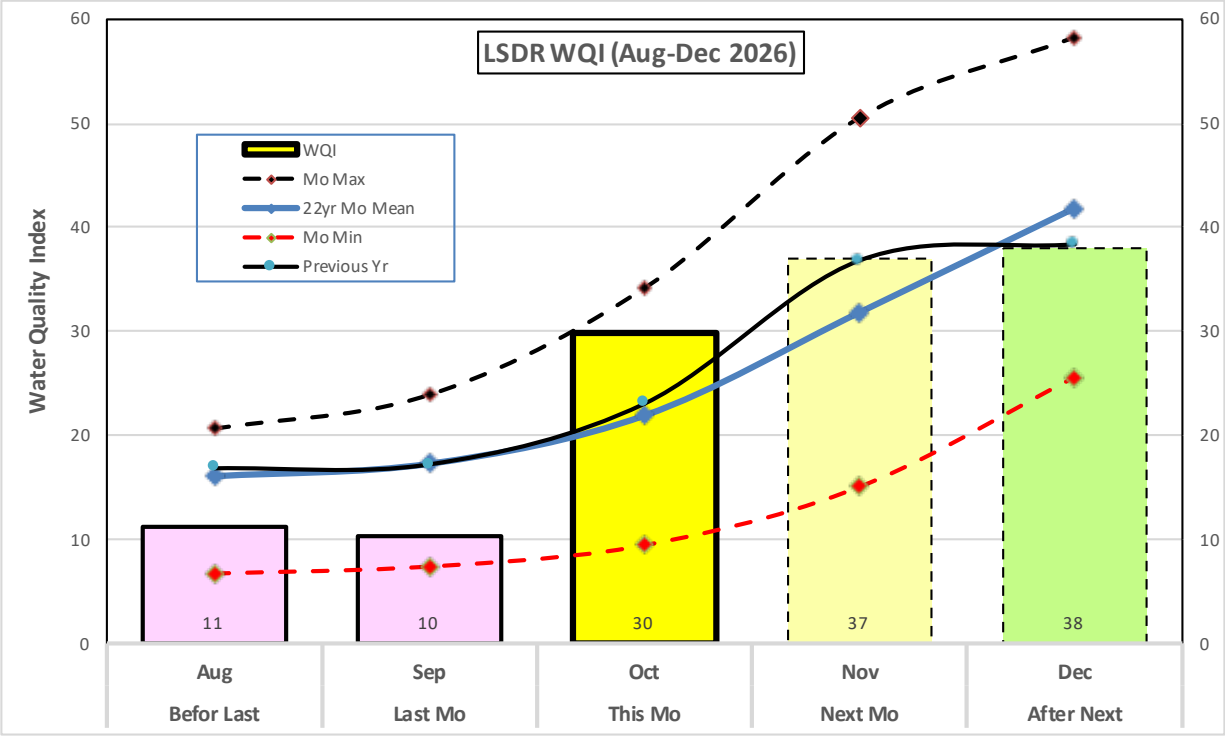
Monthly WQM Report

Lower San Diego River - October 2026



Lower SDR Water Quality Monitoring Data Summary

Table 1 presents a summary of water quality data monitored by the SDRPF RiverWatch Team within the Lower San Diego River (LSDR) watershed over the past two months (Sept/Oct). The overall index for this month of 30 (D-Marginal) is 20 points above last month as well as more than eight points greater than a year ago and the October mean index of 22 (E-Poor).

Table 1 - Sept/Oct. '26 WQM Data Summary							
	West - MV	Mid - MG	East - SB	LSDR	Variance From		
[Site #s]	[1-7] Sept/Oct	[8-10] Sept/Oct	[11-15] Sept/Oct	[1-15] Sept/Oct	Last Mo. (9/'26)	Last Yr. (10/'25	Norm (Oct.)
Temperature, oC	23.6/20.0	22.5/17.9	22.8/19.8	23.0/19.5	-15%	10%	5%
Sp.Cond., mS/cm	3.82/1.55	2.31/1.53	2.43/1.77	3.02/1.64	-46%	-23%	-40%
DO, mg/L	2.09/2.49	2.59/7.54	2.83/3.20	2.39/3.84	55%	13%	-2%
DO, % of Sat.	25/28	30/80	33/35	28/42			
pH	7.37/7.41	7.58/8.02	7.49/7.52	7.44/7.47	0.5%	-0.1%	-2%
3-day ADF, cfs	1.5/29	0.6/17	0.5/15	0.9/21	20x	57%	745%
WQ Index	14/21	5/57	11/25	10/30	2X	29%	36%
Letter Grade	E-/E	F	F+/D-	F+/D			
Sept./Oct	Poor/ Poor	VeryPoor Good	Very Poor Marginal	VeryPoor Marginal	**Index up 20 points from last month**		

Negative variance (declines from norms) and DO deficits (DO < 5.0 mg/L or 52% Sat) expressed in red.

