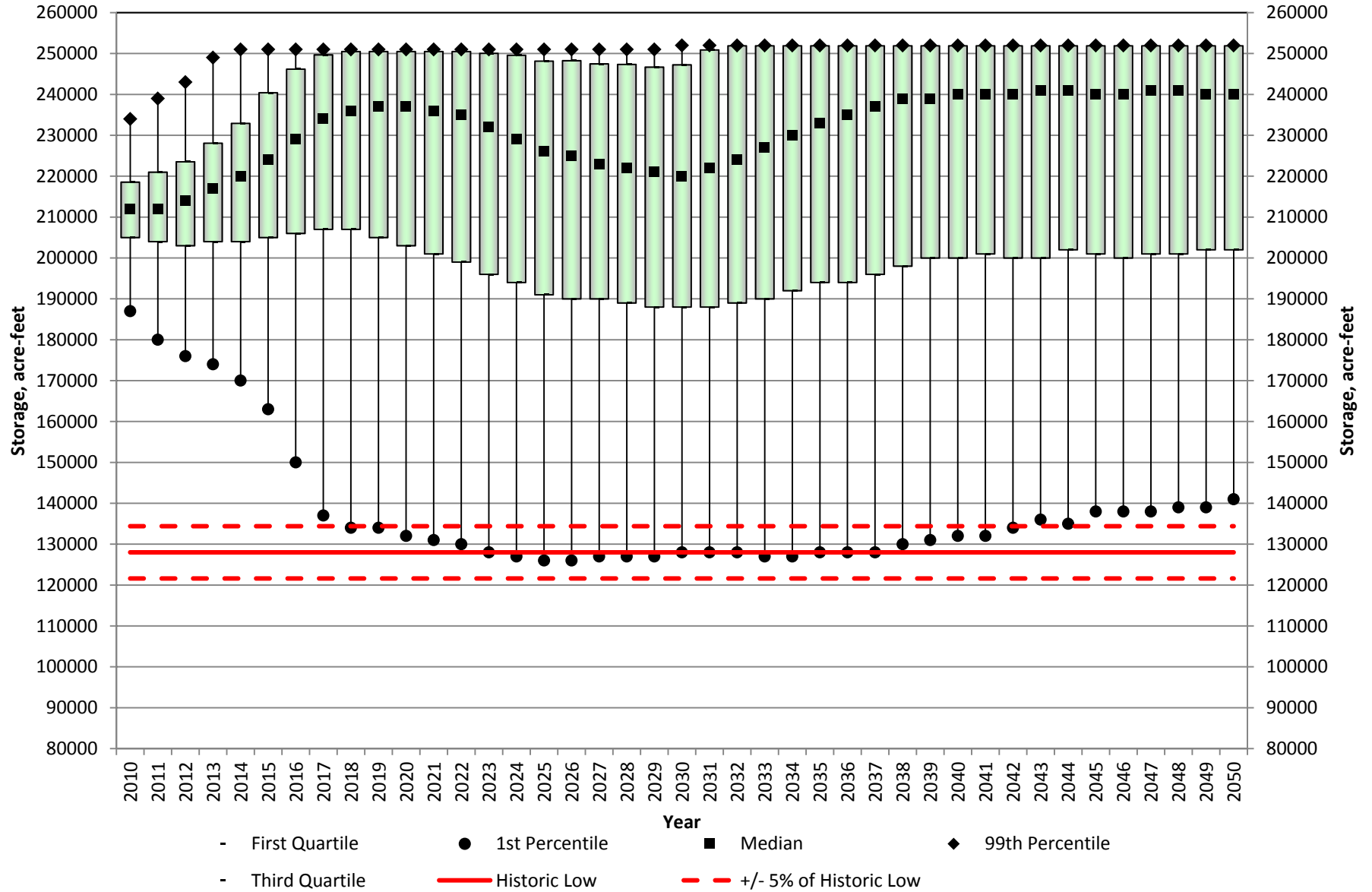
Intertie - Main Basin Storage: 85%



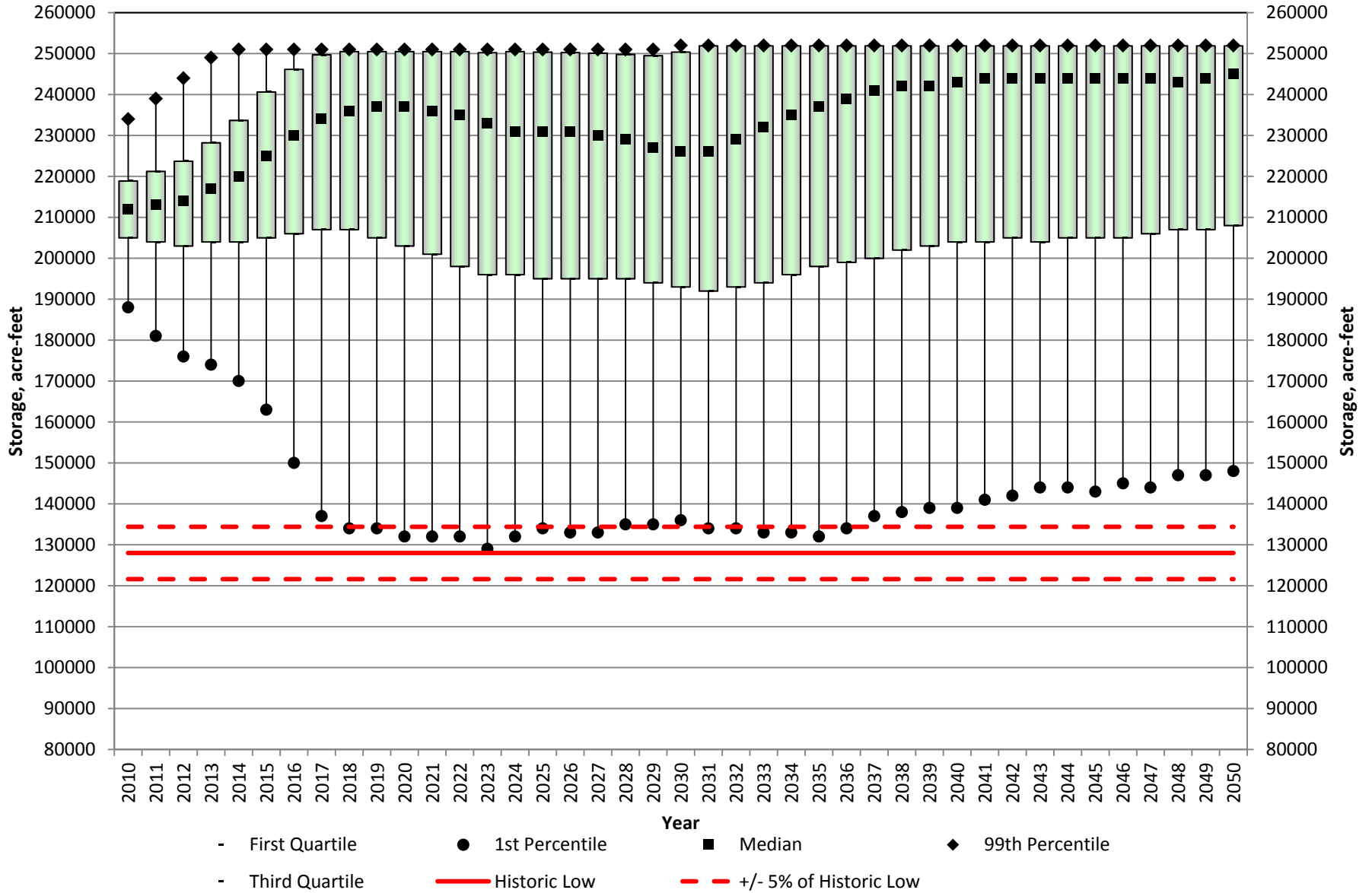
Intertie - Main Basin Storage: 90%



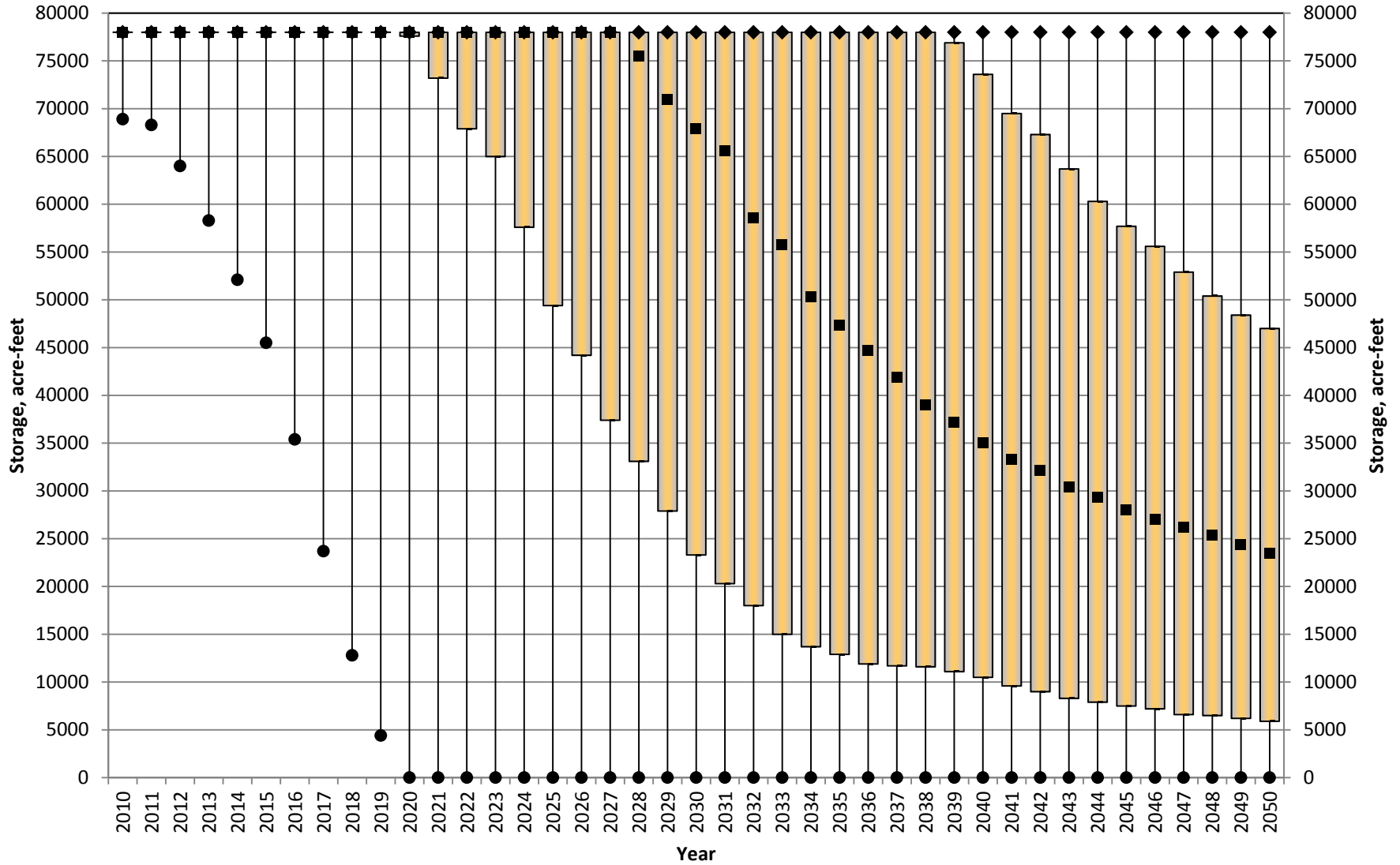
Intertie - Main Basin Storage: 95%



Intertie - Main Basin Storage: 99%

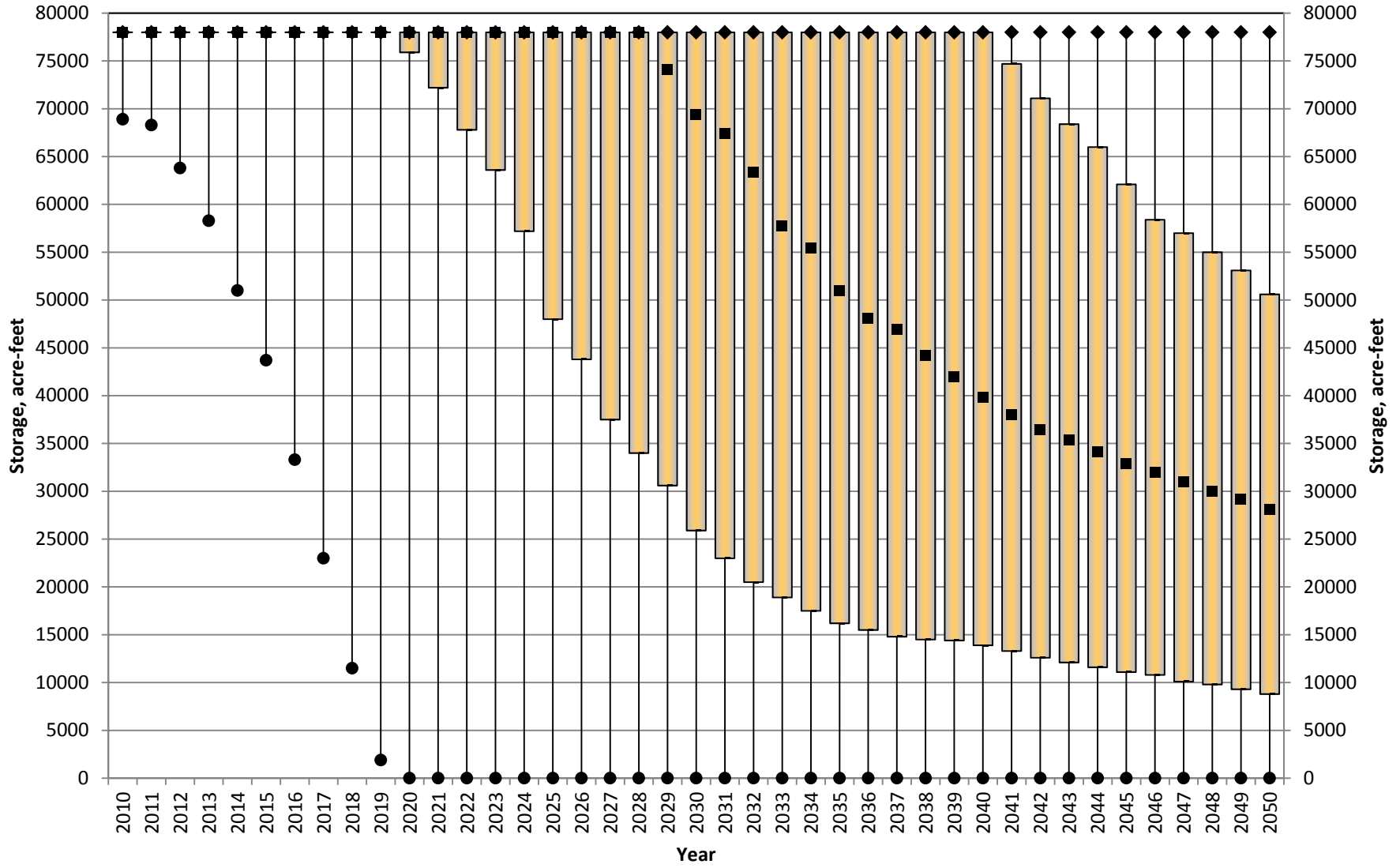


Intertie - Semitropic: 75%



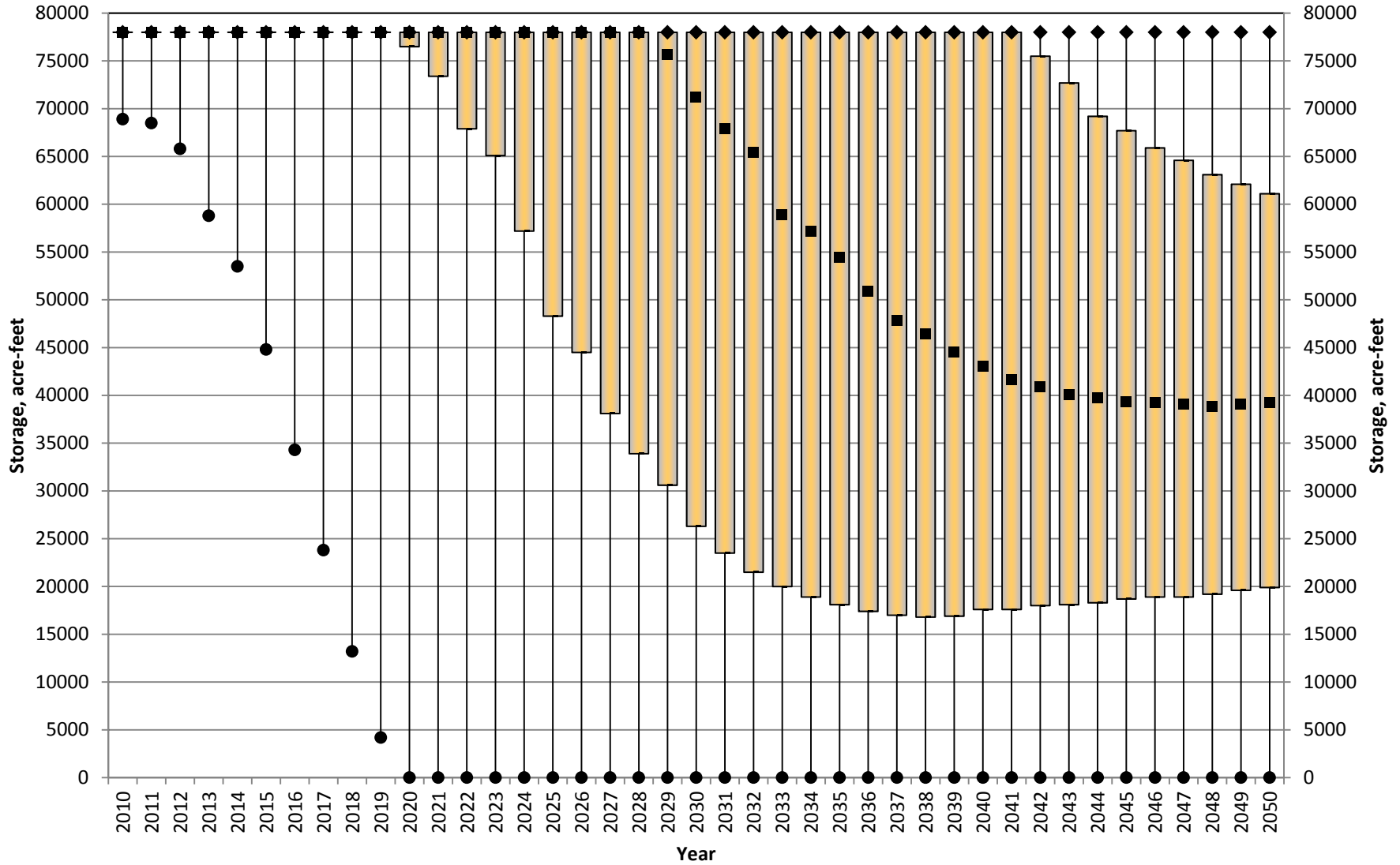
- First Quartile ● 1st Percentile ■ Median ◆ 99th Percentile - Third Quartile

