

Water-Data Report 2009

10350000 Truckee River At Vista, NV

Truckee Basin
Truckee Subbasin

LOCATION.--Lat 39°31'14", long 119°42'00" referenced to North American Datum of 1927, in SW ¼ SE ¼ sec.11, T.19 N., R.20 E., Washoe County, NV, Hydrologic Unit 16050102, 0.4 mi south of Vista, 600 ft downstream from Steamboat Creek, on the northeast side of Reno-Sparks Sewage Treatment Plant, and at mi 53.38 upstream from Marble Bluff Dam.

DRAINAGE AREA.--1,431 mi².

SURFACE-WATER RECORDS

PERIOD OF RECORD.--Aug. 1899 to Dec. 1907, Jan. 1932 to Dec. 1954, Oct. 1958 to current year. Monthly discharge only for some periods, published in WSP 1314 and 1734.

REVISED RECORDS.--WSP 1634: 1904. WSP 1734: 1907 (M). WDR NV-75-1: 1963 (M). WDR NV-79-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 4,367.60 ft above National Geodetic Vertical Datum of 1929, from levels from U.S. Coast and Geodetic Benchmark. Prior to Apr. 16, 1907, nonrecording gages at several sites at various datums in vicinity of previous gage site 1.2 mi downstream. May to Dec. 1907 reference point on railroad bridge 1.0 mi downstream. Jan. 1932 to Dec. 1954, Oct. 1958 to Aug. 17, 1959, water-stage recorder at site 0.9 mi downstream at datum 5.59 ft higher. Aug. 18, 1959 to Dec. 9, 1959, staff gage at different datum. Dec. 10 1959 to Sep. 30, 1993, at site 1.2 mi downstream at datum 0.99 ft higher.

REMARKS.--No estimated daily discharges. Records good except for period, May to July, which are fair. Flow regulated by Lake Tahoe (station 10337000), Prosser Creek (station 10340300), Stampede (station 10344300), and Boca (station 10344490) Reservoirs, and other lakes, combined capacity 1,070,000 acre-ft. Several powerplants and many diversions above station.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 18,900 ft³/s, Feb. 1, 1963, gage height, 16.76 ft, maximum gage height, 24.16 ft, Jan. 2, 1997; minimum daily, 7.0 ft³/s Aug. 26, 1935.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum gage height known, 17.04 ft from floodmarks, Dec. 1955, at site and datum used 1958-59, discharge about 15,000 ft³/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,170 ft³/s, May 5, gage height, 8.22 ft; minimum daily discharge, 221 ft³/s, Jan. 1.

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DISCHARGE, CUBIC FEET PER SECOND
WATER YEAR OCTOBER 2008 TO SEPTEMBER 2009
DAILY MEAN VALUES