LSDR **water temperatures** declined 3.5oC (-15%) from last month to within 10% of last year and 5% higher than the monthly norm of 18.6oC for Sept. The overall **specific conductance** of 1.64 mS/cm is down 46% from last month, 23% below a year ago and 40% less than the 22-yr norm of 2.74 mS/cm. The overall **dissolved oxygen** level of 3.84 mg/L (42%Sat.) is 55% greater than last month, 13% more than a year ago and 2% below the 22-yr norm of 3.95 mg/L (41%Sat). **Streamflow** over the antecedent 3-days of 21 cfs is 20 times greater than last month, 57% above a year ago and 745% above the 22-yr Oct. mean of 2.5 cfs. This month's overall LSDR **water quality index** (WQI) of 30 (D Marginal) is 20 points anove last month, 7 points more than as a year ago and 8 ponts (36%) greater than the 22-yr monthly norm of 22 (E Poor) for October.

WQI values computed over the past 25 months of RiverWatch record for the three main sections of the lower river system, the overall LSDR average, plus 30-day antecedent average daily streamflow (ADF) and total monthly rainfall (MRF) values, are expressed in **Table 2** on the next page. LSDR WQI values for October of this year are considerably above those from last Oct. and 2024 due in great part to the rapid increase in streamflow caused by more than an inch of rainfall earlier this month.

Table 2 - WQI Values, Average Daily Flow and Monthly Rainfall (Oct. '24 - Oct. '26)							
	Mission Valley	Mission Gorge	Santee Basin	LSDR		ADF,cfs	TMRF,in
Oct.'24	**17 (E)**	**42 (C)**	**24 (E+)**	**25 (D-)**	**DW**	**1.2**	**0.01**
Nov.	34 (D)	49 (C+)	23 (E+)	33 (D)	T	2.2	0.08
Dec.	45 (C)	53(B-)	33 (D)	42 (C)	T	3.7	0.05
Jan.'25	44 (C)	49 (C+)	32 (D)	40 (C)	T	3.8	0.00
Feb.	49 (C+)	68 (B)	50 (B-)	53 (B-)	WW	27	1.00
March	59 (B)	68 (B)	48 (C+)	57 (B)	WW	55	2.40
April	45 (C)	65 (B)	33 (D)	44 (C)	T	16	0.08
May	38 (C-)	48 (C+)	23 (E+)	33 (D)	T	6.7	0.23
June	27 (D)	35 (D)	24 (E+)	26 (D-)	DW	2.7	0.00
July	22 (E)	22 (E)	17 (E)	19 (E)	DW	1.4	0.00
Aug.	19 (E)	15 (E)	18 (E)	17 (E)	DW	1.3	0.01
Sept.'25	26 (D-)	16 (E)	10 (F)	17 (E)	DW	2.2	0.05
Oct.'25	**18 (E)**	**48 (C+)**	**19 (E)**	**23 (E+)**	**T**	**4.2**	**0.10**
Nov.	34(D)	61(B)	28(D)	37(D+)	WW	18	2.90
Dec.	41(C)	56(B)	27(D-)	38(C-)	WW	15	0.15
Jan. '26	53 (B-)	64 (B)	44 (C)	52 (B-)	WW	81	4.19
Feb	46 (C)	60 (B)	50 (B-)	51 (B-)	WW	36	2.11
March	42 (C)	61 (B)	30 (D)	41 (C)	T	19	0.00
April	35 (D)	52 (B-)	26 (D-)	35 (D)	T	5.7	0.15
May	30 (D-)	49 (C+)	21 (E)	30 (D)	T	5.2	0.31
June	17 (E)	35 (D)	20 (E)	21 (E)	DW	2.0	0.01
July	22 (E)	17 (E)	11 (F+)	16 (E)	DW	1.1	0.00
Aug.	20 (E)	3 (F)	7 (F)	11 (F+)	DW	1.0	0.00
Sept.'26	14 (E)	5 (F)	11 (F+)	10 (F+)	DW	1.1	0.00
Oct.'26	**21 (E)**	**57 (B)**	**25 (D-)**	**30 (D)**	**T**	**16**	**1.54**