Intertie - Semitropic: 85%



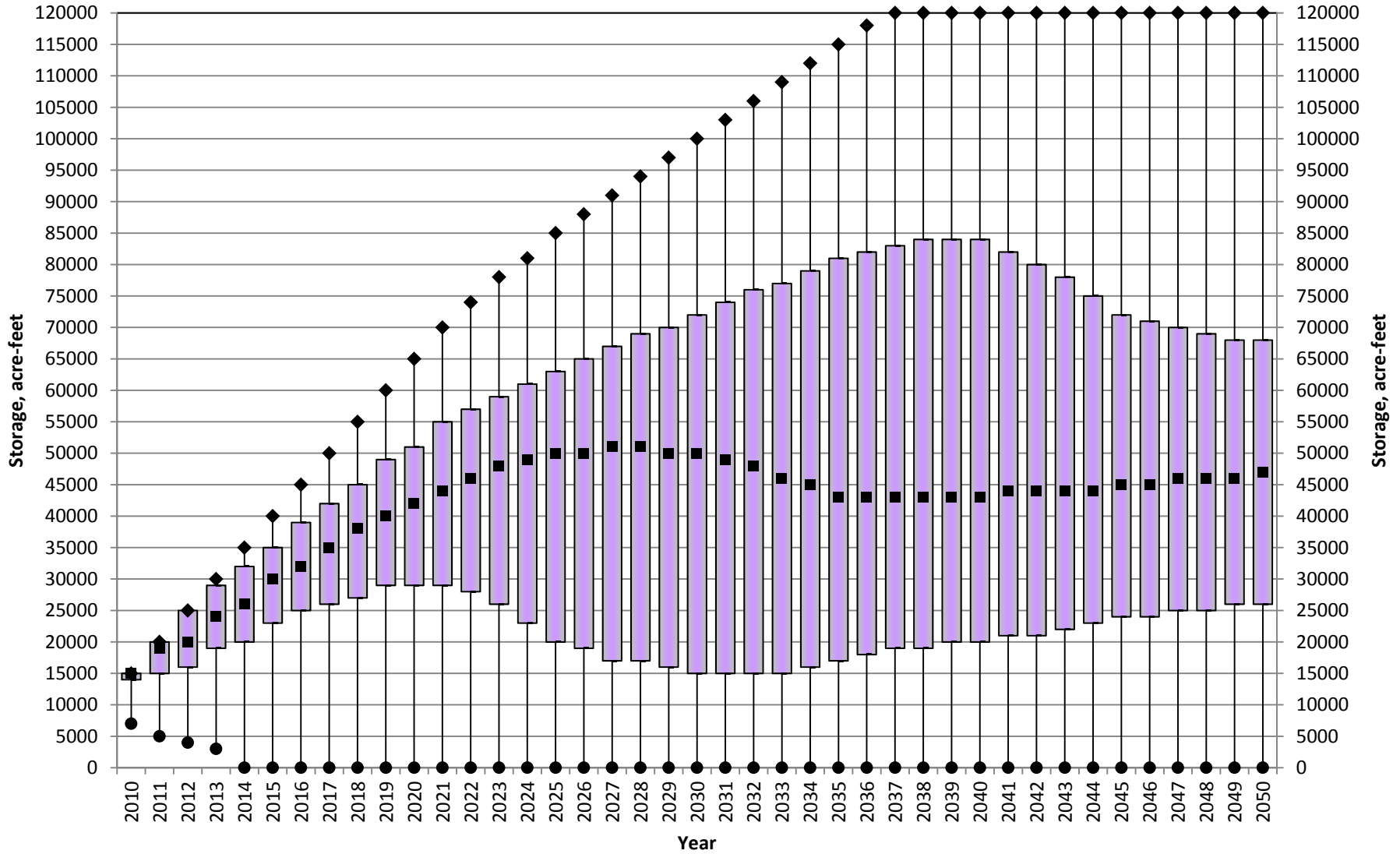
- First Quartile ● 1st Percentile ■ Median ◆ 99th Percentile - Third Quartile

Intertie - Semitropic: 90%



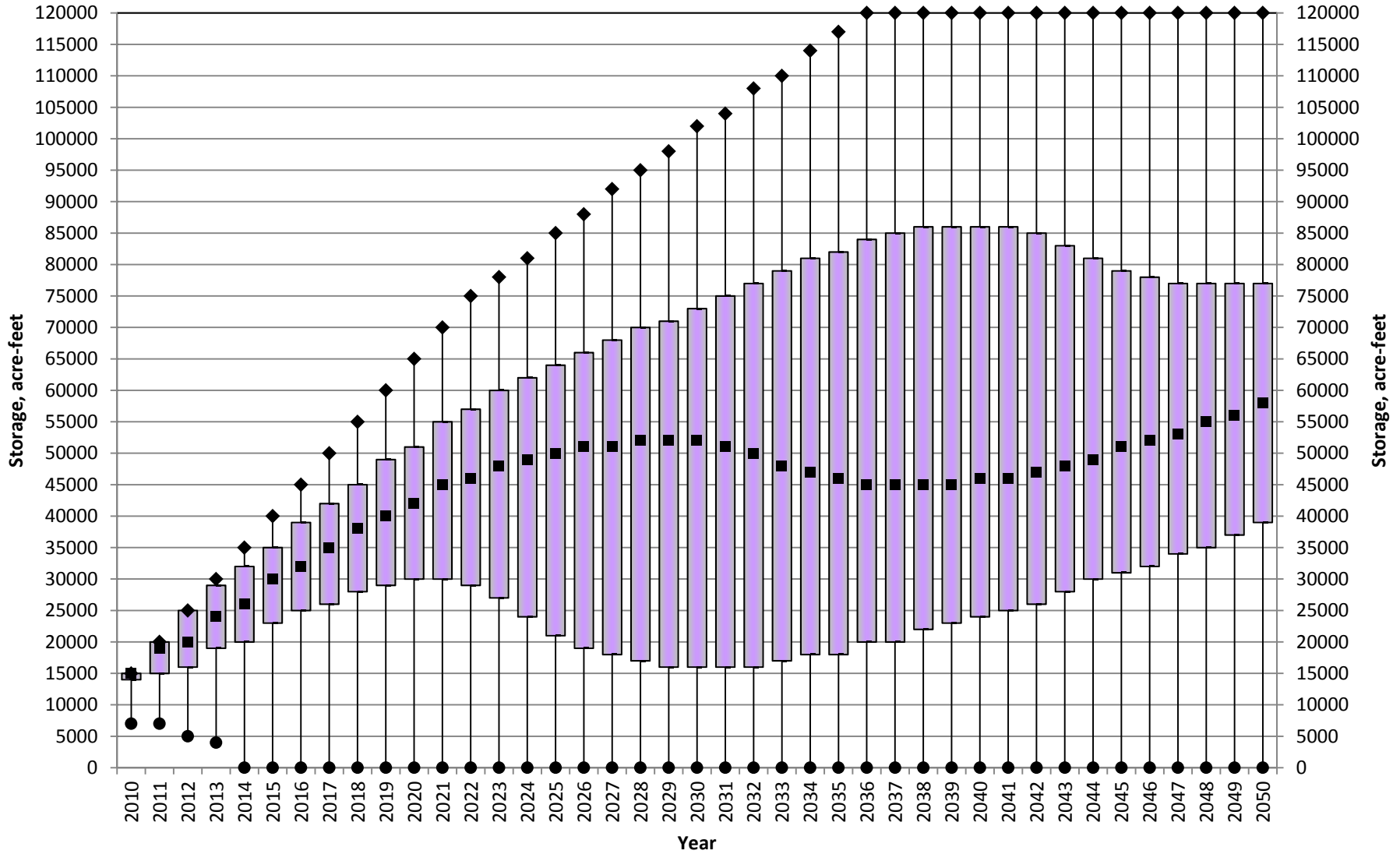
- First Quartile ● 1st Percentile ■ Median ◆ 99th Percentile - Third Quartile

Intertie - Cawelo: 85%



- First Quartile ● 1st Percentile ■ Median ◆ 99th Percentile - Third Quartile

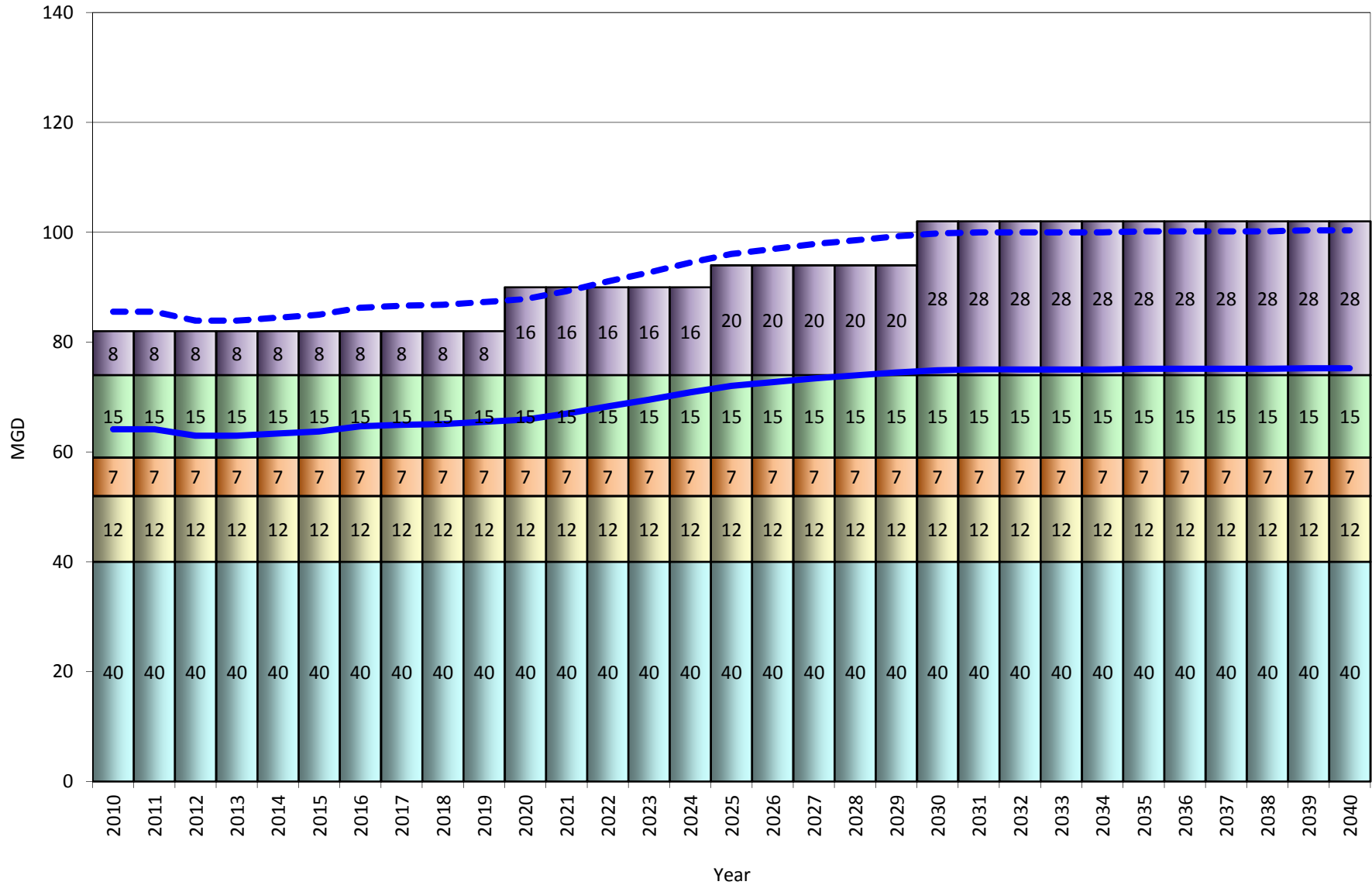
Intertie - Cawelo: 90%



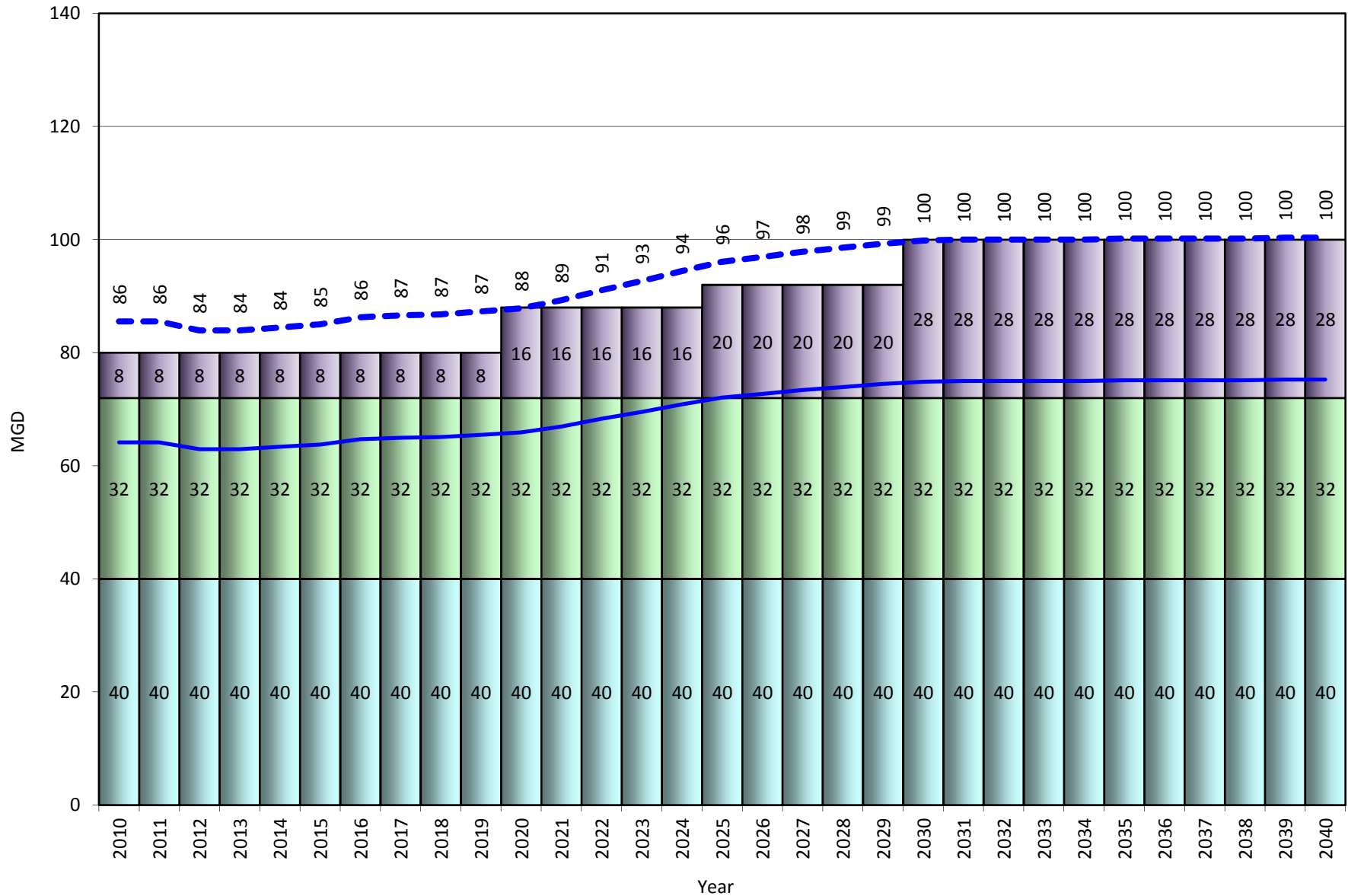
- First Quartile ● 1st Percentile ■ Median ◆ 99th Percentile - Third Quartile

KEY SUPPORTING FACILITY OUTAGE FIGURES

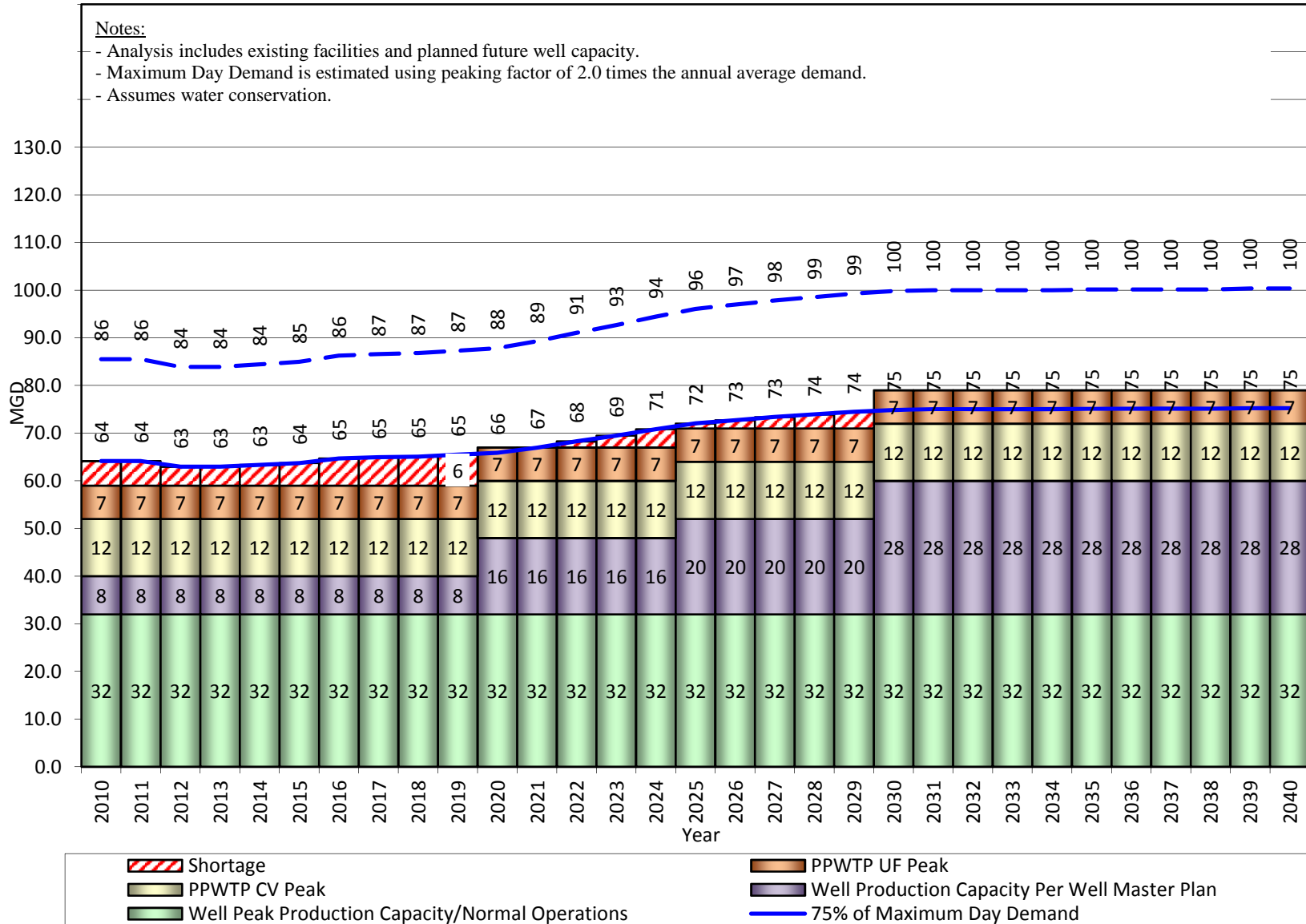
Current Plan & Intertie: Largest Well Field Out of Service



