Appendix 2. Characteristics, principal aquifers, study units, and assessment studies of domestic wells sampled for the NAWQA Program, 1991–2004, by aquifer type

Tables

Table 2–1. Characteristics, principal aquifers, study units, and assessment studies of domestic wells sampled for the NAWQA Program in aquifer studies, 1991–2004, by aquifer rock type.

[Well and water depths in parentheses are single values only. Numbers of wells for well depth, depth to top of open interval, and depth to water may differ. --, not applicable or not available]

Principal aquifer	NAWQA study unit	Study code	Number of wells	Median well depth, in feet below land surface	Median depth to top of open interval, in feet below land surface	Median depth to water, in feet below land surface	Sampling period
Basin-fill and other non-glacial sand and gravel aquifers (BFSG)							
Basin and Range basin-fill aquifers (BR)	Central Arizona Basins (CAZB)	cazbsus1a	17	377	320	251	1996–97
		cazbsus1b	18	215	217	65	1996–97
		cazbsus2	25	340	230	199	1998
		cazbsus3	17	264	222	107	1996
	Great Salt Lake Basins (GRSL)	grslsus1a	17	238	142	126	1998
		grslsus1b	17	202	180	75	1998
	Nevada Basin and Range (NVBR)	nvbrsus1	4	300	145	--	1995
		nvbrsus2	3	185	120	--	1995
		nvbrsus3	11	125	120	--	1995
Central Valley aquifer system (CV)	Sacramento River Basin (SACR)	sacrsus1	27	155	120	22	1996
	San Joaquin–Tulare Basins (SANJ)	sanjsus1	30	182	133	84	1995, 2002
High Plains aquifer (HP)	High Plains aquifer (HPGW)	hpgwsus1a	74	263	215	158	1999
		hpgwsus1b	46	204	163	137	2001
		hpgwsus1c	104	205	183	83	2002–03
		hpgwsus2	20	74	64	30	1999
		hpgwsus4	27	190	170	89	2003
		hpgwsus5	27	113	100	15	2004
Mississippi River Valley alluvial aquifer (MV)	Mississippi Embayment (MISE)	misesus1	2	70	(30)	(12)	1998
		misesus3	3	130	105	11	1998
Northern Rocky Mountains Intermontane Basins aquifer system (NR)	Northern Rockies Intermontane Basins (NROK)	nroksus1	29	137	130	86	1999
		nroksus2	28	58	50	26	2001
Other stream valley alluvial aquifers (OS)	Central Nebraska Basins (CNBR)	cnbrsus2	9	50	37	8	1997
	Upper Colorado River Basin (UCOL)	ucolsus1	22	60	48	33	1997
		ucolsus2	12	49	43	(5)	1997
	Yellowstone River Basin (YELL)	yellsus1	1	(19)	(6)	(11)	1999
Rio Grande aquifer system (RG)	Rio Grande Valley (RIOG)	riogsus1	25	178	173	12	1995

Table 2–1. Characteristics, principal aquifers, study units, and assessment studies of domestic wells sampled for the NAWQA Program in aquifer studies, 1991–2004, by aquifer rock type.—Continued

[Well and water depths in parentheses are single values only. Numbers of wells for well depth, depth to top of open interval, and depth to water may differ. --, not applicable or not available]