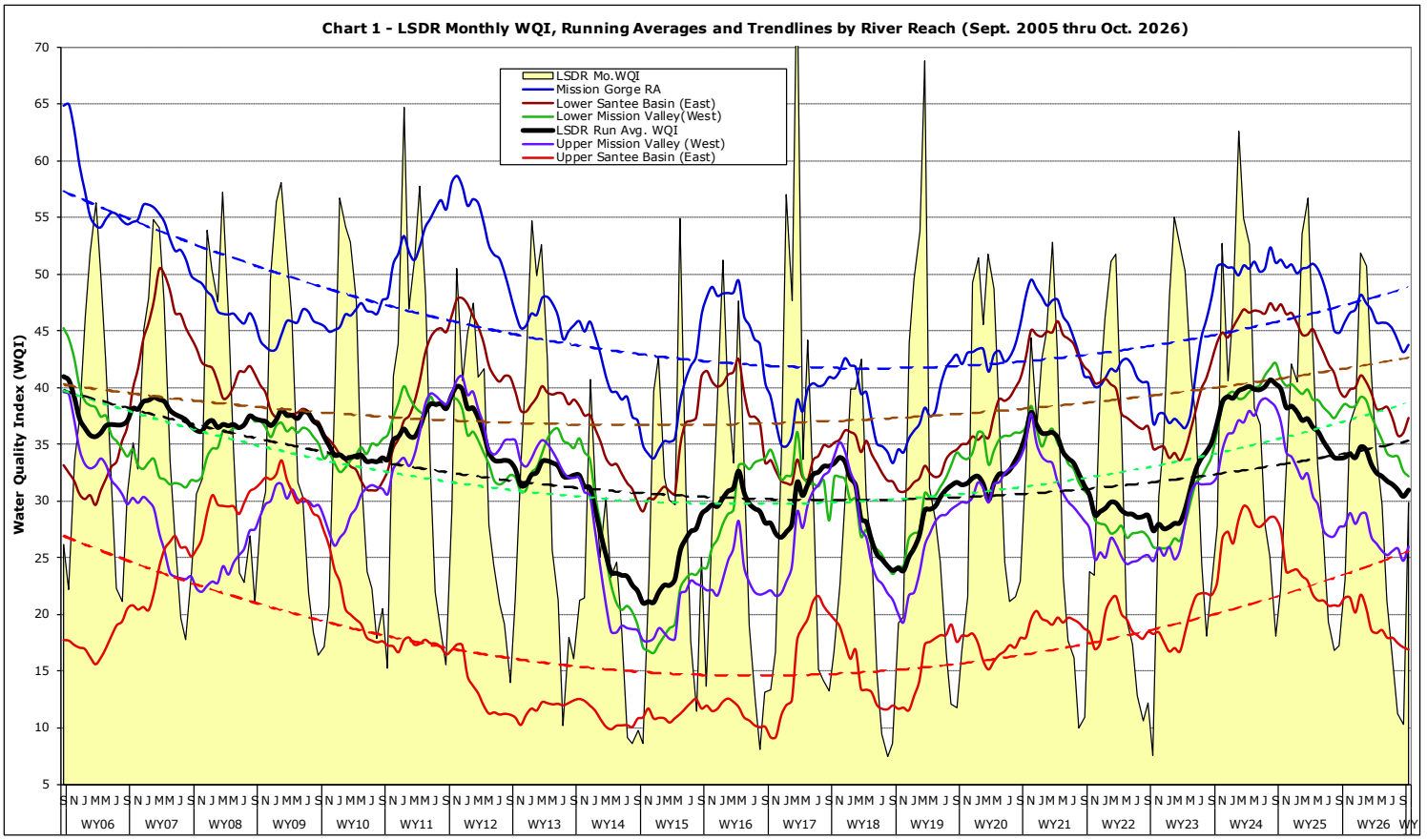
The **cover page** of this report presents overall LSDR WQ Index values for this month in comparison to two previous (Aug. & Sept.) and two subsequent (Nov. & Dec.) months. The index climbed significantly from Very Poor (F) to Marginal (D) within the last few weeks as streamflow increased by over an order of magnitude. The values shown for the next several months (Nov./ Dec.) are last year's index values and 22-yr means.