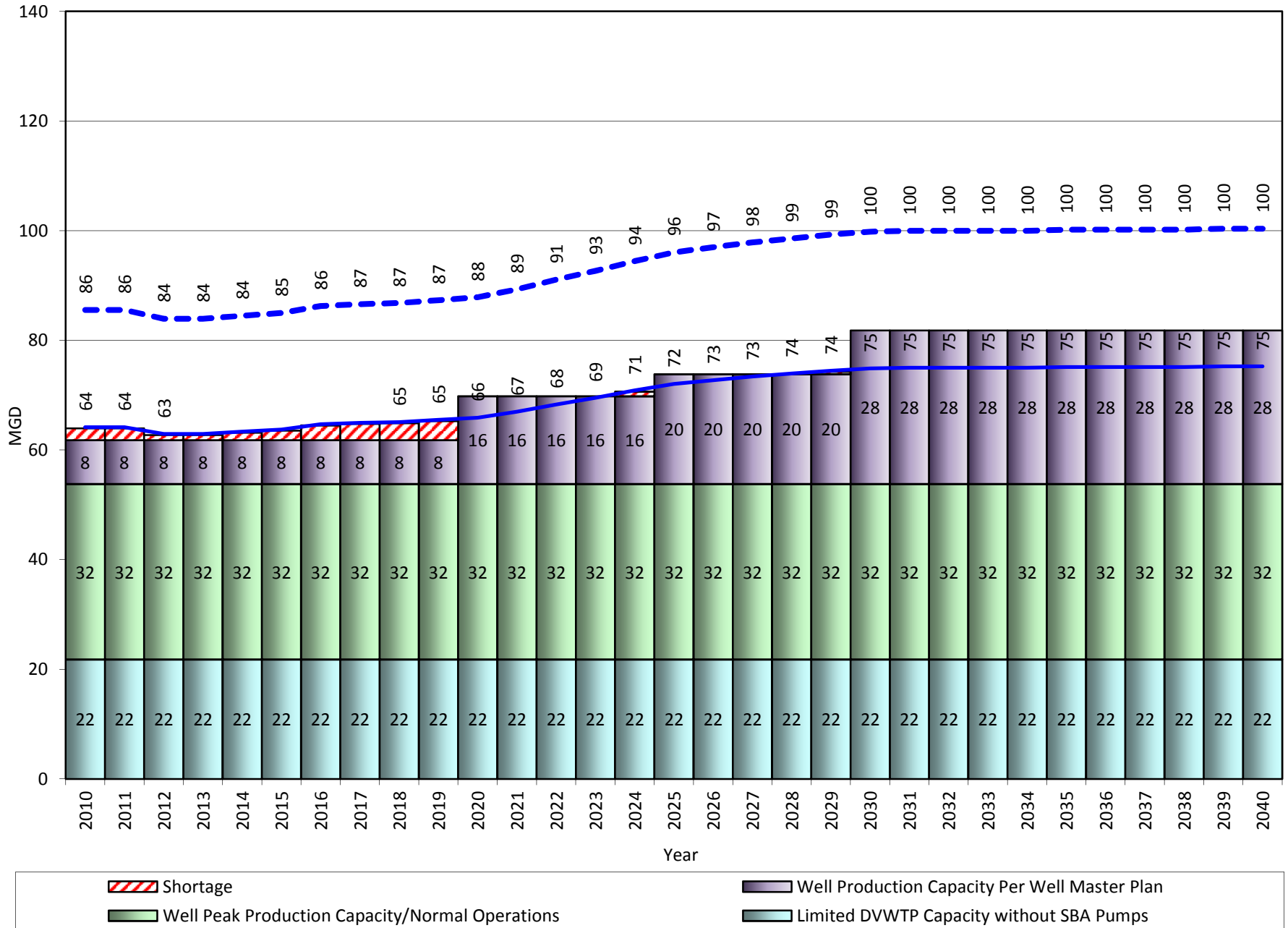
Current Plan & Intertie: Patterson Pass WTP Out of Service



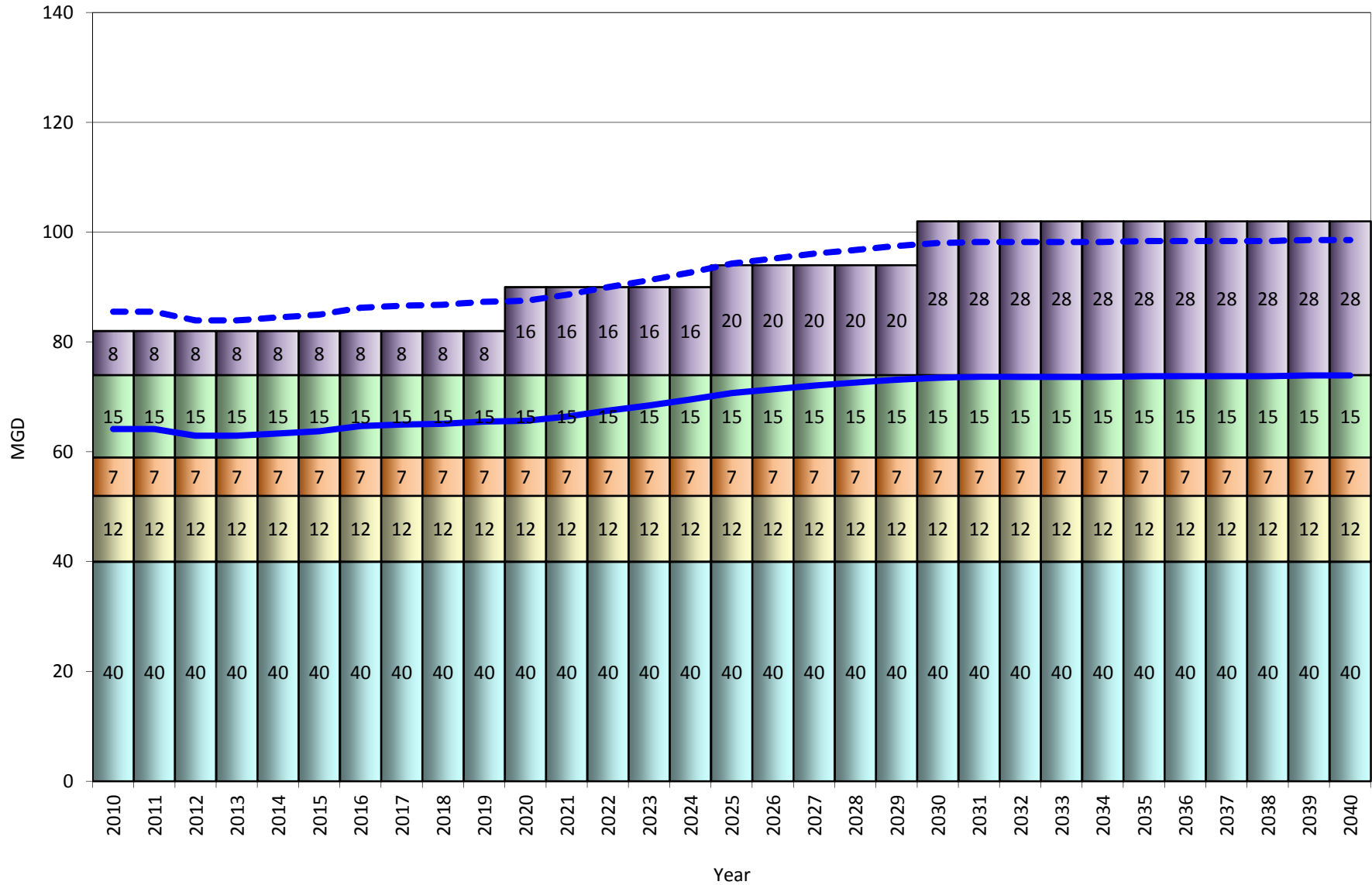
Current Plan & Intertie: Del Valle WTP Out of Service



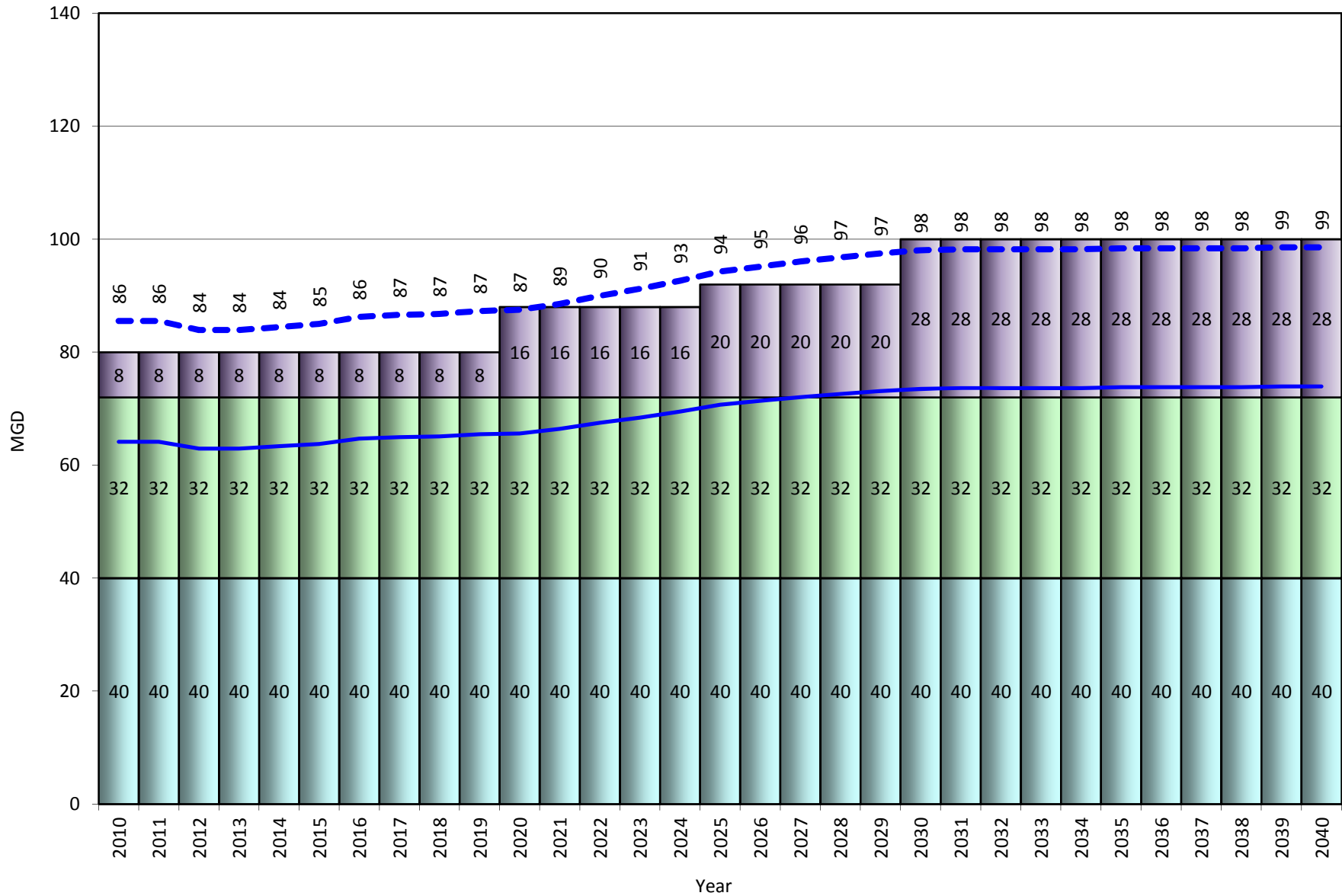
Current Plan & Intertie: South Bay Aqueduct Out of Service



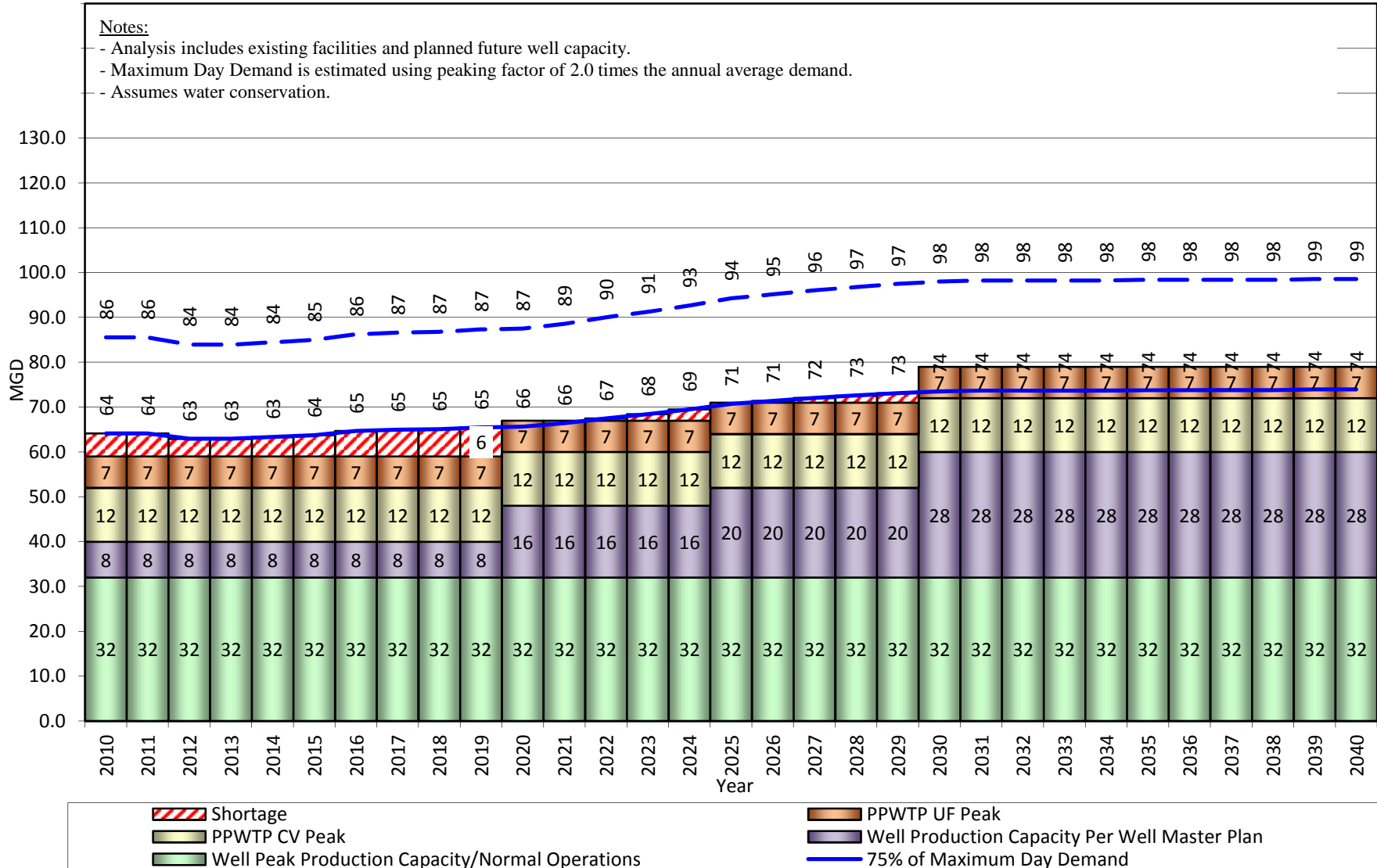
In-Valley - Largest Well Field Out of Service: 75%



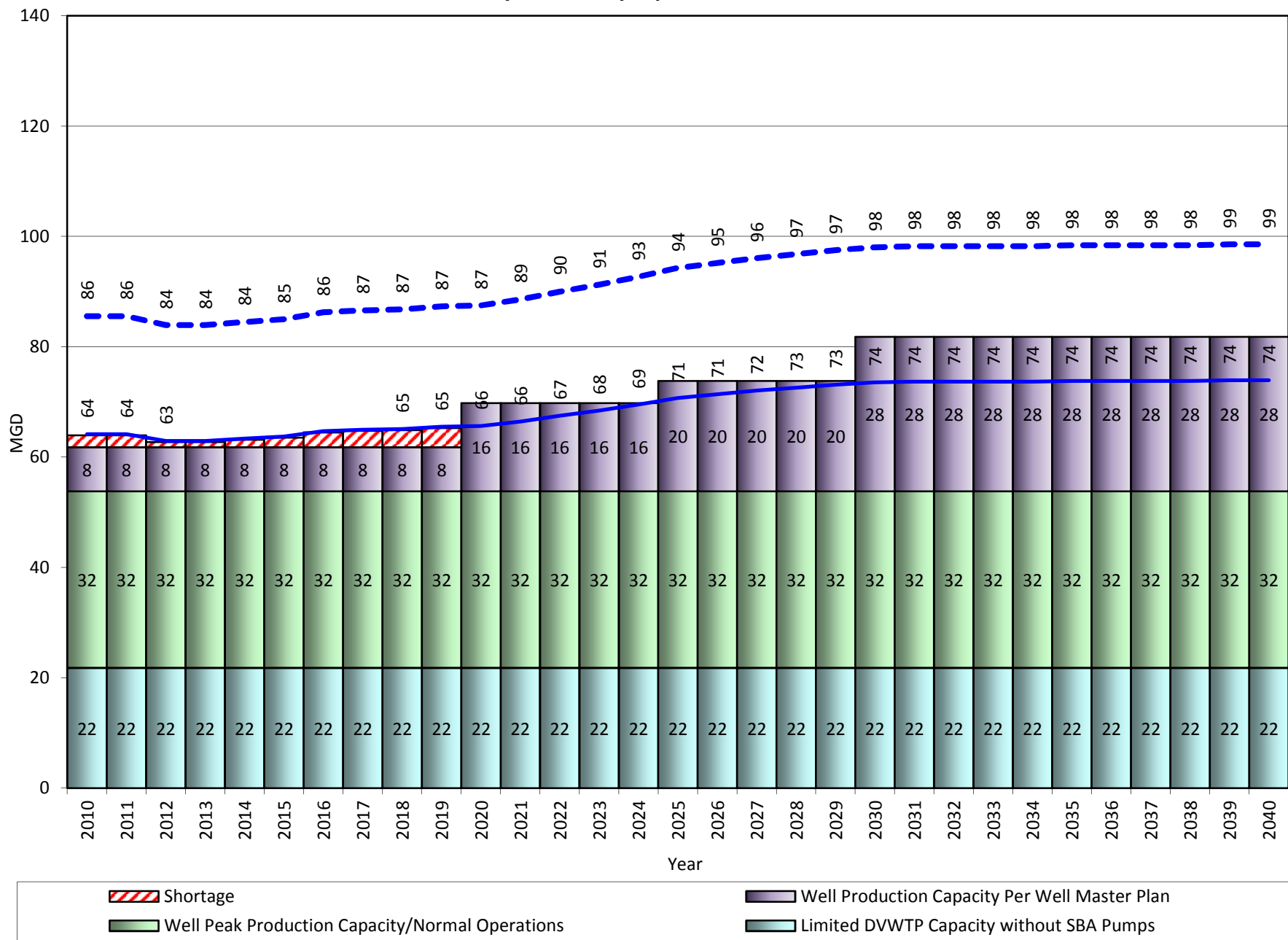
In-Valley - Patterson Pass WTP Out of Service: 75%