Principal aquifer	NAWQA study unit	Study code	Number of wells	Median well depth, in feet below land surface	Median depth to top of open interval, in feet below land surface	Median depth to water, in feet below land surface	Sampling period
Basin-fill and other non-glacial sand and gravel aquifers (BFSG)—Continued							
Snake River Plain basin-fill aquifers (SPf)	Upper Snake River Basin (USNK)	usnksus1	9	67	64	--	1994
		usnksus2	19	145	128	17	1995
		usnksus3	6	166	112	7	1996
Willamette Lowland basin-fill aquifers (WL)	Willamette Basin (WILL)	willsus1	69	60	50	16	1993
Glacial sand and gravel aquifers (GLAC)							
Eastern glacial aquifers (Ge)	Allegheny and Monongahela River Basins (ALMN)	almnsus2	30	73	68	--	1996
	Conneticut, Housatonic, and Thames River Basins (CONN)	connsus2	28	113	105	25	2002
	Delaware River Basin (DELR)	delrsus3	12	86	61	21	2001
	Hudson River Basin (HDSN)	hdsnsus1	2	108	--	--	1994
	Long Island–New Jersey Coastal Drainages (LINJ)	linjsus1	1	(152)	(146)	--	1997
Central glacial aquifers (Gc)	Lake Erie-Lake Saint Clair Drainages (LERI)	lerisus1	27	78	74	30	1998
	Lower Illinois River Basin (LIRB)	lirbsus1	26	239	235	--	1996
		lirbsus2	28	50	15	41	1996
	Great and Little Miami River Basins (MIAM)	miamsus1	30	60	60	25	1999
	Upper Illinois River Basin (UIRB)	uirbsus1	27	72	68	22	2001
		uirbsus2	23	45	40	10	2000
	Western Lake Michigan Drainages (WMIC)	wmicsus2	24	82	72	27	2003
West central glacial aquifers (Gwc)	Eastern Iowa Basins (EIWA)	eiwasus2	32	52	51	11	1998
	Red River of the North Basin (REDN)	rednsus1	5	62	56	--	1992, 1995
		rednsus2	15	65	58	7	1993
		rednsus3	3	60	--	(24)	1995
		rednsus5	25	109	111	19	1991–94
Western glacial aquifers (Gw)	Cook Inlet Basin (COOK)	cooksus1a	22	105	98	64	1999
	Puget Sound Basin (PUGT)	pugtsus1	29	68	64	22	1996

Table 2–1. Characteristics, principal aquifers, study units, and assessment studies of domestic wells sampled for the NAWQA Program in aquifer studies, 1991–2004, by aquifer rock type.—Continued

[Well and water depths in parentheses are single values only. Numbers of wells for well depth, depth to top of open interval, and depth to water may differ. --, not applicable or not available]

Principal aquifer	NAWQA study unit	Study code	Number of wells	Median well depth, in feet below land surface	Median depth to top of open interval, in feet below land surface	Median depth to water, in feet below land surface	Sampling period
Coastal plain aquifers in semi-consolidated sand (CP)							
Coastal lowlands aquifer system (CL)	Acadian–Pontchartrain Drainages (ACAD)	acadsus1	29	140	128	27	2000–01
		acadsus2	27	120	113	(90)	2001
	Trinity River Basin (TRIN)	trinsus3	29	180	155	39	1994, 2002
North Atlantic Coastal Plain aquifer system (NA)	Albemarle–Pamlico Drainage Basin (ALBE)	albesus1	1	(20)	--	(11)	1994
		albesus7	6	90	75	17	2002–2003
	Delmarva Peninsula (DLMV)	dlmvsus1	13	49	40	8	2001
	Long Island–New Jersey Coastal Drainages (LINJ)	linjsus2	30	100	90	5	1998
	Potomac River Basin and Delmarva Peninsula (PODL)	podlsus2	15	81	73	36	2003
Southeastern Coastal Plain aquifer system (SC)	Mobile River Basin (MOBL)	moblsus1	24	144	121	53	1999
	Santee River Basin and Coastal Drainages (SANT)	santsus1	2	125	105	57	1997
Texas coastal uplands aquifer system (TC)	Trinity River Basin (TRIN)	trinsus2	10	102	(20)	25	1994
Sandstone aquifers (SS)							
Cambrian-Ordovician aquifer system (CO)	Upper Mississippi River Basin (UMIS)	umissus3	25	180	126	31	1996
		umissus4	25	200	175	88	1996
	Western Lake Michigan Drainages (WMIC)	wmicsus1	20	128	97	35	1995
Early Mesozoic basin aquifers (EM)	Delaware River Basin (DELR)	delrsus1	25	160	40	25	1999
	Long Island–New Jersey Coastal Drainages (LINJ)	linjsus3	22	193	50	(14)	1998–99
	Potomac River Basin (POTO)	potosus2	22	155	45	29	1994
Lower Tertiary/Upper Cretaceous aquifers (LT)	Red River of the North Basin (REDN)	rednsus5	1	(127)	(123)	(48)	1994
	Yellowstone River Basin (YELL)	yellsus2	23	160	80	27	2000–01