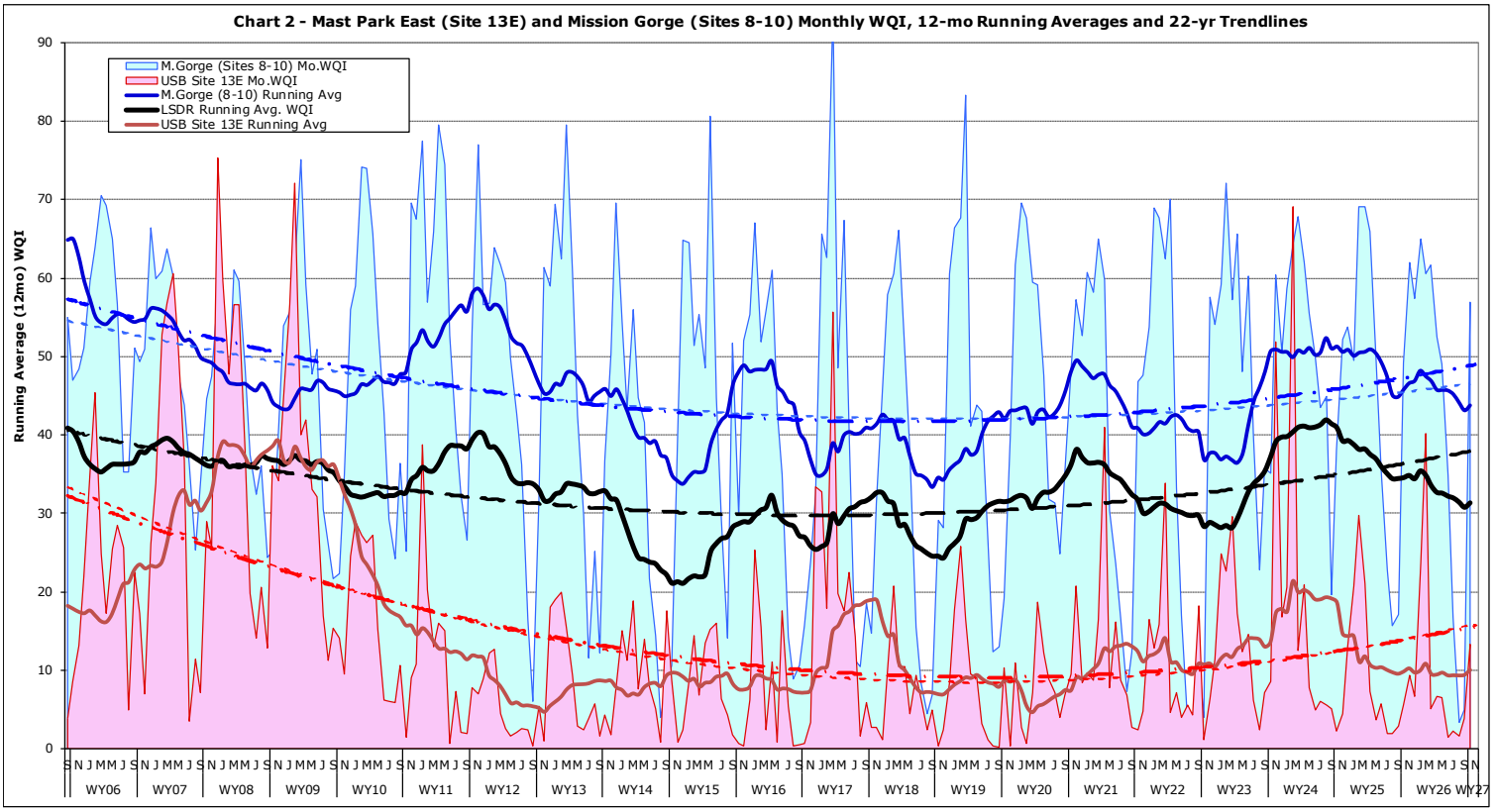
WQI values extending from Sept.'05 thru Sept.'26 are presented in **Chart 1** (next page) together with 12-mo. running averages overall (LSDR) and for each of the five reaches of the entire lower river watershed. The current running average WQI of 31 is 6.1% below of the long-range norm of 33. The running average low for Oct. of 21 (36% below avg.) occured in 2014 a droubt year. The previous highest running average index for the month of 41 (23% above norm) occured in 2005, a very wet year. The cyclic nature of the running average index values is readily apparent.