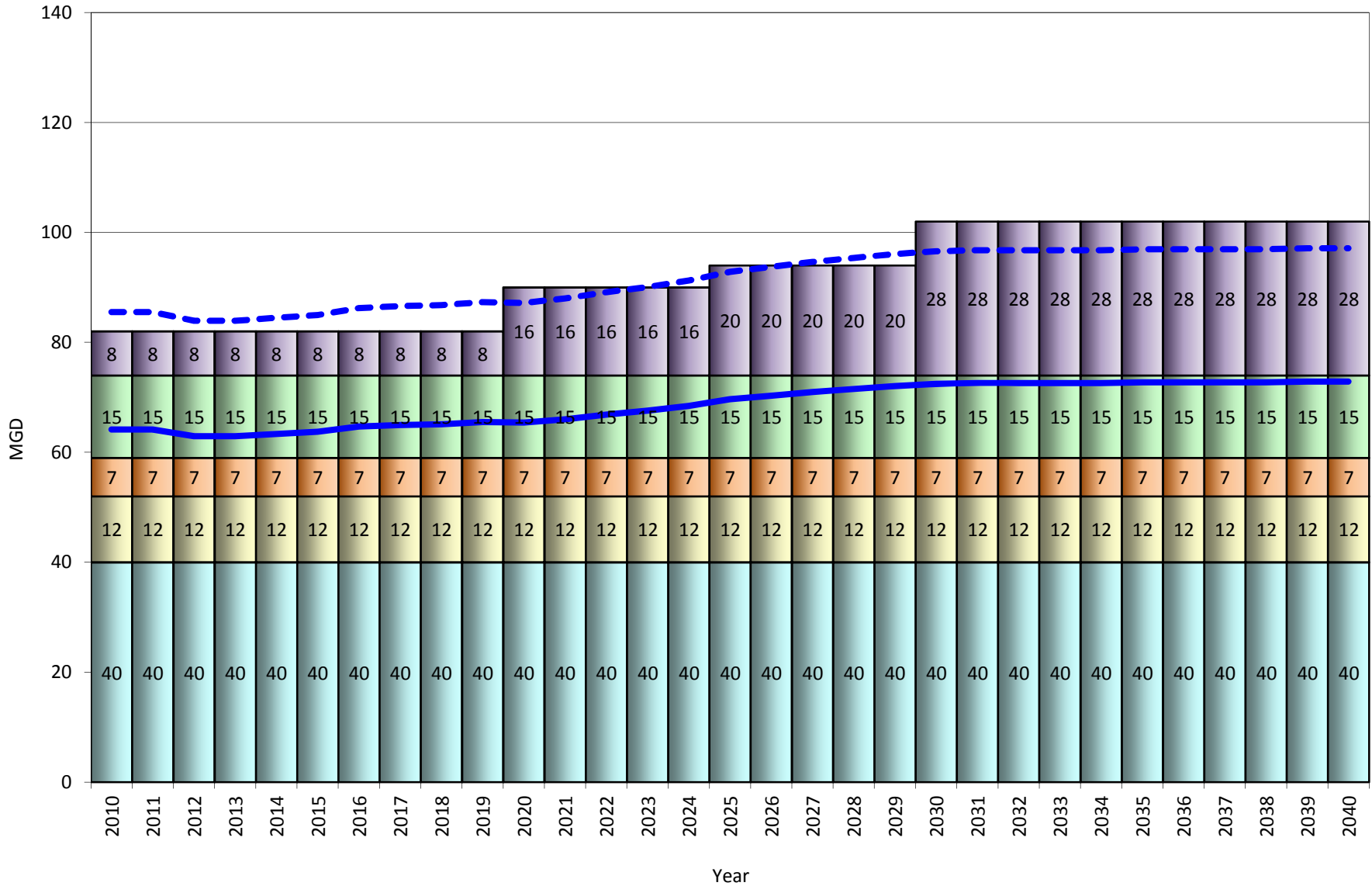
In-Valley - Del Valle WTP Out of Service: 75%



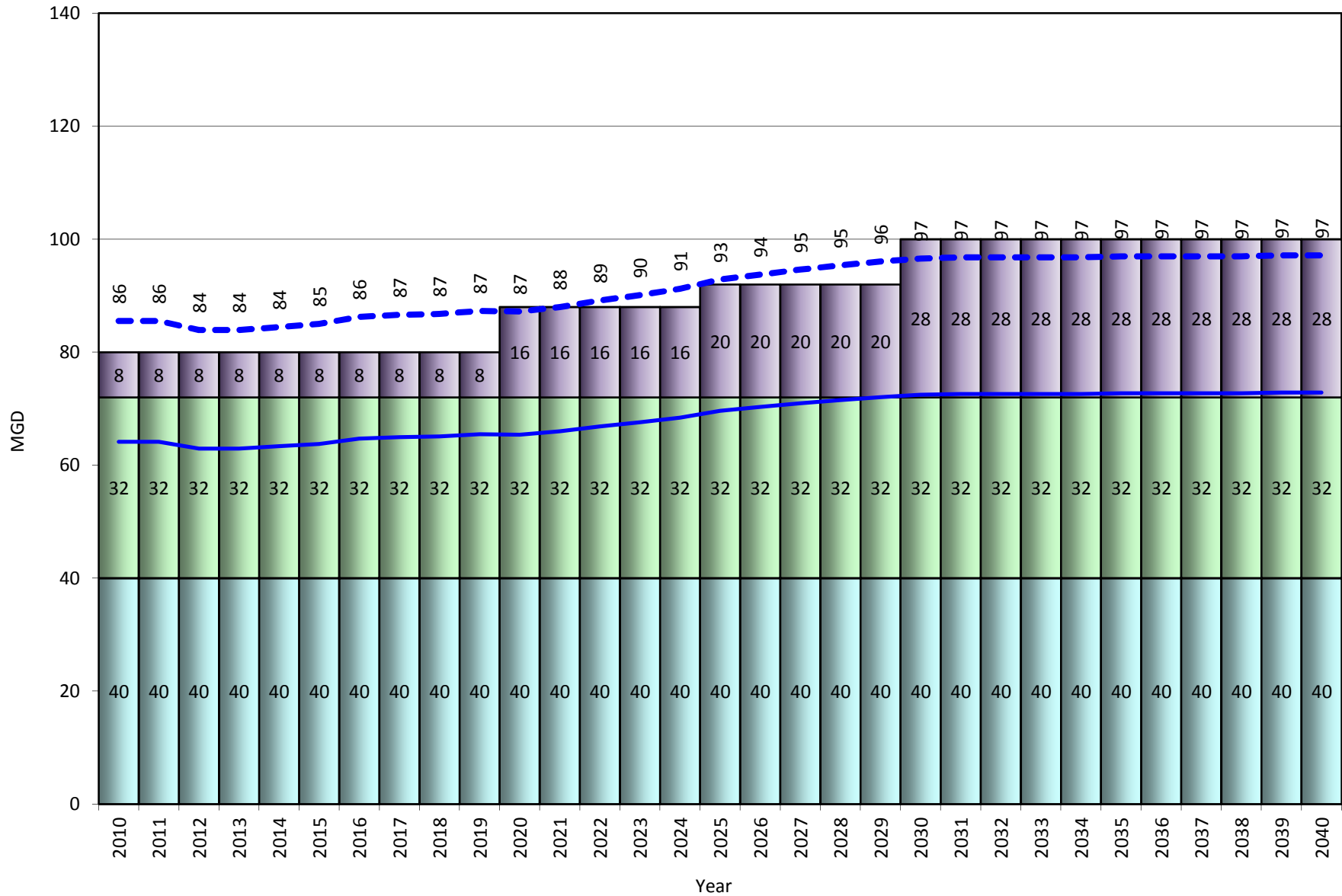
In-Valley - South Bay Aqueduct Out of Service: 75%



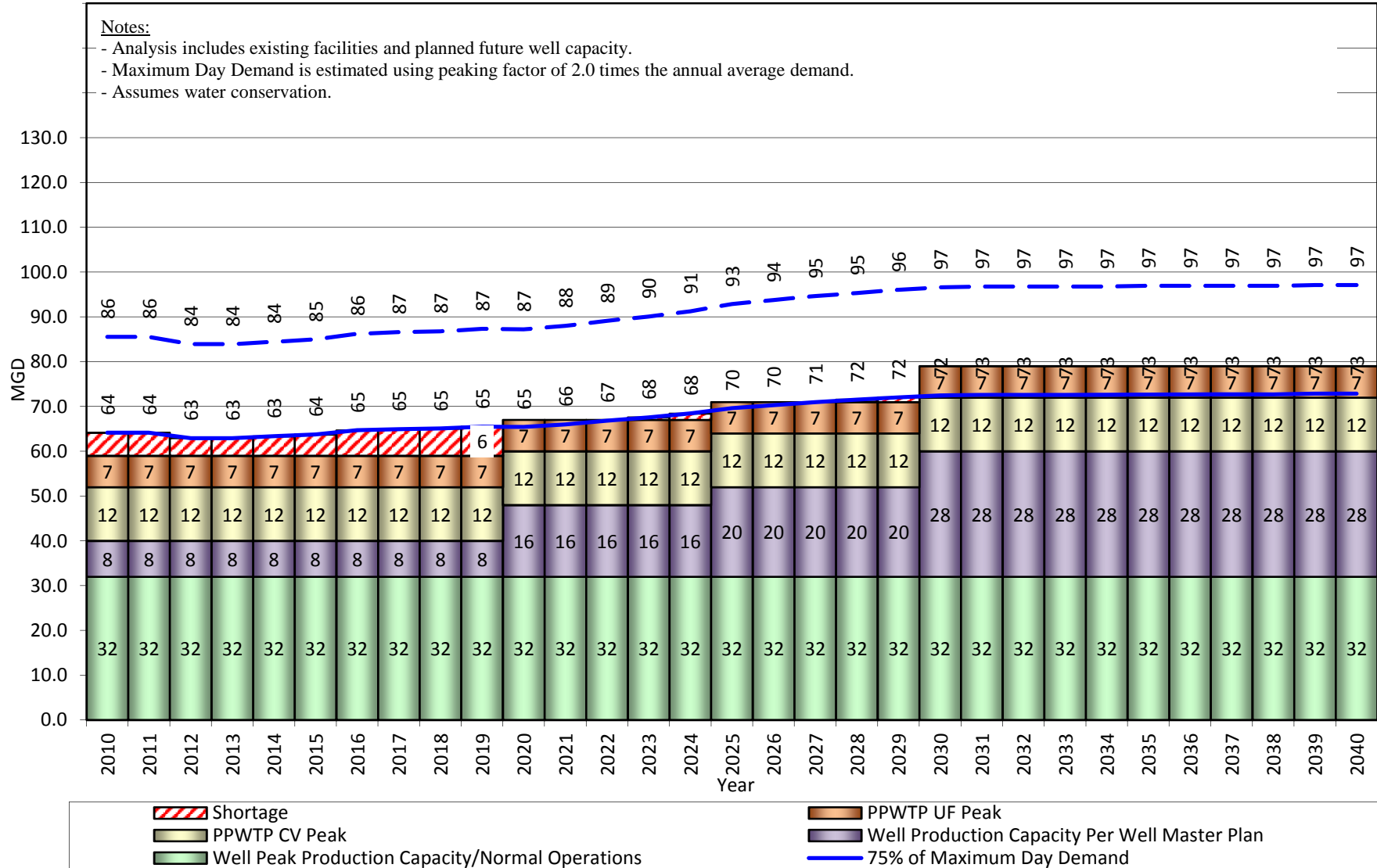
In-Valley - Largest Well Field Out of Service: 80%



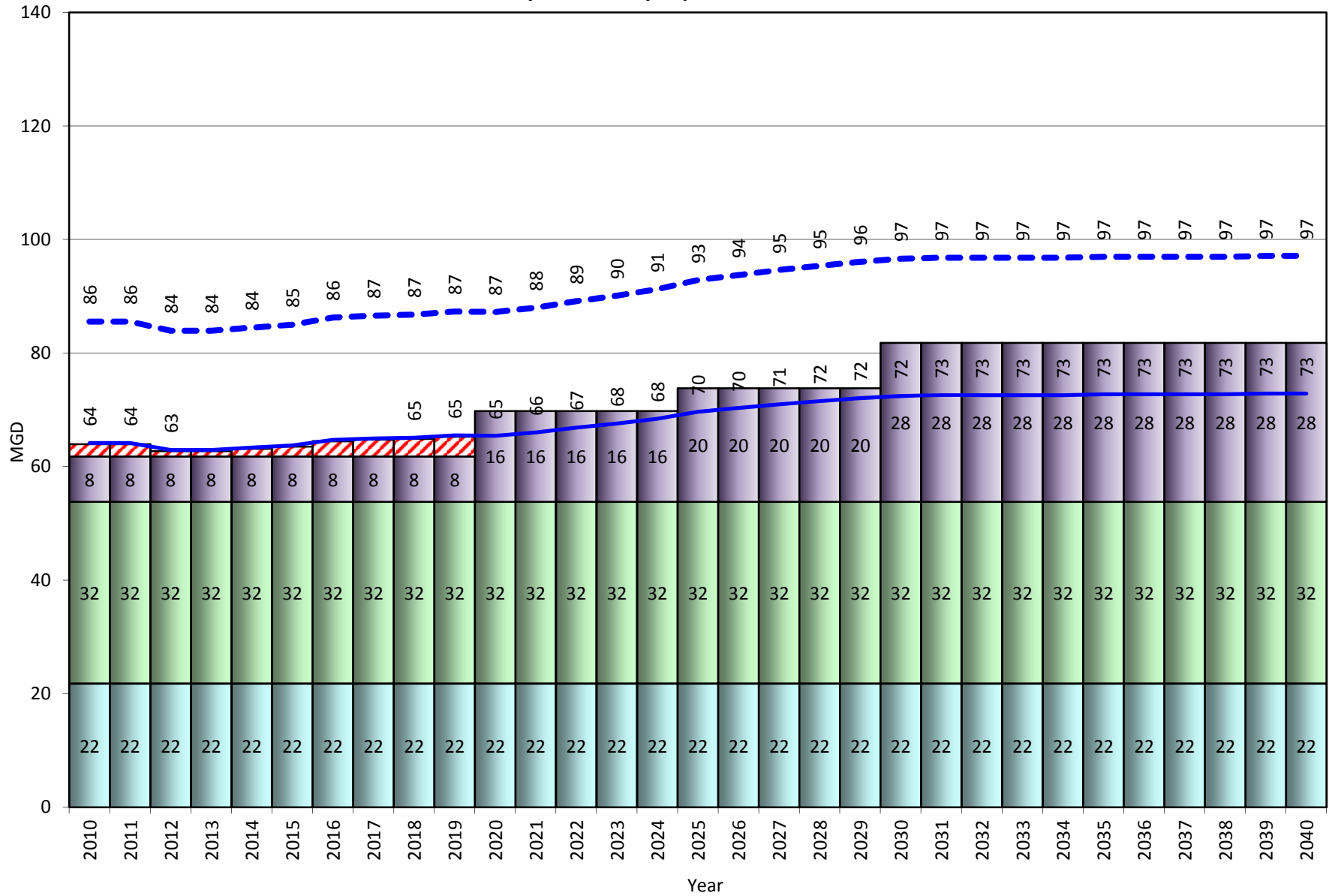
In-Valley - Patterson Pass WTP Out of Service: 80%



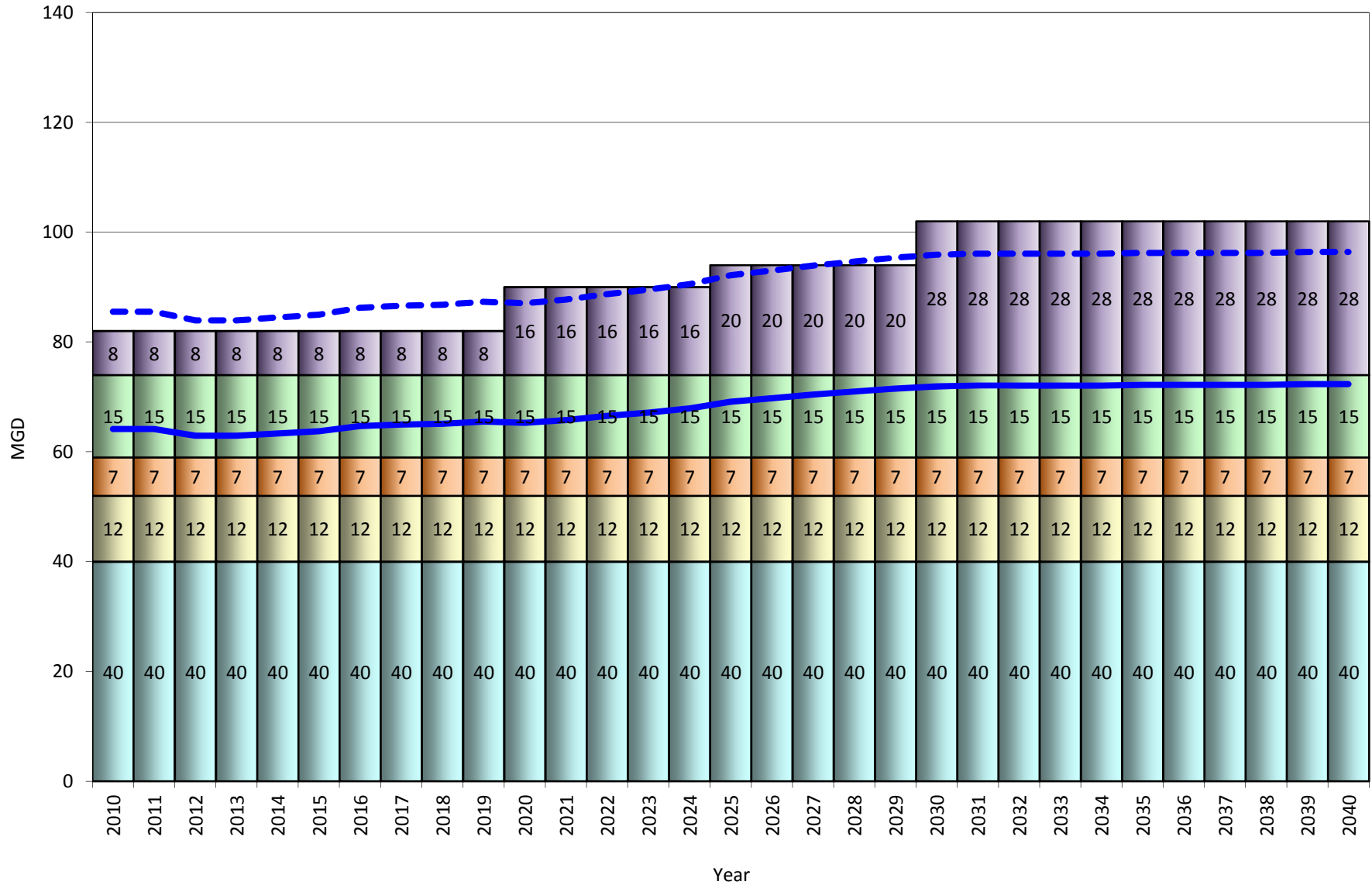
In-Valley - Del Valle WTP Out of Service: 80%