Table 2–1. Characteristics, principal aquifers, study units, and assessment studies of domestic wells sampled for the NAWQA Program in aquifer studies, 1991–2004, by aquifer rock type.—Continued

[Well and water depths in parentheses are single values only. Numbers of wells for well depth, depth to top of open interval, and depth to water may differ. --, not applicable or not available]

Principal aquifer	NAWQA study unit	Study code	Number of wells	Median well depth, in feet below land surface	Median depth to top of open interval, in feet below land surface	Median depth to water, in feet below land surface	Sampling period
		Sandstone aquifers (SS)—Continued					
Pennsylvanian aquifers (P)	Alleheny and Monongahela River Basin (ALMN)	almnsus1	30	105	21	45	1996
	Kanawha–New River Basins (KANA)	kanasus1	16	92	29	63	1997
Valley and Ridge sandstone and shale aquifers (VRs)	Delaware River Basin (DELR)	delrsus2	27	185	82	41	2000
	Lower Susquehanna River Basin (LSUS)	lsussus1	29	155	60	39	1993
		Sandstone and carbonate-rock aquifers (SS/CARB)					
Edwards-Trinity aquifer system (ET)	South-Central Texas (SCTX)	sctxsus1	21	295	180	130	1996
		sctxsus2	25	400	123	170	1996
		sctxsus3	1	(1,500)	(250)	--	1997
	Trinity River Basin (TRIN)	trinsus1	22	162	125	26	1994
Mississippian aquifers (M)	Kanawha–New River Basins (KANA)	kanasus1	5	205	42	101	1997
	Lake Erie–Lake Saint Clair Drainages (LERI)	lerisus1	1	--	--	--	1998
	Lower Tennessee River Basin (LTEN)	ltensus1	8	86	56	38	1999
		ltensus2	4	99	58	35	2000
		Carbonate-rock aquifers (CARB)					
Floridan aquifer system (F)	Apalachicola–Chattahoochee-Flint River Basin (ACFB)	acfbsus1	7	100	69	34	1995
	Georgia-Florida Coastal Plain (GAFL)	gaflsus2	30	93	65	26	2002–03
		gaflsus3	30	150	95	28	2002
	Santee River Basin and Coastal Drainages (SANT)	santsus2	29	170	90	18	1998
Ordovician aquifers (O)	Lower Tennessee River Basin (LTEN)	ltensus2	21	140	20	21	2000
Ozark Plateaus aquifer system (OP)	Ozark Plateaus (OZRK)	ozrksus2a	33	196	74	54	1993
		ozrksus3a	16	140	77	49	1993
Silurian-Devonian aquifers (SD)	Eastern Iowa Basins (EIWA)	eiwasus1	32	223	150	59	1996
Valley and Ridge carbonate-rock aquifers (VRc)	Kanawha–New River Basins (KANA)	kanasus2	1	(325)	(183)	(157)	1997
	Upper Tennessee River Basin (UTEN)	utensus1	18	245	64	73	1998–99

Table 2–1. Characteristics, principal aquifers, study units, and assessment studies of domestic wells sampled for the NAWQA Program in aquifer studies, 1991–2004, by aquifer rock type.—Continued

[Well and water depths in parentheses are single values only. Numbers of wells for well depth, depth to top of open interval, and depth to water may differ. --, not applicable or not available]