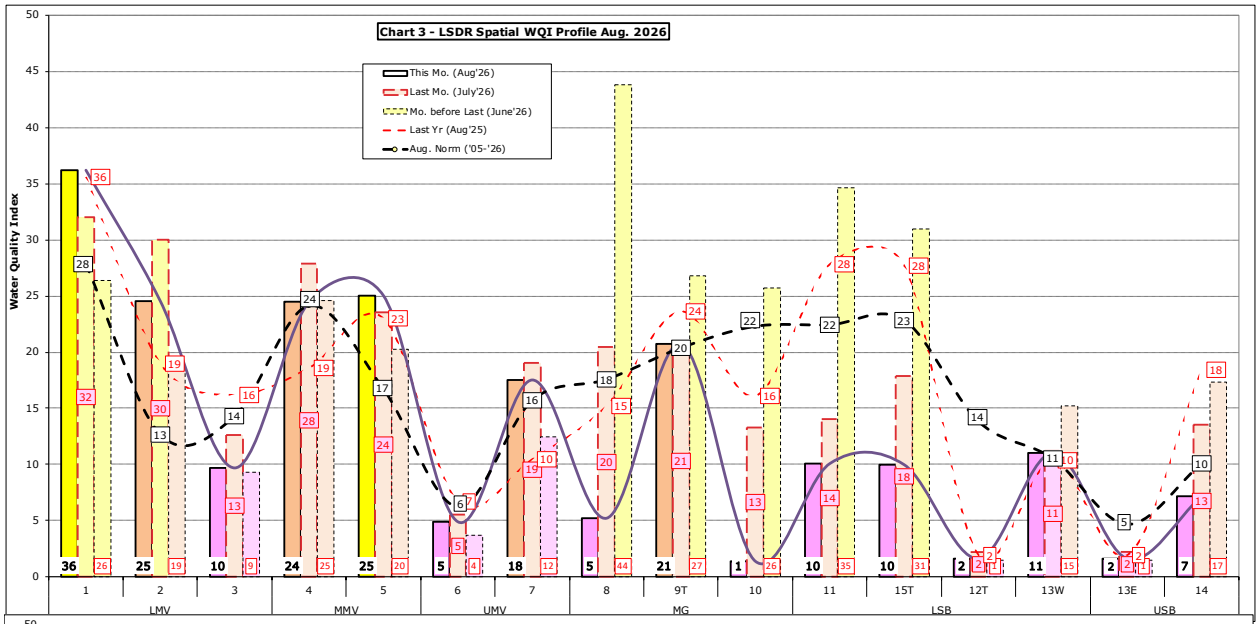
As shown on **Chart 2**, the range in monthly and 12-mo. running average WQI values for the commonly 'lowest" (Upper Santee Basin) and typically "highest" (Mission Gorge) reaches of the lower watershed are also highly cyclic. The greatest downward trends (red-dashed line) over time have been associated with the lowest quality reach (Upper Santee Basin) encompasing sites 13E and 14. The Mission Gorge (blue line) section, extending from Old Mission Dam through Mission Trails, continues to demonstrate the least change over time. Both charts describe the decline in index values over the last two water years (WYs25/26) of below average rainfall and streamflow.

