

## NISQUALLY RIVER BASIN

## 12082500 NISQUALLY RIVER NEAR NATIONAL, WA

LOCATION.--Lat 46°45'10", long 122°04'57", in SW 1/4 SW 1/4 sec.29, T.15 N., R.6 E., Pierce County, Hydrologic Unit 17110015, on right bank 100 ft downstream from old railroad bridge, 1.2 mi west of National, 3.3 mi upstream from Mineral Creek, and at mile 57.8.

DRAINAGE AREA.--133 mi<sup>2</sup>.

PERIOD OF RECORD.--May 1942 to current year.

REVISED RECORDS.--WSP 1716: 1943(M), 1947(P), 1950-51, 1956(M). WDR WA-74-1: 1968(M), 1969(M), 1972(P).

GAGE.--Water-stage recorder. Elevation of gage is 1,450 ft above NGVD of 1929, from river-profile map.

REMARKS.--Records good except for estimated daily discharges, which are fair. Small diversions for domestic use. Water temperatures published October 1951 to September 1982. U.S. Geological Survey satellite telemeter at station.

AVERAGE DISCHARGE.--60 years (water years 1943-2002), 773 ft<sup>3</sup>/s, 78.96 in/yr, 559,900 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 21,200 ft<sup>3</sup>/s, Feb. 8, 1996, gage height, 12.18 ft; minimum discharge, 100 ft<sup>3</sup>/s, Nov. 10, 17, 1987.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,600 ft<sup>3</sup>/s and maximum (\*):

Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)	Date	Time	Discharge (ft <sup>3</sup> /s)	Gage height (ft)
Nov. 14	1400	4,610	6.40	Dec. 17	0130	4,840	7.03
Nov. 22	2245	2,800	5.90	Jan. 08	0030	*8,630	*8.26
Dec. 13	2230	3,260	6.19	Apr. 14	0415	5,470	6.98

Minimum discharge, 157 ft<sup>3</sup>/s, Oct. 9, 10.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2001 TO SEPTEMBER 2002  
DAILY MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	275	896	1060	305	485	673	572	813	1480	1080	578	568
2	305	916	1030	434	461	616	576	937	1430	973	546	579
3	314	802	872	429	444	574	583	868	1360	921	502	552
4	339	702	774	384	426	545	628	763	1370	844	497	367
5	294	707	693	363	432	535	734	710	1640	762	435	321
6	278	611	708	622	479	522	817	651	1580	797	411	313
7	213	547	644	5130	602	481	901	595	1240	932	383	300
8	206	503	617	5910	577	454	853	539	1010	1070	402	263
9	168	467	589	2830	520	435	891	499	879	926	500	291
10	231	445	559	1840	512	472	1260	468	914	1060	629	357
11	294	430	525	1440	503	1170	1380	475	1070	1150	617	446
12	393	491	503	1410	460	1350	1500	565	1320	1120	624	e460
13	463	687	1530	1260	435	1040	2010	791	1650	1200	693	e470
14	706	3620	2290	1070	408	877	4410	839	1930	1110	756	440
15	428	3010	1420	943	400	769	2410	818	1840	925	709	417
16	339	2120	2790	849	402	687	1560	802	1600	893	655	385
17	269	1430	3090	772	401	613	1170	e860	1300	892	605	299
18	233	982	1600	721	421	560	957	e940	1310	838	552	266
19	280	937	1110	712	499	566	830	e980	1140	788	524	341
20	281	1140	841	710	494	626	760	e1200	1090	720	523	383
21	298	1270	679	670	896	606	709	e1300	1210	729	491	327
22	404	1800	573	610	1370	586	673	1140	1330	794	572	349
23	495	2200	485	562	1420	592	626	1060	1320	835	585	373
24	441	1470	423	642	1440	609	592	1010	1190	816	601	391
25	488	1130	375	951	1150	655	584	1080	1210	812	574	379
26	505	930	337	764	967	657	598	1220	1420	768	589	341
27	505	793	310	656	839	635	608	1400	1440	696	599	267
28	434	819	325	572	748	618	565	1830	1440	692	658	253
29	380	958	293	522	---	601	572	2310	2130	815	673	288
30	531	875	274	511	---	585	653	2020	1410	830	575	212
31	908	---	295	498	---	572	---	1710	---	655	522	---
TOTAL	11698	33688	27614	35092	18191	20281	30982	31193	41253	27443	17580	10998
MEAN	377	1123	891	1132	650	654	1033	1006	1375	885	567	367
MAX	908	3620	3090	5910	1440	1350	4410	2310	2130	1200	756	579
MIN	168	430	274	305	400	435	565	468	879	655	383	212
AC-FT	23200	66820	54770	69600	36080	40230	61450	61870	81830	54430	34870	21810
CFSM	2.84	8.44	6.70	8.51	4.88	4.92	7.76	7.57	10.3	6.66	4.26	2.76
IN.	3.27	9.42	7.72	9.82	5.09	5.67	8.67	8.72	11.54	7.68	4.92	3.08

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1942 - 2002, BY WATER YEAR (WY)

	MEAN	MAX	(WY)	MIN	(WY)
1942	466	1333	1948	205	1990
1943	835	2696	1996	140	1953
1944	957	2344	1976	246	1953
1945	866	1805	1974	285	1979
1946	821	2330	1996	318	1966
1947	648	1784	1972	296	1955
1948	786	1276	1990	362	1975
1949	1037	1681	1949	596	1992
1950	1058	2010	1974	490	1992
1951	808	1334	1974	433	1992
1952	563	952	1999	333	1994
1953	432	739	1959	275	1985

## SUMMARY STATISTICS

	FOR 2001 CALENDAR YEAR	FOR 2002 WATER YEAR	WATER YEARS 1942 - 2002
ANNUAL TOTAL	224486	306013	
ANNUAL MEAN	615	838	773
HIGHEST ANNUAL MEAN			1186
LOWEST ANNUAL MEAN			496
HIGHEST DAILY MEAN	3620	Nov 14	15700
LOWEST DAILY MEAN	168	Oct 9	105
ANNUAL SEVEN-DAY MINIMUM	241	Oct 5	116
ANNUAL RUNOFF (AC-FT)	445300	607000	559900
ANNUAL RUNOFF (CFSM)	4.62	6.30	5.81
ANNUAL RUNOFF (INCHES)	62.79	85.59	78.96
10 PERCENT EXCEEDS	965	1430	1340
50 PERCENT EXCEEDS	518	655	629
90 PERCENT EXCEEDS	278	340	320

e Estimated