| Day | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
|--------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 1 | 363 | 483 | 296 | 221 | 332 | 492 | 534 | 385 | 694 | 453 | 356 | 305 |
| 2 | 260 | 641 | 278 | 229 | 332 | 942 | 569 | 1,310 | 739 | 416 | 305 | 295 |
| 3 | 288 | 446 | 275 | 238 | 323 | 1,370 | 632 | 1,500 | 847 | 445 | 340 | 287 |
| 4 | 395 | 488 | 285 | 237 | 317 | 930 | 563 | 1,720 | 716 | 452 | 308 | 308 |
| 5 | 412 | 441 | 326 | 264 | 325 | 717 | 528 | 1,700 | 805 | 461 | 292 | 294 |
| 6 | 382 | 423 | 347 | 254 | 344 | 619 | 532 | 1,470 | 611 | 463 | 296 | 300 |
| 7 | 386 | 432 | 339 | 255 | 311 | 520 | 514 | 1,150 | 538 | 448 | 300 | 323 |
| 8 | 358 | 439 | 346 | 254 | 321 | 533 | 517 | 1,010 | 547 | 428 | 287 | 346 |
| 9 | 352 | 468 | 328 | 253 | 310 | 524 | 498 | 896 | 582 | 422 | 293 | 339 |
| 10 | 387 | 453 | 312 | 246 | 293 | 480 | 516 | 888 | 405 | 414 | 301 | 315 |
| 11 | 510 | 428 | 320 | 248 | 336 | 461 | 528 | 873 | 409 | 342 | 298 | 324 |
| 12 | 504 | 421 | 333 | 254 | 354 | 449 | 540 | 778 | 435 | 363 | 284 | 345 |
| 13 | 514 | 433 | 342 | 250 | 358 | 440 | 549 | 659 | 504 | 397 | 277 | 368 |
| 14 | 501 | 418 | 331 | 247 | 359 | 427 | 547 | 614 | 570 | 388 | 261 | 351 |
| 15 | 492 | 431 | 359 | 250 | 366 | 435 | 520 | 611 | 556 | 299 | 274 | 374 |
| 16 | 481 | 428 | 318 | 250 | 373 | 451 | 514 | 644 | 528 | 283 | 301 | 366 |
| 17 | 459 | 411 | 337 | 250 | 370 | 531 | 488 | 712 | 522 | 282 | 328 | 345 |
| 18 | 476 | 421 | 397 | 243 | 399 | 562 | 491 | 833 | 514 | 280 | 323 | 362 |
| 19 | 494 | 422 | 449 | 242 | 353 | 550 | 515 | 825 | 493 | 272 | 304 | 362 |
| 20 | 513 | 413 | 364 | 242 | 344 | 559 | 542 | 849 | 469 | 325 | 290 | 367 |
| 21 | 488 | 395 | 319 | 239 | 356 | 594 | 602 | 750 | 447 | 300 | 304 | 372 |
| 22 | 480 | 369 | 304 | 269 | 358 | 640 | 682 | 686 | 496 | 263 | 284 | 470 |
| 23 | 466 | 304 | 286 | 339 | 480 | 579 | 718 | 652 | 467 | 281 | 302 | 475 |
| 24 | 478 | 296 | 250 | 412 | 611 | 525 | 693 | 632 | 449 | 284 | 333 | 472 |
| 25 | 472 | 301 | 324 | 416 | 547 | 515 | 586 | 560 | 414 | 267 | 323 | 428 |
| 26 | 473 | 328 | 272 | 411 | 482 | 504 | 491 | 541 | 428 | 265 | 302 | 390 |
| 27 | 473 | 332 | 271 | 380 | 494 | 514 | 436 | 510 | 437 | 296 | 290 | 367 |
| 28 | 464 | 292 | 265 | 368 | 494 | 512 | 458 | 528 | 463 | 318 | 295 | 388 |
| 29 | 477 | 299 | 275 | 375 | --- | 548 | 431 | 589 | 484 | 306 | 279 | 416 |
| 30 | 456 | 300 | 253 | 368 | --- | 578 | 383 | 631 | 461 | 277 | 289 | 382 |
| 31 | 463 | --- | 234 | 342 | --- | 543 | --- | 703 | --- | 257 | 313 | --- |
| Total | 13,717 | 12,156 | 9,735 | 8,846 | 10,642 | 18,044 | 16,117 | 26,209 | 16,030 | 10,747 | 9,332 | 10,836 |
| Mean | 442 | 405 | 314 | 285 | 380 | 582 | 537 | 845 | 534 | 347 | 301 | 361 |
| Max | 514 | 641 | 449 | 416 | 611 | 1,370 | 718 | 1,720 | 847 | 463 | 356 | 475 |
| Min | 260 | 292 | 234 | 221 | 293 | 427 | 383 | 385 | 405 | 257 | 261 | 287 |
| Ac-ft | 27,210 | 24,110 | 19,310 | 17,550 | 21,110 | 35,790 | 31,970 | 51,990 | 31,800 | 21,320 | 18,510 | 21,490 |

STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1899 - 2009, BY WATER YEAR (WY)

| | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep |
|-------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Mean | 428 | 541 | 662 | 751 | 874 | 999 | 1,283 | 1,664 | 1,182 | 530 | 352 | 382 |
| Max | 1,304 | 2,650 | 3,705 | 6,858 | 4,066 | 5,420 | 4,979 | 5,643 | 5,740 | 3,007 | 1,476 | 1,529 |
| (WY) | (1908) | (1984) | (1984) | (1997) | (1986) | (1986) | (1907) | (1952) | (1983) | (1983) | (1907) | (1983) |
| Min | 41.7 | 87.7 | 94.9 | 122 | 121 | 197 | 233 | 103 | 46.2 | 79.8 | 36.7 | 28.8 |
| (WY) | (1934) | (1933) | (1933) | (1991) | (1991) | (1933) | (1977) | (1934) | (1934) | (1992) | (1935) | (1935) |

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SUMMARY STATISTICS

| | Calendar Year 2008 | | Water Year 2009 | | Water Years 1899 - 2009 | |
|---------------------------------|--------------------|--------|-----------------|--------|-------------------------|--------------|
| Annual total | 166,088 | | 162,411 | | | |
| Annual mean | 454 | | 445 | | 804 | |
| Highest annual mean | | | | | 2,786 | 1983 |
| Lowest annual mean | | | | | 158 | 1992 |
| Highest daily mean | 1,320 | May 17 | 1,720 | May 4 | 17,400 | Feb 1, 1963 |
| Lowest daily mean | 234 | Dec 31 | 221 | Jan 1 | 7.0 | Aug 26, 1935 |
| Annual seven-day minimum | 271 | Dec 25 | 239 | Dec 30 | 9.7 | Aug 21, 1935 |
| Maximum peak flow | | | 2,170 | May 5 | 18,900 | Feb 1, 1963 |
| Maximum peak stage | | | 8.22 | May 5 | 24.16 | Jan 2, 1997 |
| Annual runoff (ac-ft) | 329,400 | | 322,100 | | 582,500 | |
| 10 percent exceeds | 599 | | 632 | | 1,790 | |
| 50 percent exceeds | 416 | | 412 | | 495 | |
| 90 percent exceeds | 341 | | 275 | | 205 | |