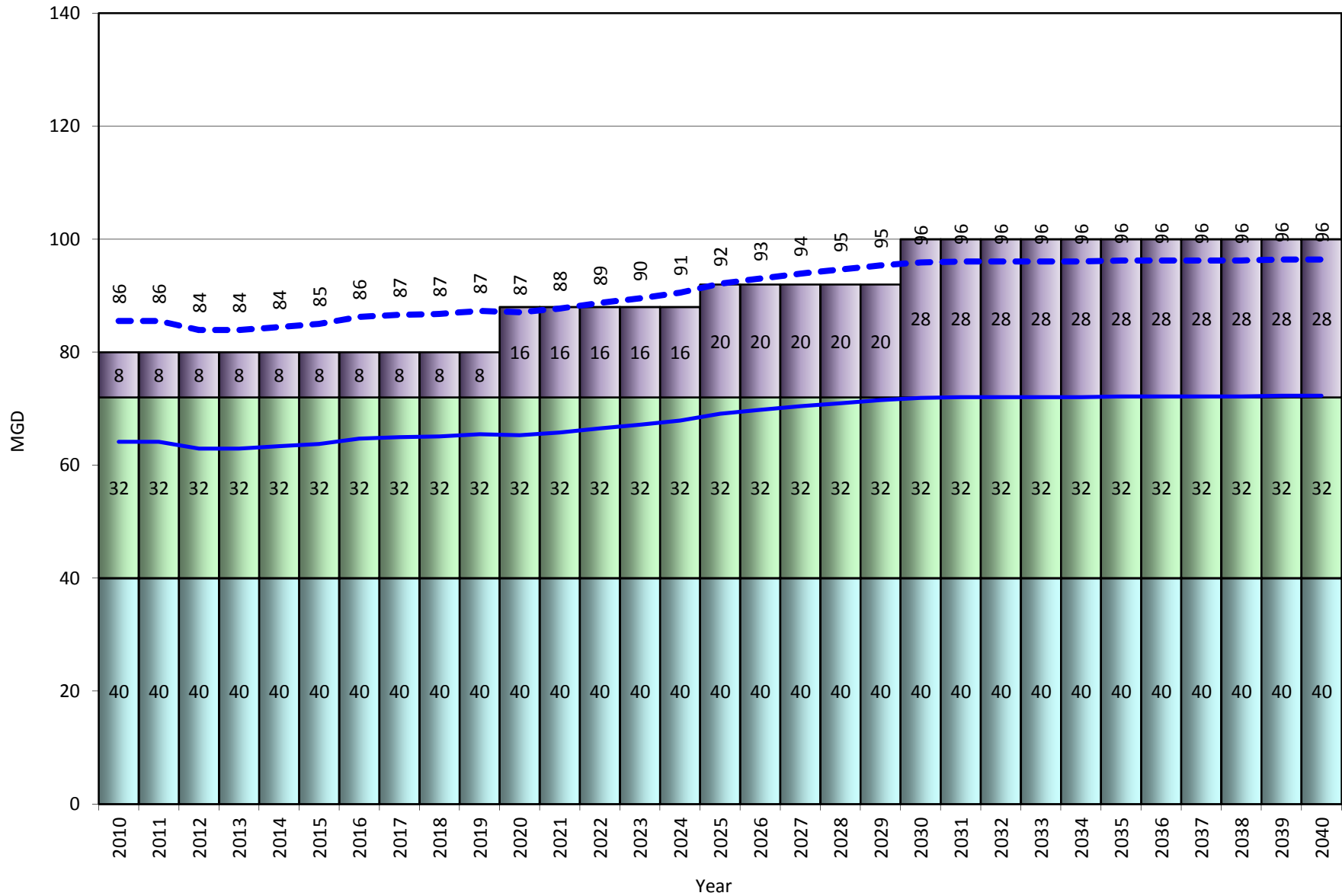
In-Valley - South Bay Aqueduct Out of Service: 80%



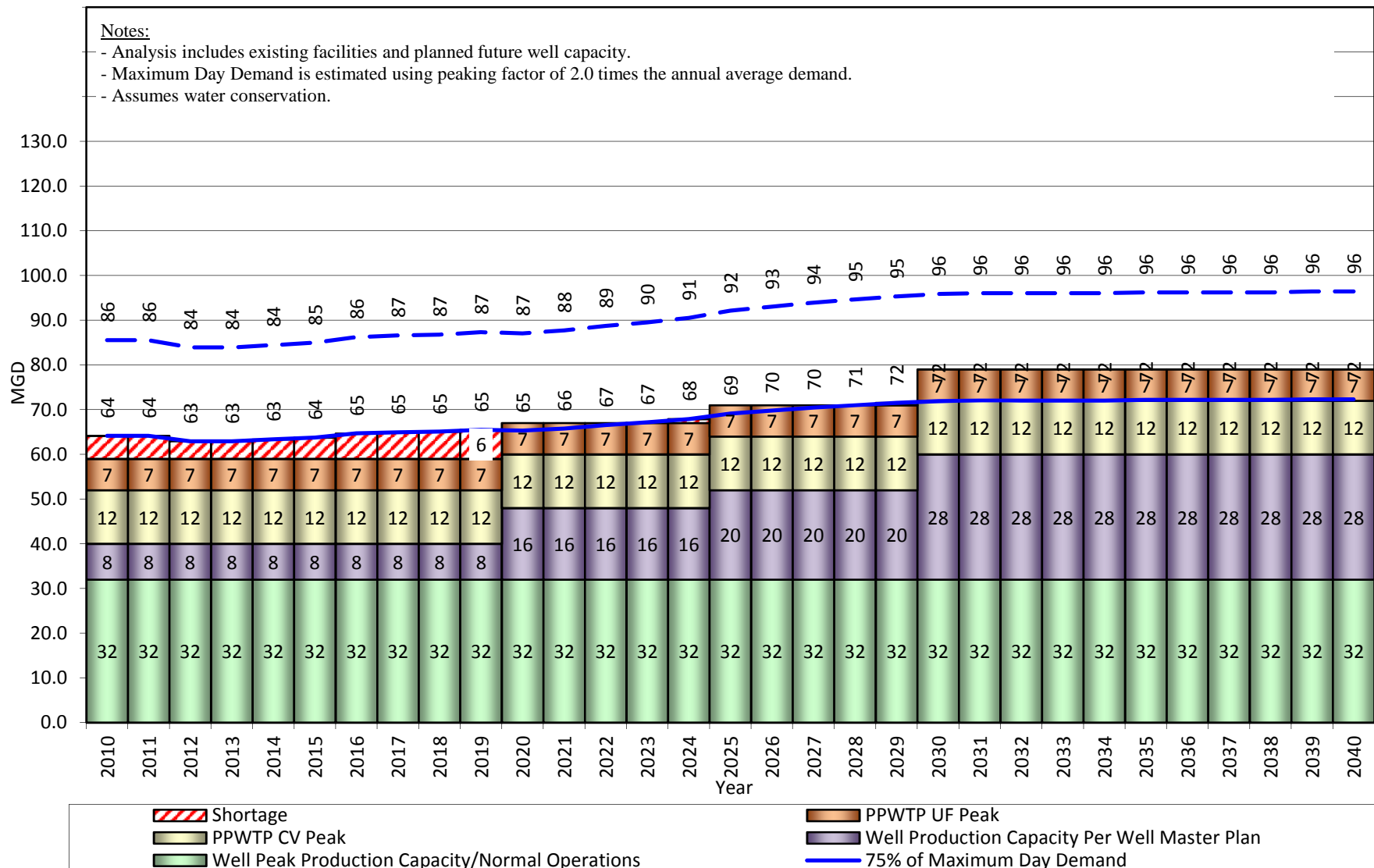
In-Valley - Largest Well Field Out of Service: 85%



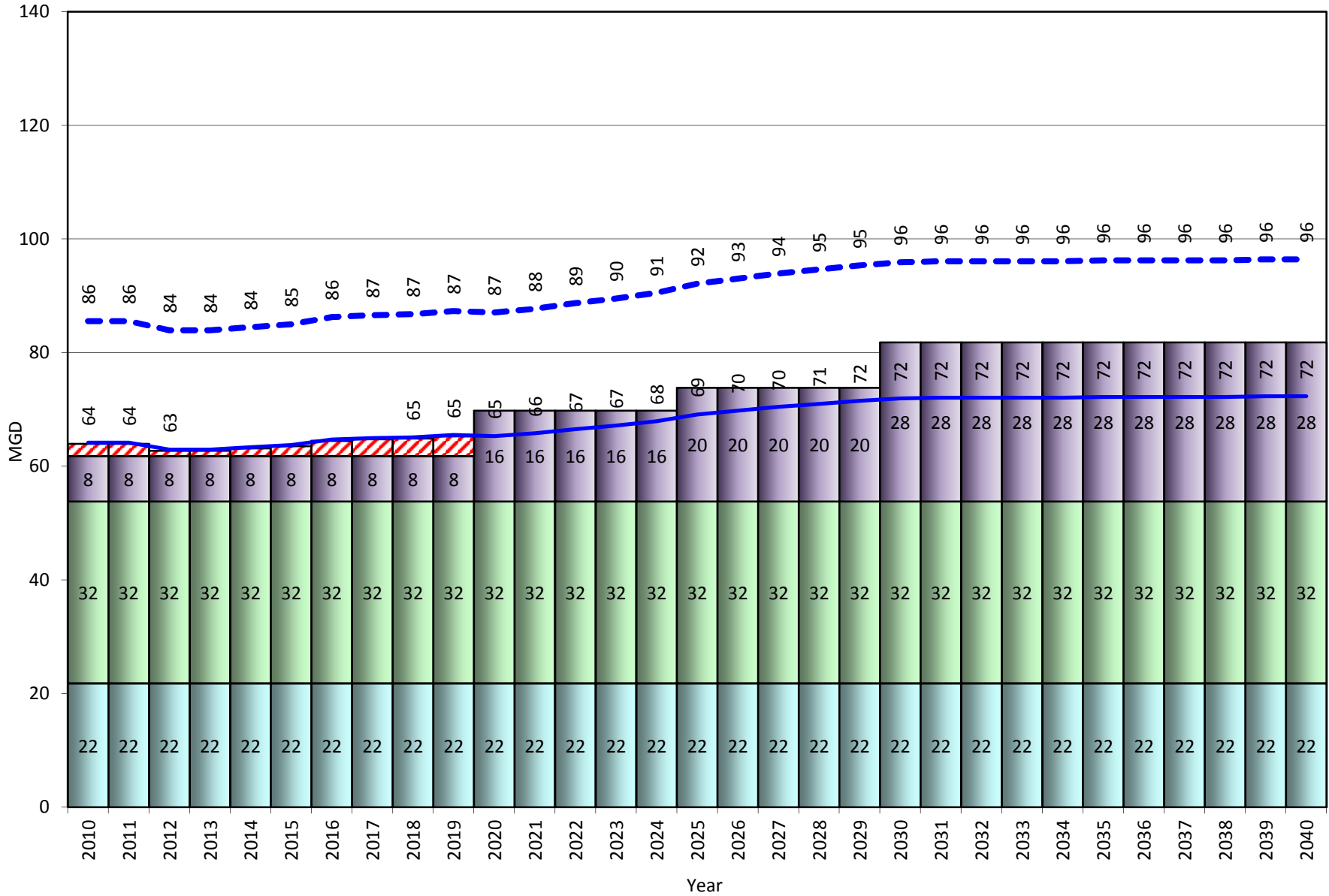
In-Valley - Patterson Pass WTP Out of Service: 85%



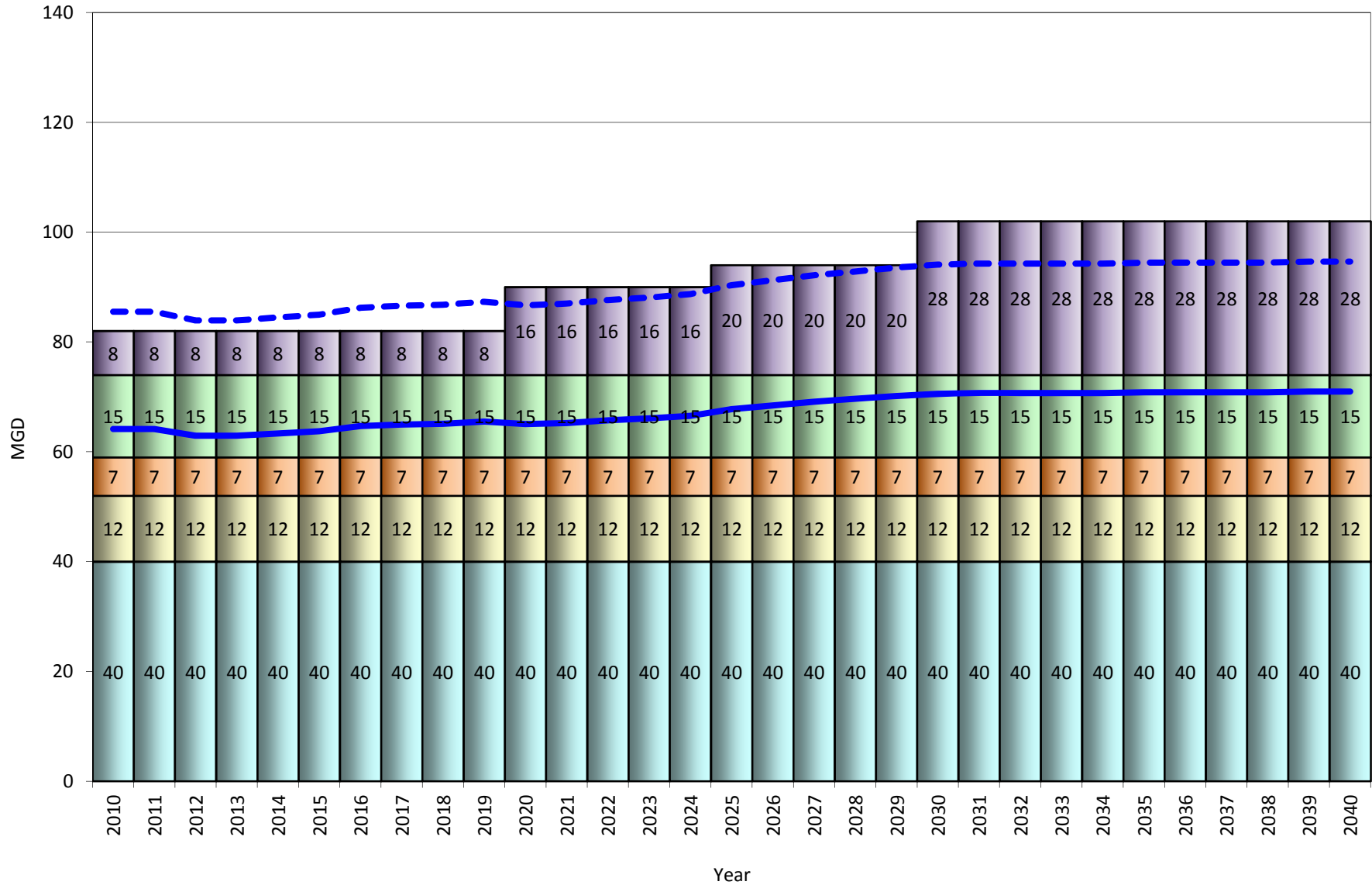
In-Valley - Del Valle WTP Out of Service: 85%



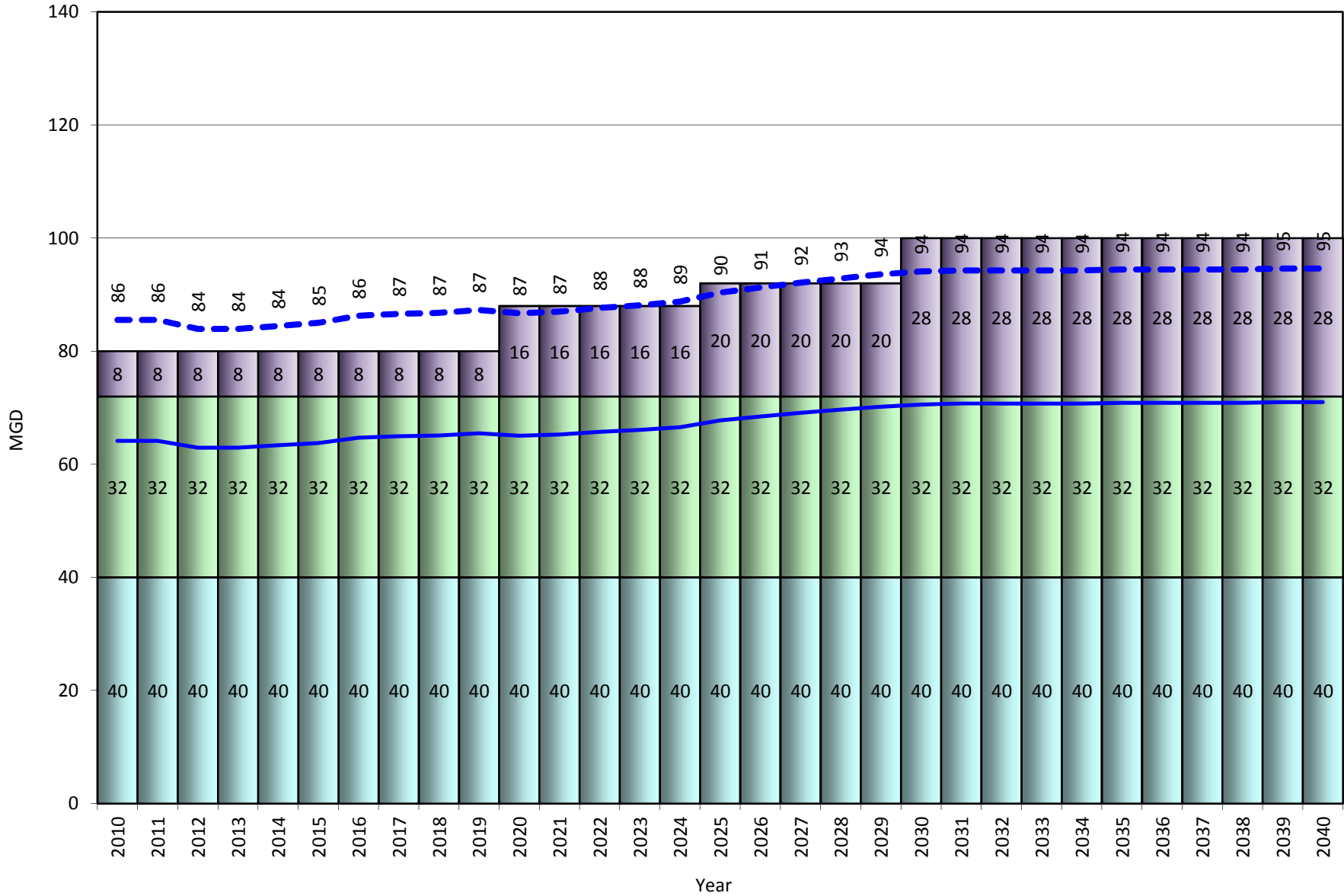
In-Valley - South Bay Aqueduct Out of Service: 85%