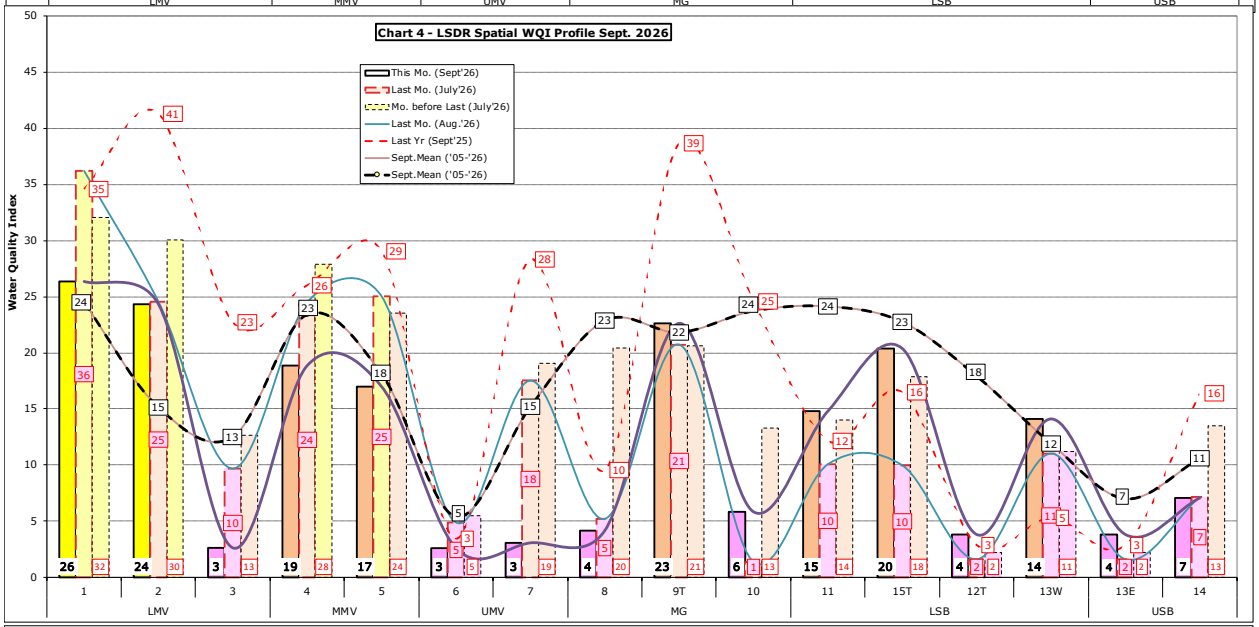
Spatial WQI values determined over the last three months (Aug, Sept & Oct), expressed in order of location upstream, are shown in **Charts 3, 4 and 5** on page 6. This month's results (color bars w/values in bold black shown on Chart 5) are much greater than measured last month (middle bar) at all but three sites (i.e., 1,2 &14). This month; only two sites were found Very Poor (F), seven Poor (E), three Marginal (D), three Fair (C) and one Good (B). Last month only two sites were Marginal (D), six Poor (E) and eight Very Poor (F). During the previouis month (Aug.) only two sites were Marginal(D), four Poor (E) and ten Very Poor (F). Index values are expected to continue improving over the next month as temperatures further decline and streamflow rises. This months overall water quality, compared to the last two are higher due to rainfall, first flush streamflows, lower water temperatures and specific conductivities resulting in higher dissolved oxygen levels. The most improved portions of the lower river system are in the Mission Gorge (sites 8-10) and Lower Santee Basin (sites 11, 15 &12) reaches. The least improved are the Upper Santee Basin and Lower Mission Valley reaches.

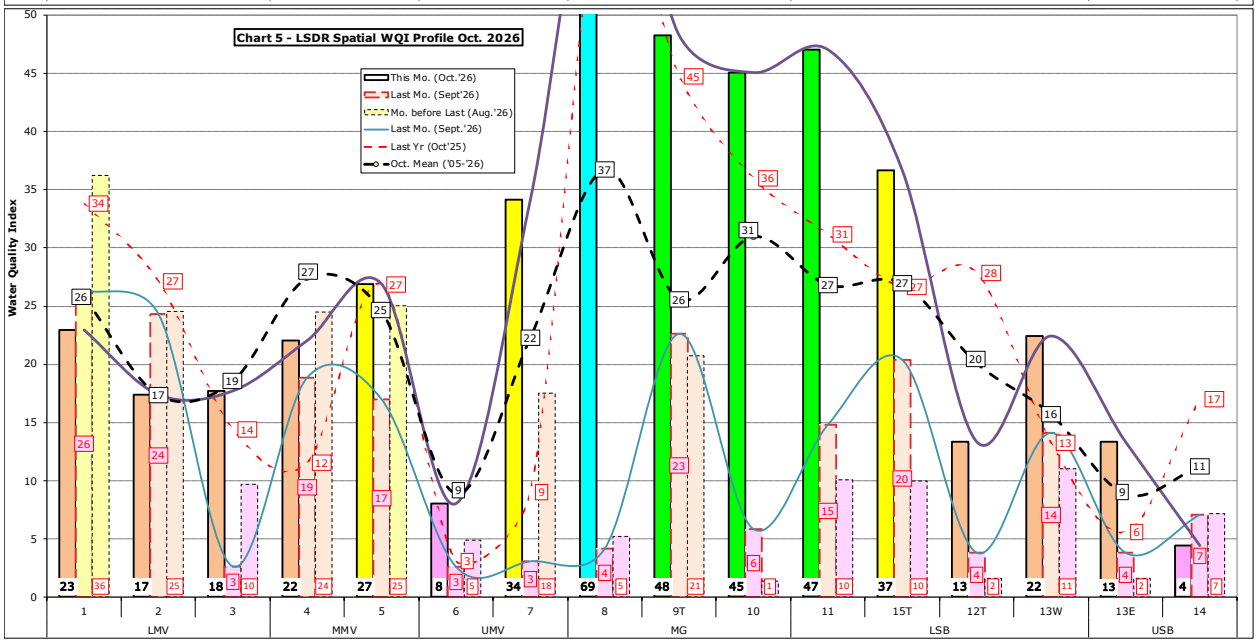
Chart 6 shows montly WQI values expressed as color-shaded bars; blue (50 or >) A-B/Good, green (38-49) C/Fair, yellow (25-37) D/Marginal, brown (13-24) E/Poor, and pink (12 or <) F/Very Poor over the last five months extending from June thru October. Unshaded index values for the remaining seven months (Nov. thru May) of each water year are also shown. Running average index values for the LSDR (distance weighted averages of all sites) are displayed as a heavy black line. Running averages for the consistently highest (best) quality section of the river (Mission Gorge) are described by the upper 'blue' line, while the consistently lowest (poorest) reach (Upper Santee Basin) is shown by the lower 'red' line. The three dashed curved lines represent overall trends in index values for the highest, mean and lowest sections of the river over the past 266