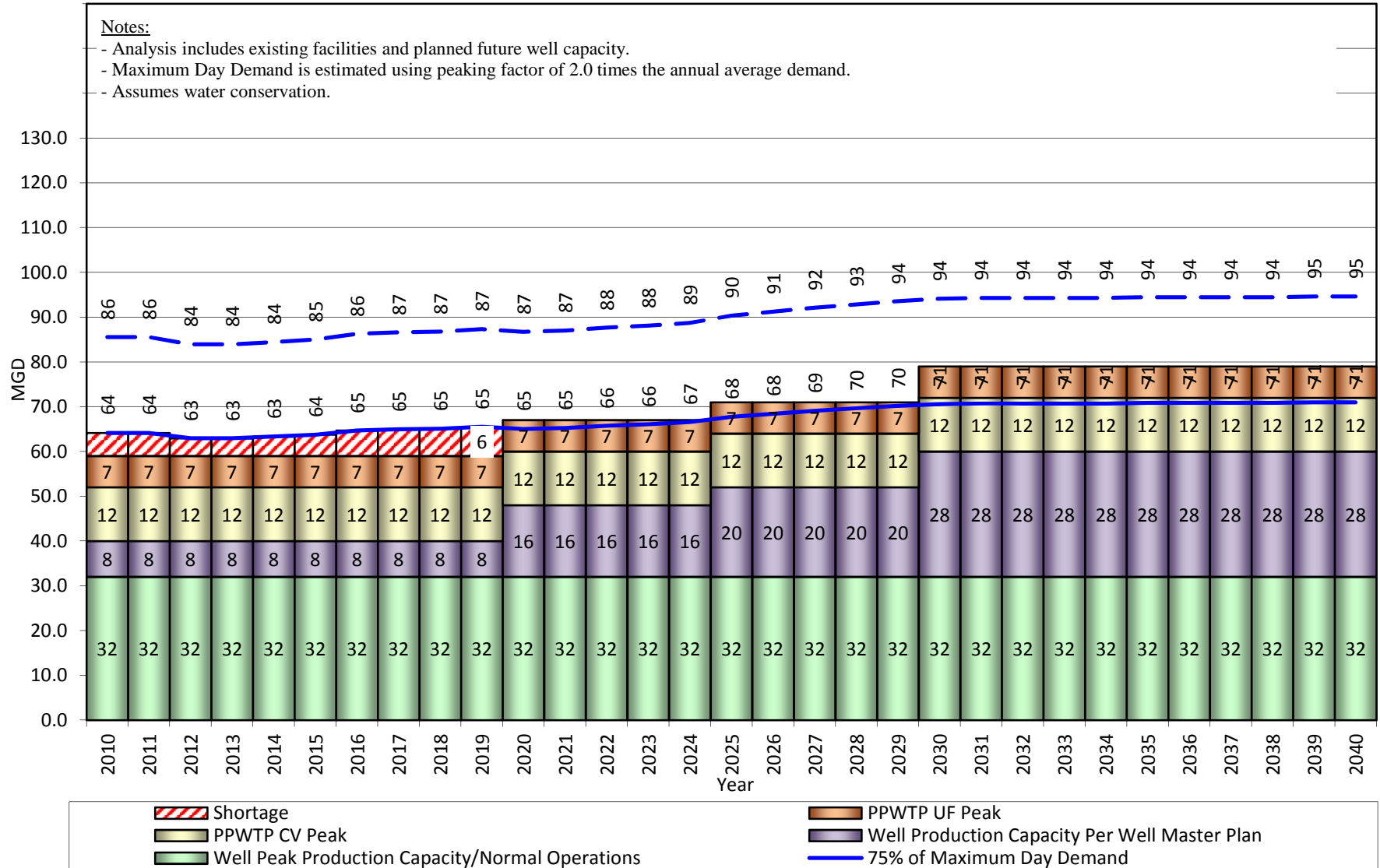
In-Valley - Largest Well Field Out of Service: 90%



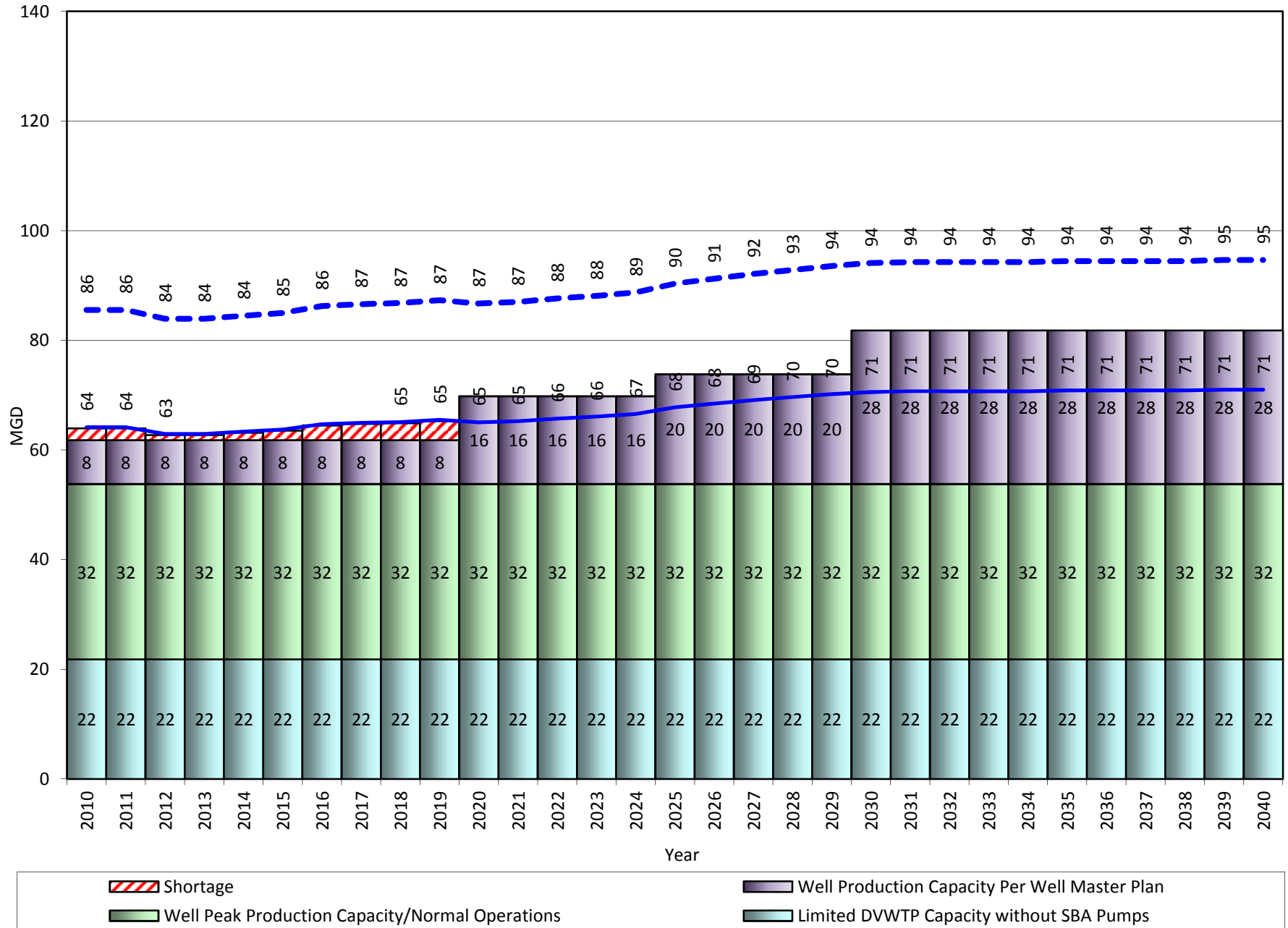
In-Valley - Patterson Pass Out of Service: 90%



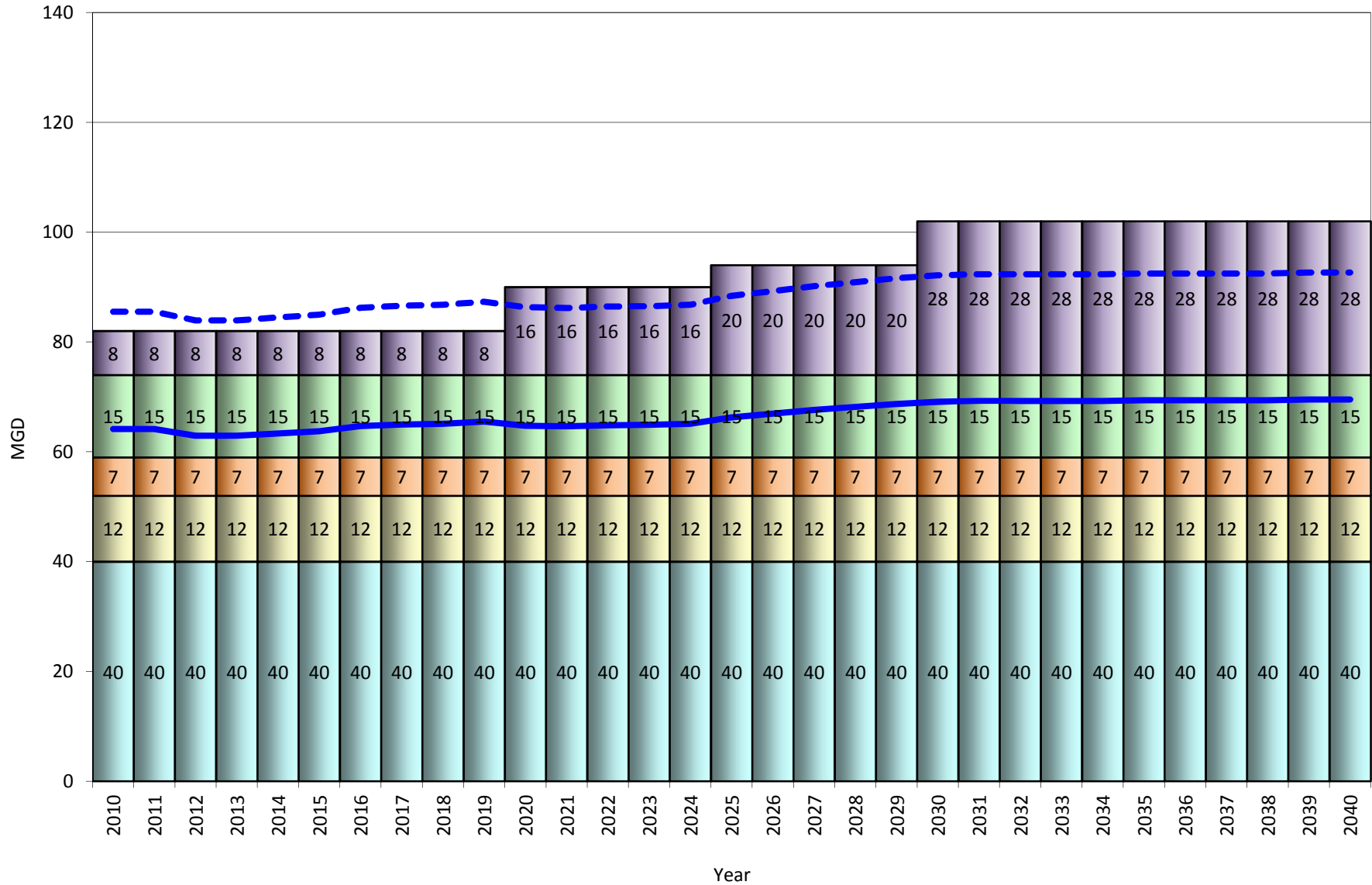
In-Valley - Del Valle WTP Out Of Service: 90%



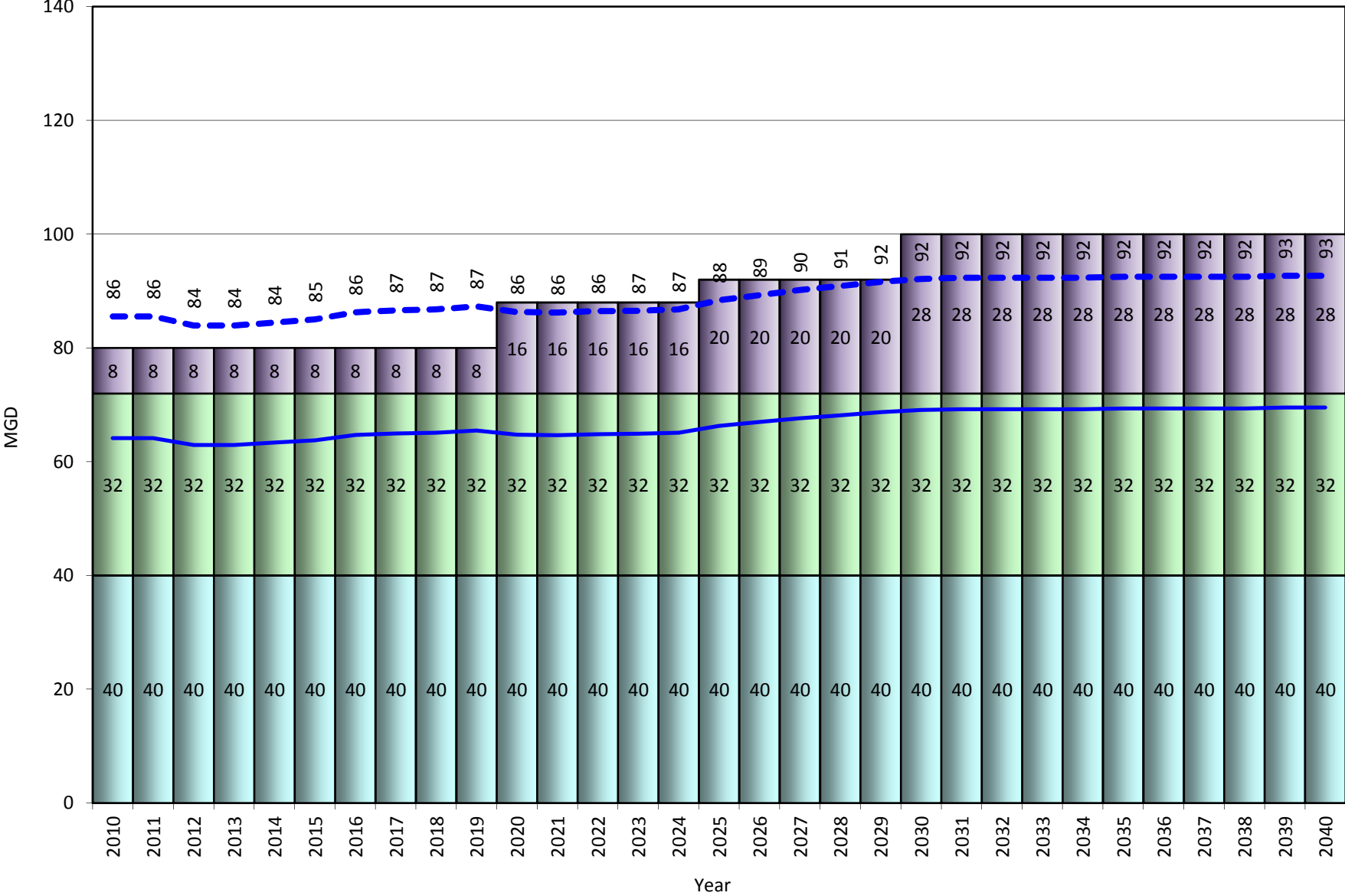
In-Valley - South Bay Aqueduct Out of Service: 90%



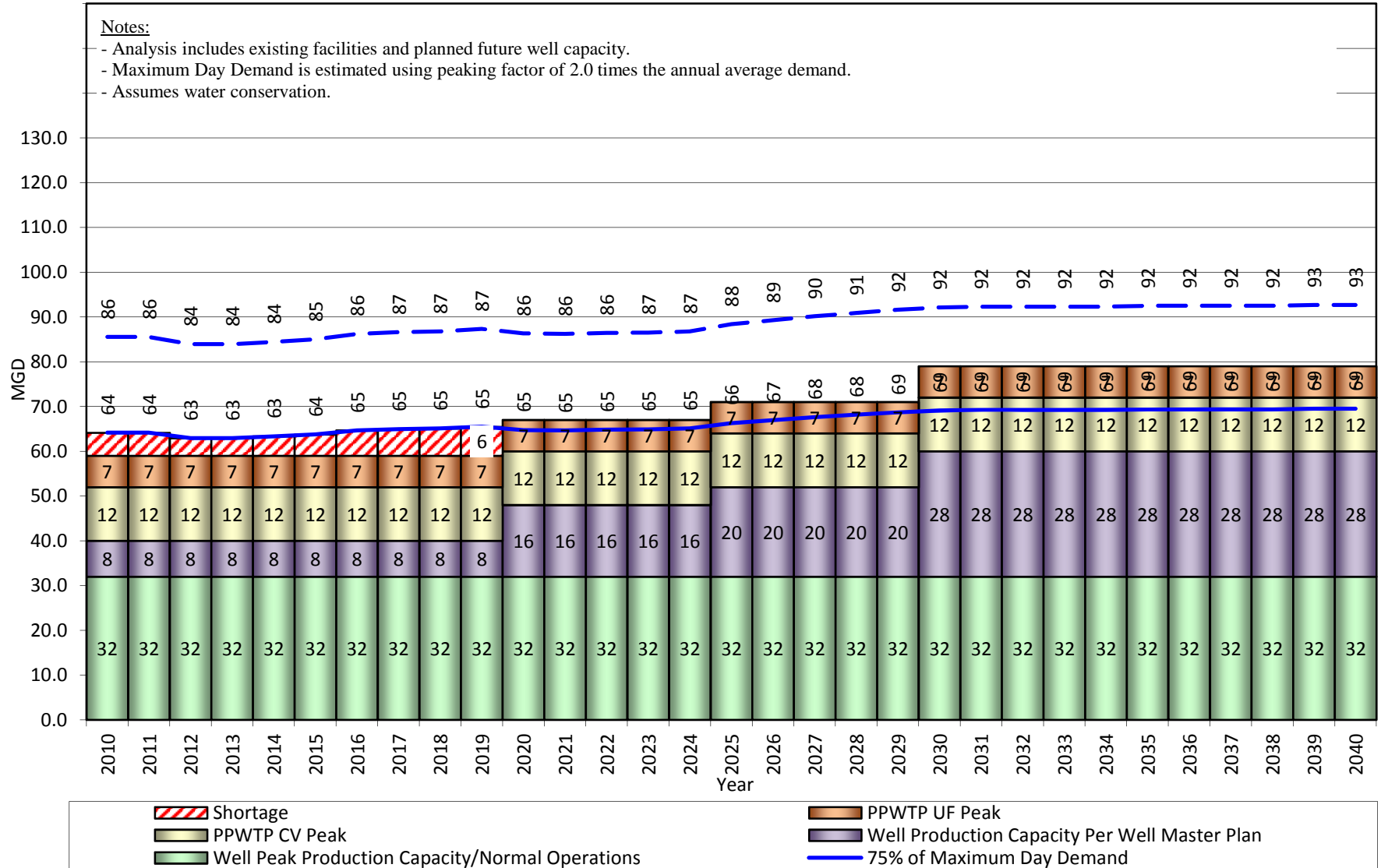
In-Valley - Largest Well Field Out of Service: 95%



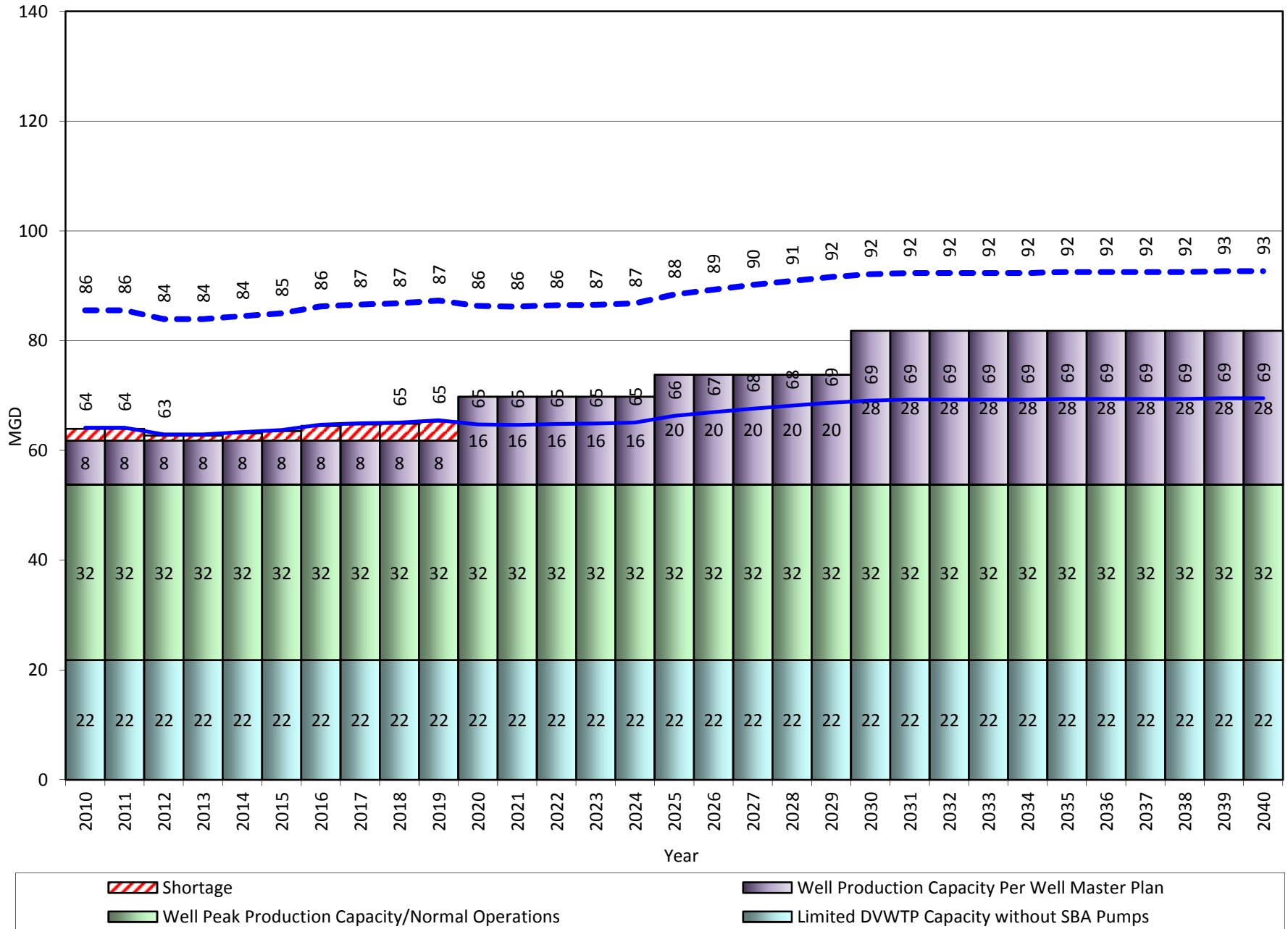
In-Valley - Patterson Pass WTP Out of Service: 95%



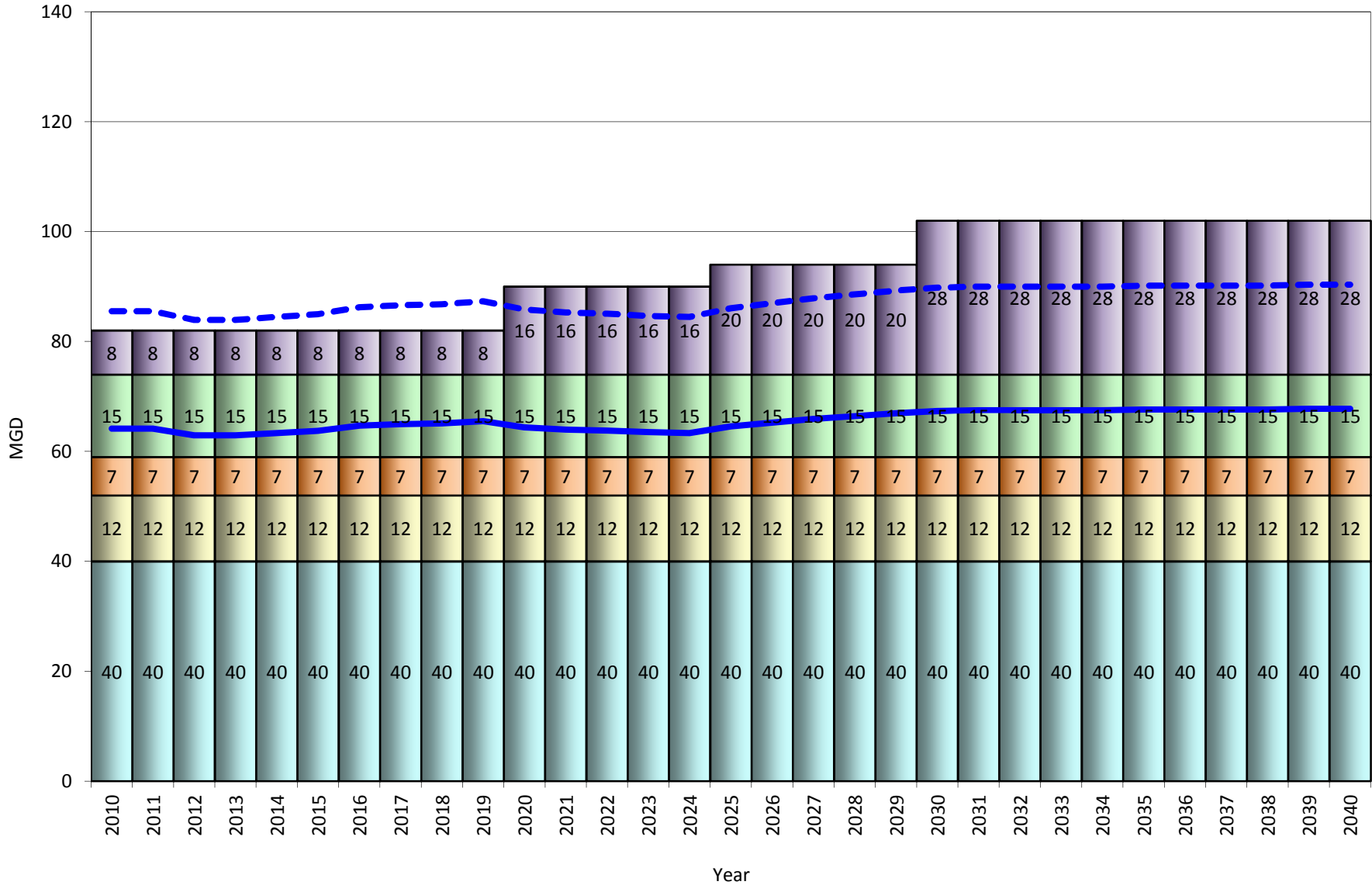
In-Valley - Del Valle WTP Out of Service: 95%



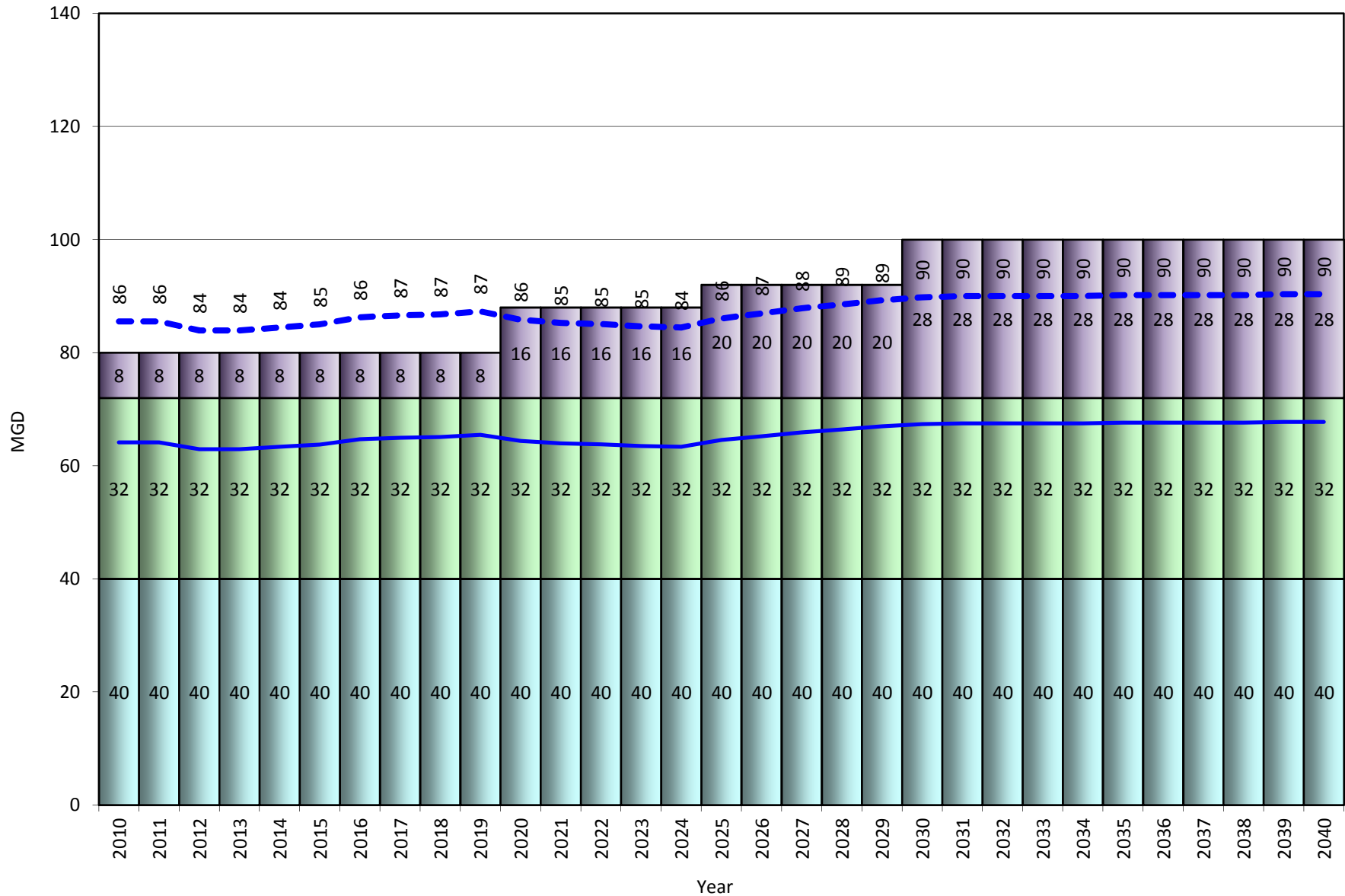
In-Valley - South Bay Aqueduct Out of Service: 95%



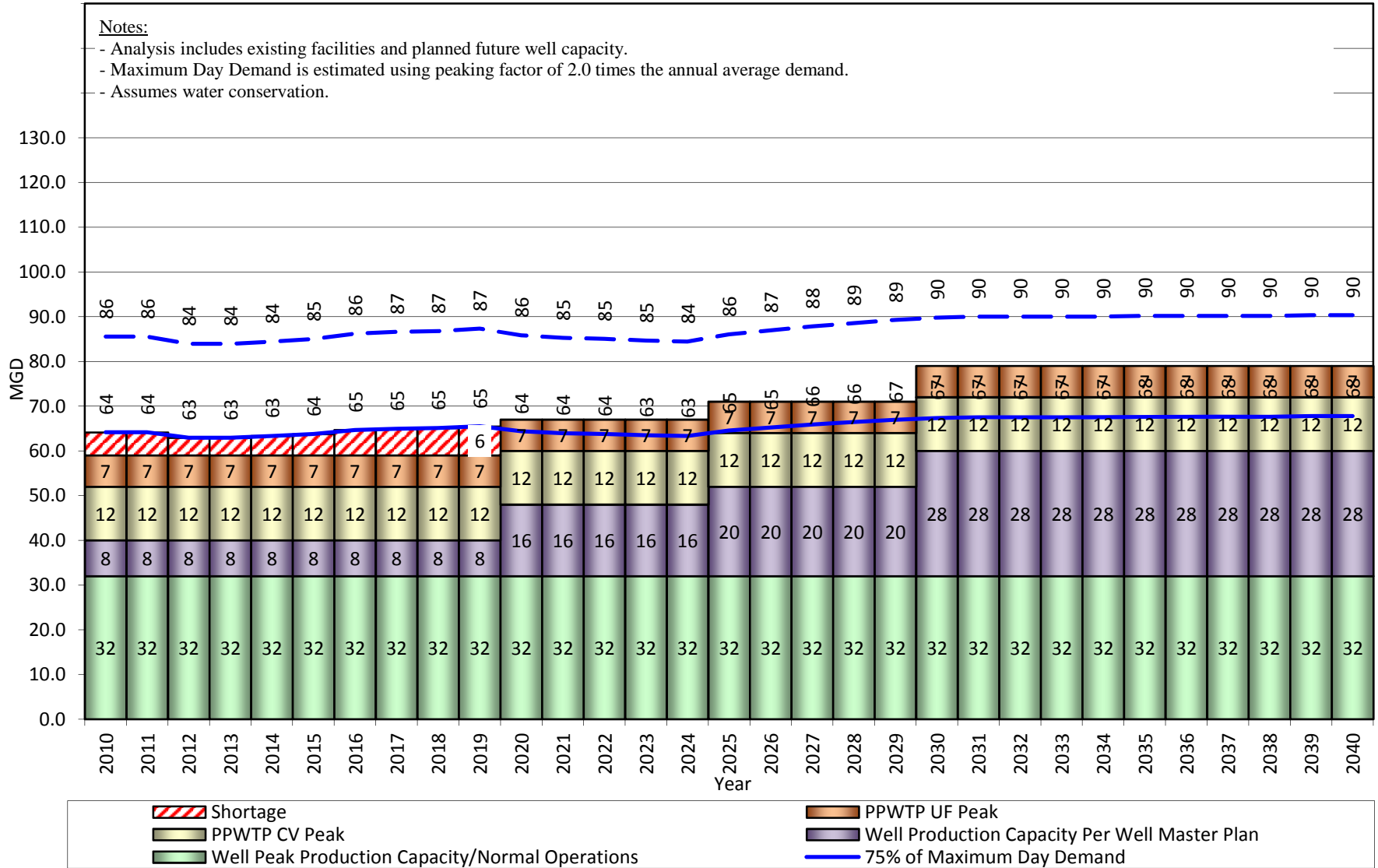
In-Valley - Largest Well Field Out of Service: 99%



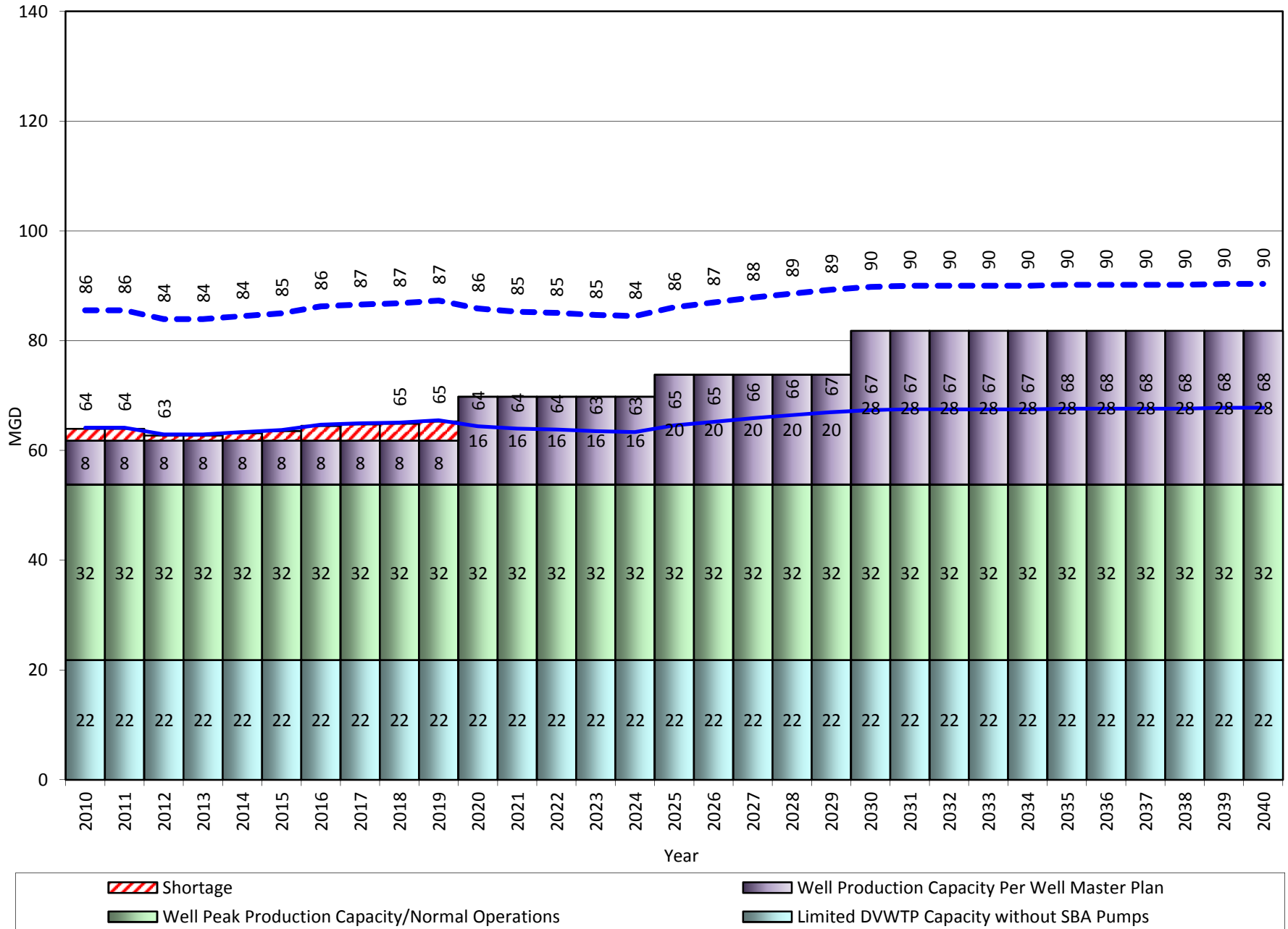
In-Valley - Patterson Pass WTP Out of Service: 99%



In-Valley - Del Valle WTP Out of Service: 99%



In-Valley - South Bay Aqueduct Out of Service: 99%



APPENDIX G. RECYCLED WATER SUPPLY ESTIMATES

This appendix provides a brief summary of the analysis used to estimate the amount of recycled water supply available in the Livermore-Amador Valley (Valley), beyond those supplies already allocated to existing programs, to help reduce potable water demands. The following sections describe the analysis:

- Potential Sources of Recycled Water Supply
- Summary of Recycled Water Supply Already Allocated to Existing Programs
- Estimated Recycled Water Available in the Valley

Potential Sources of Recycled Water Supply

The City of Livermore (Livermore) and Dublin San Ramon Services District (DSRSD) currently collect all of the wastewater produced within the city limits of Pleasanton, Dublin, and Livermore, and portions of San Ramon. Wastewater transport out of the area is handled through the Livermore-Amador Valley Water Management Agency (LAVWMA), a joint powers authority (JPA) composed of DSRSD, Livermore, and Pleasanton. Since 1979, LAVWMA has owned the conveyance facilities that ship treated wastewater from the treatment plants west over the Dublin grade, and eventually to the East Bay Discharge Authority, which dechlorinates the effluent and discharges it through a deep water pipeline into San Francisco Bay.