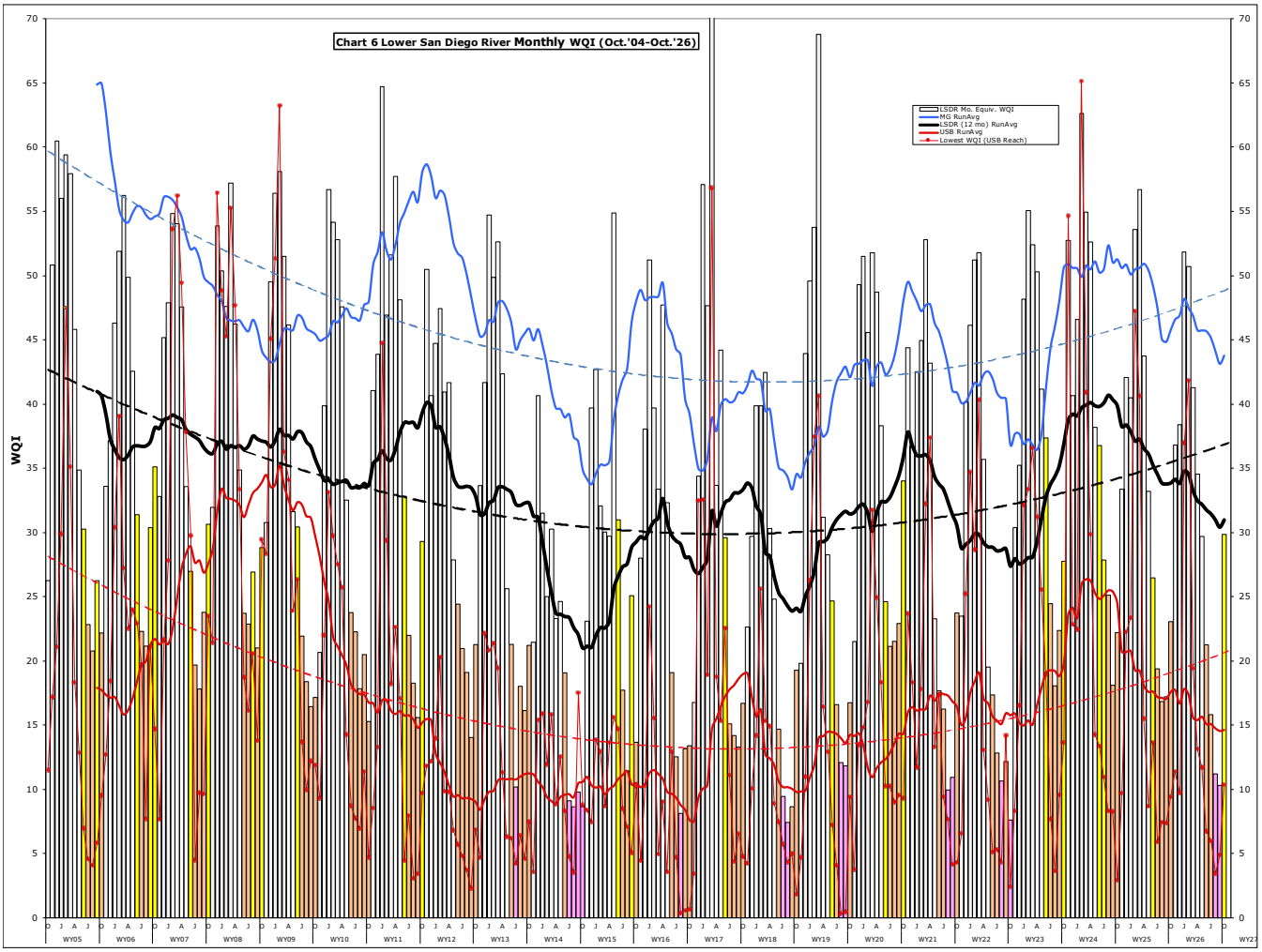

Chart 1 - LSDR Monthly WQI, Running Averages and Trendlines by River Reach (Sept. 2005 thru Oct. 2026)
LSDR Mo.WQI
Mission Gorge RA
Lower Santee Basin (East)
Lower Mission Valley(West)
LSDR Run Avg. WQI
Upper Mission Valley (West)
Upper Santee Basin (East)
Water Quality Index (WQI)
WY06
WY07
WY08
WY09
WY10
WY11
WY12
WY13
WY14
WY15
WY16
WY17
WY18
WY19
WY20
WY21
WY22
WY23
WY24
WY25
WY26


Chart 2 - Mast Park East (Site 13E) and Mission Gorge (Sites 8-10) Monthly WQI, 12-mo Running Averages and 22-yr Trendlines
M.Gorge (Sites 8-10) Mo.WQI
USB Site 13E Mo.WQI
M.Gorge (8-10) Running Avg
LSDR Running Avg. WQI
USB Site 13E Running Avg
Running Average (12mo) WQI
WY06
WY07
WY08
WY09
WY10
WY11
WY12
WY13
WY14
WY15
WY16
WY17
WY18
WY19
WY20
WY21
WY22
WY23
WY24
WY25
WY26
WY27


Chart 3 - LSDR Spatial WQI Profile Aug. 2026
This Mo. (Aug'26)
Last Mo. (July'26)
Mo. before Last (June'26)
Last Yr (Aug'25)
Aug. Norm ('05-'26)
Water Quality Index
LMV
MMV
UMV
MG
LSB
USB


Chart 4 - LSDR Spatial WQI Profile Sept. 2026
This Mo. (Sept'26)
Last Mo. (July'26)
Mo. before Last (July'26)
Last Mo. (Aug.'26)
Last Yr (Sept'25)
Sept.Mean ('05-'26)
Sept.Mean ('05-'26)
Water Quality Index
LMV
MMV
UMV
MG
LSB
USB


Chart 5 - LSDR Spatial WQI Profile Oct. 2026
This Mo. (Oct.'26)
Last Mo. (Sept'26)
Mo. before Last (Aug.'26)
Last Mo. (Sept.'26)
Last Yr (Oct'25)
Oct. Mean ('05-'26)
Water Quality Index
LMV
MMV
UMV
MG
LSB
USB



months (22+yrs) of continous water quality monitiring. The lowest 12-month running average values in all portions of the river occured during the last extended drought years (2012-2016). There has been a slow, unsteady increase in index values fin all sections of the lower river from 2017 thru 2024, followed by two years of decline. This month's overall index value of 30 (D Marginal) demonstrates the typical transition toward improved water quality as streamflow and dissolved oxygen levels increase while water temperatures and specific conductivity decline during the initial or 'first flush' hydrologic occurance of the wet-weather season. Seven years (30%) out of the last 23 years of record have seen index values improve into the Marginal (yellow) water quality range. October values are predominaly (14 out of 23) in the Poor (brown) range while two (9%) remained in the Very Poor (pink) range with index values of 12 or less.

With strong predictions of further precipitation over the next 30 days, overall water quility in the lower river system, especially in the upper and lower most reaches, is expected to continue improving in November.

jck (10/18/26)