Livermore Water Recycling Plant

The original plant located along Jack London Boulevard was constructed in 1958 with a capacity of 2.5 million gallons per day (MGD).¹ Livermore added tertiary treatment capacity in 1974, and after several upgrades, the plant can currently treat 9.5 MGD of wastewater.² Based on conversations with Livermore staff, the plant may be expanded to 10.5 MGD in the future.³ The plant is also rated to produce 6.0 MGD of tertiary-treated water for use as a recycled water supply; based on conversations with Livermore staff, the plant may be re-rated to 6.5 MGD.⁴ For the analysis in this WSE, Zone 7 staff limited the analysis to future capacity and therefore, used secondary and tertiary capacities to 10.5 and 6.0 MGD, respectively.

DSRSD Water Recycling Plant

DSRSD's plant is located south of I-580, near the intersection of I-580 and I-680. The plant can treat 17 MGD to secondary levels, and will eventually have the capacity to treat 20.7 MGD. The plant is currently rated to produce 9.7 MGD of tertiary water for use as a recycled water supply, and will eventually be expanded to 16.5 MGD. For the analysis in this WSE, Zone 7 staff limited the analysis to future capacity and therefore, used secondary and tertiary capacities to 20.7 and 16.5 MGD, respectively.

Monthly Secondary Effluent Ratios

Zone 7 staff reviewed historical data from 2006 to 2009 to generate monthly ratios for projecting future secondary effluent available. The data is provided to Zone 7 by both Livermore and DSRSD.

¹ City of Livermore Website: <http://www.cityoflivermore.net/citygov/pw/wrd/wastewater/lwrp.asp>

² Carollo, 2011. Recycled Water Master Plan – Phase 1 – Executive Summary. February.

³ Meeting with the City of Livermore on February 23, 2010.

⁴ Meeting with the City of Livermore on February 23, 2010.

Summary of Recycled Water Supply Already Allocated to Existing Programs

In Livermore, tertiary-treated water (mono-filtration followed by ultraviolet [UV] disinfection) is used to irrigate Livermore’s Municipal Golf Course, Las Positas College, business parks along the north side of I-580 and the west side of Highway 84, and Highway 84 corridor landscapes. Livermore has been irrigating its golf course with recycled water since the 1960s. In Livermore, recycled water use was 988 AF in 2009. Livermore’s facilities can produce up to 5,600 acre-feet annually (AFA)⁵ should the demand increase.

In 1995, DSRSD and East Bay Municipal Utility District (EBMUD), formed a JPA called the “DSRSD-EBMUD Recycled Water Authority” (DERWA). This entity operates the San Ramon Valley Recycled Water Program (SRVRWP), which supplies recycled water to portions of DSRSD’s and EBMUD’s service areas. Through the SRVRWP, DSRSD began supplying tertiary-treated water (sand filtration or microfiltration followed by UV disinfection) in 2006 for landscape irrigation. As of August 2007, SRVRWP was providing recycled water to over 170 customer sites. Its facilities are sized to provide up to 3,700 AF of recycled water annually to DSRSD and an additional 2,700 AF to EBMUD⁶. In 2009, DSRSD supplied 2,100 AF of recycled water.

A summary of the wastewater quantities already allocated to existing programs is provided in Table G-1. As shown in Table G-1, Livermore and DSRSD – collectively – plan to produce approximately 5,900 AF.

Table G-1. Recycled Water Supply Already Allocation, acre-feet

Type	Secondary and Tertiary Already Allocated
Livermore ^(a)	2,200
DSRSD ^(b)	3,700
Total within the Valley	5,900
EBMUD ^(b)	2,700
Total Already Allocated	8,600

^(a) Per discussions with Livermore staff on 2/23/2010.

^(b) Per discussions with DSRSD staff on 4/14/2010.

Assumed Monthly Recycled Water Use

Based on historical data from 2006 to 2009, Zone 7 staff then developed ratios for allocating secondary effluent and planned recycled water use on a monthly basis. Zone 7 staff then used the capacity limits of existing tertiary facilities and monthly demand ratios estimated using historical data from 2006 to 2009 to determine the amount of secondary effluent available – beyond those supplies already allocated to existing plans – to provide potable water demand offsets. This analysis also allowed Zone 7 staff to estimate the amount recycled water supply that required storage.

Table G-2 presents a summary of available recycled water supply. Figure G-1 presents the monthly demand ratios used to allocate supply on a monthly basis to determine storage requirements, while Figure G-2 presents a graphical summary of the available secondary effluent.

⁵ City of Livermore, 2005. Livermore Municipal Water 2005 Urban Water Management Plan.

⁶ http://www.derwa.org/pdf/DERWA_quick_facts.pdf

Table G-2. Summary of Available Recycled Water Supply

Retailer	Component	Direct		Storage ^(a)	
		Low	High	Low	High
Pleasanton	Supply, af	2,600	2,600	3,600	3,600
	Supply, mgd	2.3	2.3	3.2	3.2
	Additional Capacity Required, mgd ^(b)	6.7	6.7	0.0	0.0
DSRSD	Supply, af	0	--	6,600	6,600
	Supply, mgd	0	--	5.9	5.9
	Additional Capacity Required, mgd ^(b)	0	--	0	0
Livermore	Supply, af	0	3,700	5,700	5,860
	Supply, mgd	0.0	3.3	5.1	5.2
	Additional Capacity Required, mgd ^(b)	0.0	9.6	0	0.4
Total	Supply, af	2,600	6,300	15,900	16,060
	Supply, mgd	2.3	5.6	14.2	14.3
	Additional Capacity Required, mgd ^(b)	6.7	16.3	0.0	0.4

^(a) Assumes all supply is treated before storage, and is based on availability from Oct to May.

^(b) Direct capacity is based on a peaking factor of 2.9 times the annual average supply. Storage capacity is based on operating the plant from Oct to May unless existing capacity is enough to treat supplies available from Oct to May.

Figure G-1. Monthly Ratios Used to Estimate Recycled Water Storage Requirements

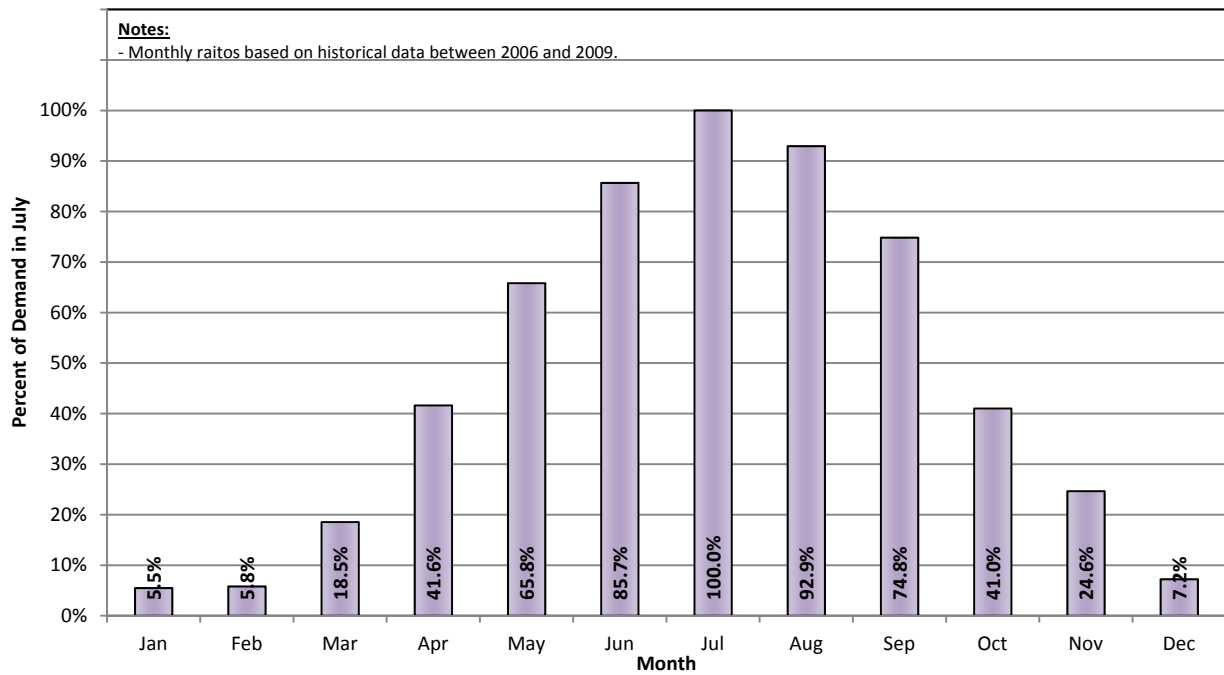
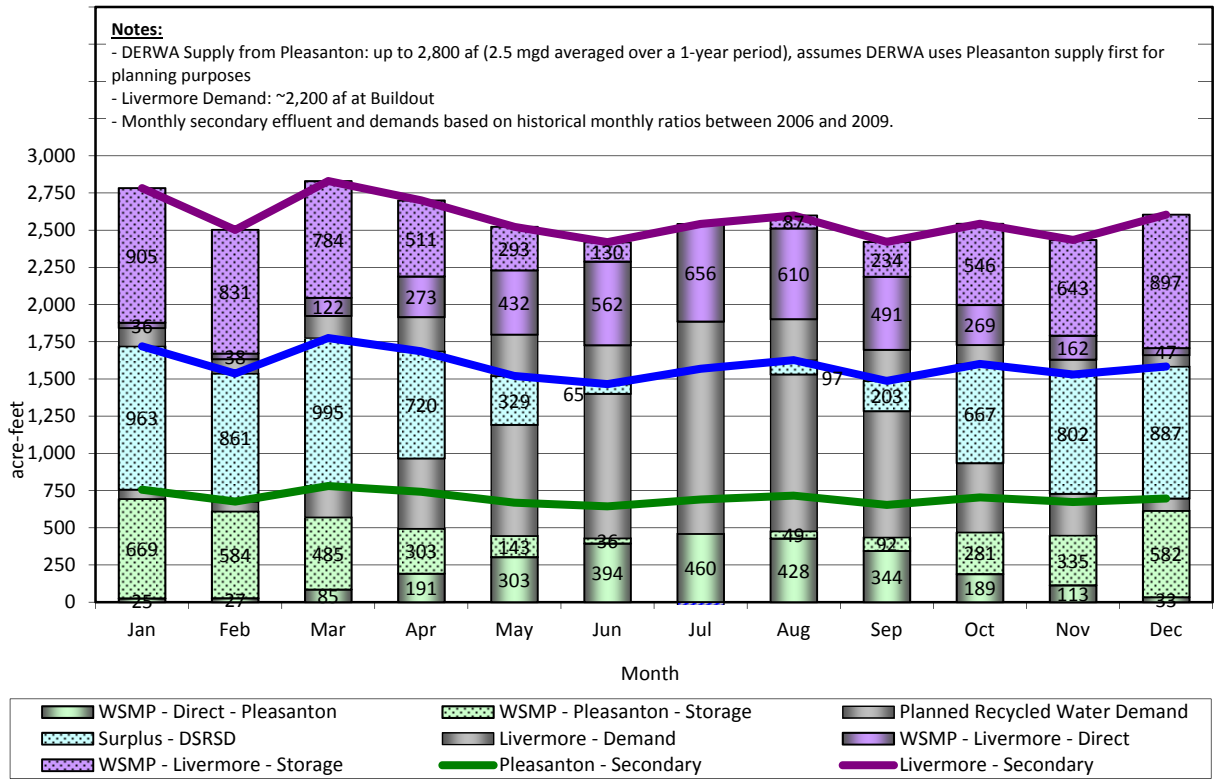


Figure G-2. Average Monthly Recycled Water Supply and Demand at Buildout



APPENDIX H: CEQA EXEMPTION

Form 4. Environmental Declaration

RECEIVED
JUL 05 2011
Zone 7 Water Agency

*ENVIRONMENTAL DECLARATION
(Calif. Fish and Game Code Sec. 711.4)

NAME AND ADDRESS OF APPLICANT OR LEAD AGENCY:

Zone 7 Alameda County Flood Control and
Water Conservation District
100 North Canyons Parkway
Livermore, CA 94551

Attn: Mary Lim

FOR COURT USE ONLY

FILED
ALAMEDA COUNTY

MAY 11 2011

PATRICK O'CONNELL, County Clerk
By *[Signature]* Deputy

FILING NO.

11-160

CLERKS
USE ONLY

CLASSIFICATION OF ENVIRONMENTAL DOCUMENT:

- 1. NOTICE OF EXEMPTION/STATEMENT OF EXEMPTION PLU117
 - A—STATUTORILY OR CATEGORICALLY EXEMPT PLU 117
\$50.00 (Fifty Dollars) – CLERK’S FEE
 - B—DE MINIMUS IMPACT –CERTIFICATE OF FEE EXEMPTION REQUIRED PLU 117
\$50.00 (Fifty Dollars) – CLERK’S FEE

- 2. NOTICE OF DETERMINATION – FEE REQUIRED
 - A—NEGATIVE DECLARATION PLU 116
\$2,044.00 (Two Thousand and Forty Four Dollars) – STATE FILING FEE
\$50.00 (Fifty Dollars) – CLERK’S FEE
 - B—ENVIRONMENTAL IMPACT REPORT PLU 115
\$2,839.25 (Twenty Eight Hundred and Thirty Nine Dollars and Twenty Five Cents) – STATE FILING FEE
\$50.00 (Fifty Dollars) – CLERK’S FEE

- 3. OTHER (Specify) _____ PLU117
Notice of Finding of No Significant Impact
\$50.00 (Fifty Dollars) – CLERK’S FEE

* THIS FORM MUST BE COMPLETED AND SUBMITTED WITH ALL ENVIRONMENTAL DOCUMENTS FILED WITH THE ALAMEDA COUNTY CLERK’S OFFICE.

FIVE COPIES OF ALL NECESSARY DOCUMENTATION ARE REQUIRED FOR FILING PURPOSES.

APPLICABLE FEES MUST BE PAID AT THE TIME OF FILING AN ENVIRONMENTAL DOCUMENT WITH THE ALAMEDA COUNTY CLERK’S OFFICE.

NOTE TO COUNTY CLERK: PURSUANT TO SECTION 21152 OF THE PUBLIC RESOURCES CODE, THE COUNTY CLERK SHALL POST NOTICES WITHIN 24 HOURS OF RECEIPT IN THE OFFICE OF THE COUNTY CLERK. A NOTICE SHALL REMAIN POSTED FOR A PERIOD OF 30 DAYS. UPON EXPIRATION OF THIS PERIOD, THE CLERK SHALL RETURN THE NOTICE TO THE LEAD AGENCY’S CONTACT PERSON WITH A NOTATION CERTIFYING THE NOTICE WAS POSTED FOR THE PRESCRIBED PERIOD BY LAW.

MAKE CHECK PAYABLE TO: ALAMEDA COUNTY CLERK



Notice of Exemption

To: Office of Planning and Research
For U.S. Mail:
P.O. Box 3044
Sacramento, CA 95812-3044

Street Address:
1400 Tenth Street, Room 121
Sacramento, CA 94514

From: ZONE 7 WATER AGENCY
100 North Canyons Parkway
Livermore, CA 94551
925-454-5000

To: County Clerk
County of Alameda
1106 Madison Street
Oakland, CA 94612

Date: May 6, 2011

Project Title: 2011 Water Supply Evaluation

Project Number (Zone 7): N/A

Project Location – Specific: Livermore

Project Location – City: Dublin, Livermore, Pleasanton

Project Location – County: Alameda County

FILED
ALAMEDA COUNTY

MAY 11 2011

PATRICK O'CONNELL, County Clerk
By  Deputy

Description of Nature, Purpose, and Beneficiaries of Project:

Over the past few decades, Zone 7 Water Agency (Zone 7) has developed a robust water supply system that allowed Zone 7 to store excess water in the wet years and draw on these reserves during dry years to create a reliable and sustainable water supply for the Livermore-Amador Valley (Valley). However, approximately 80% of Zone 7's water supply is Table A water purchased through the State Water Project (SWP) from the Department of Water Resources – the reliability of the SWP is subject to a very uncertain future due to legal and environmental constraints in the Sacramento-San Joaquin Delta (Delta) and climate change.

In response to this challenge, Zone 7 staff completed a preliminary evaluation of the existing water supply system. This Water Supply Evaluation (WSE) will help Zone 7:

- Develop a diverse set of water supply options and corresponding portfolios that will help identify supplemental studies that might be necessary to assist Zone 7 in refining associated supply yields and limits;
- Evaluate the ability for various water supply portfolios to meet future reliability targets; and
- Identify low-cost, zero-impact actions that will minimize near-term risks of water supply shortages, while maximizing flexibility until more certainty surrounds potential fixes for the SWP.

Name of Public Agency Approving Project: Zone 7 Water Agency

Name of Person or Agency Carrying Out Project: Zone 7 Water Agency

Exempt Status: (check one)

- Ministerial (Sec. 21080(b)(1); 15268);
- Declared Emergency (Sec. 21080(b)(3); 15269(a));
- Emergency Project (Sec. 21080(b)(4); 15269(b)(c));
- Categorical Exemption. State type and section number:
- Statutory Exemptions. State code number:
- Not Subject to CEQA under the General Rule of CEQA. See section 15061(b)(3).

FILED
ALAMEDA COUNTY

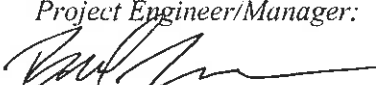
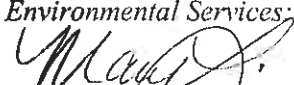
MAY 11 2011

PATRICK O'CONNELL, County Clerk
By  Deputy

Reasons Why Project is Exempt:


The project is not subject to CEQA under the general rule of CEQA that states that CEQA applies only to projects that have a potential for causing a significant effect on the environment. Public Resources Code section 21068 defines "significant effect on the environment" to mean a "substantial, or potentially substantial, adverse change in the environment." The Water Supply Evaluation recommends conducting various studies to confirm key assumptions, determine limitations, and further evaluate the feasibility of various water supply options. The recommended studies and evaluations will not result in a direct or indirect physical change in the environment because these studies will only provide Zone 7 with additional information.

Lead Agency Contact Person: Brad Ledesma **Area Code/Telephone/Ext:** 925-454-5038

<i>Project Engineer/Manager:</i>	<i>Environmental Services:</i>
Signature: 	
Title Associate Civil Engineer	Environmental Services Program Manager
Zone 7 Water Agency	Zone 7 Water Agency

Date received for filing at County Clerk: _____
Date received for filing at OPR: _____

CLERK'S CERTIFICATE OF POSTING, Pub. Res. 21152: I certify that a copy of this document was posted at the Recorder's Office, Oakland, CA, for the period prescribed by law.

Executed at _____ COUNTY CLERK
Oakland, CA
Date 06/30/2011 By  Deputy



2011 WATER SUPPLY EVALUATION

A Risk-Based Approach To Evaluating
Zone 7 Water Agency's Water Supply System

July 2011

Zone 7 Water Agency
Livermore, CA