Principal aquifer	NAWQA study unit	Study code	Number of wells	Median well depth, in feet below land surface	Median depth to top of open interval, in feet below land surface	Median depth to water, in feet below land surface	Sampling period
		Basaltic-rock aquifers (BAS)					
Snake River Plain basaltic-rock aquifers (SPb)	Upper Snake River Basin (USNK)	usnksus1	14	280	117	183	1992–95
		usnksus2	5	210	50	--	1995
		Crystalline-rock aquifers (CRYS)					
New England crystalline-rock aquifers (NEx)	Connecticut, Housatonic, and Thames River Basins (CONN)	connsus1	27	225	35	18	1995
	Long Island–New Jersey Coastal Drainages (LINJ)	linjsus1	28	201	59	9	1997
	New England Coastal Basins (NECB)	necbsus1	28	188	25	12	1999–2000
		necbsus2	30	303	35	23	1999–2000
Piedmont and Blue Ridge crystalline-rock aquifers (PBx)	Kanawha–New River Basins (KANA)	kanasus2	18	159	49	44	1995
	Lower Susquehanna River Basins (LSUS)	lsussus2	30	147	69	42	1994
	Potomac River Basin (POTO)	potosus1	23	142	44	36	1997
	Santee River Basin and Coastal Drainages (SANT)	santsus3	29	200	61	26	1997
Rocky Mountain Front Range crystalline-rock aquifers (RMx)	South Platte River Basin (SPLT)	spltsus1	27	225	82	--	1995
		Aquifer not determined					
Aquifer not determined	Hudson River Basin (HDSN)	hdsnsus1	44	125	(91)	6	1994
	Upper Snake River Basin (USNK)	usnksus2	1	(615)	(504)	--	1995
		usnksus3	1	(75)	(52)	(5)	1995

Table 2–2. Characteristics, principal aquifers, study units, and assessment studies of domestic wells sampled for the NAWQA Program in agricultural land-use studies, 1991–2004, by aquifer rock type.

[Well and water depths in parentheses are single values only. Numbers of wells for well depth, depth to top of open interval, and depth to water may differ. --, not applicable or not available]

Principal aquifer	NAWQA study unit	Study code	Primary agricultural land use	Number of wells	Median well depth, in feet below land surface	Median depth to top of open interval, in feet below land surface	Median depth to water, in feet below land surface	Sampling period
Basin-fill and other non-glacial sand and gravel aquifers (BFSG)								
Central Valley aquifer system (CV)	San Joaquin–Tulare Basins (SANJ)	sanjluscr1a	Row crops	23	147	110	76	1995, 2002
		sanjlusor1a	Vineyards	27	155	120	47	1993, 2001
		sanjlusor2a	Almonds	26	155	118	39	1994, 2001
Columbia Plateau basin-fill aquifers (CPf)	Central Columbia Plateau (CCPT)	ccptlusag2a	Row crops	12	126	109	(30)	1993–94
		ccptlusor1a	Orchards	9	160	141	121	1994–95
Other stream valley alluvial aquifers (OS)	Mobile River Basin (MOBL)	moblluscr1	--	1	(40)	(30)	(25)	2001
	Potomac River Basin (POTO)	potolusag2	--	1	(71)	--	--	1995
Snake River Plain basin-fill aquifers (SPf)	Upper Snake River Basin (USNK)	usnkluscr1	Row crops	25	35	32	9	1993
		usnkluscr3	Row crops	1	(180)	(121)	(77)	1994
Glacial sand and gravel aquifers (GLAC)								
West central glacial aquifers (Gwc)	Red River of the North Basin (REDN)	rednlusag1	--	2	54	47	--	1994
	Upper Mississippi River Basin (UMIS)	umisluscr1	Row crops	3	28	(53)	(27)	1998
Western glacial aquifers (Gw)	Puget Sound Basin (PUGT)	pugtluscr1	Raspberries	3	41	35	18	1997–98
Coastal plain aquifers in semi-consolidated sand (CP)								
North Atlantic Coastal Plain aquifer system (NA)	Albemarle–Pamlico Drainage Basin (ALBE)	albelusag2	Row crops	10	118	75	(3)	1994
	Delmarva Peninsula (DLMV)	dlmvluscr1	Row crops	2	37	31	21	2001
Sandstone aquifers (SS)								
Valley and Ridge sandstone and shale aquifers (VRs)	Potomac River Basin (POTO)	potolusag2	--	23	122	31	29	1996
Carbonate-rock aquifers (CARB)								
Ozark Plateaus aquifer system (OP)	Ozark Plateaus (OZRK)	ozrklusag1a	Cattle pasture	19	165	--	45	1994
		ozrklusag2a	Poultry pasture	20	180	28	34	1995
Piedmont and Blue Ridge carbonate-rock aquifers (PBc)	Lower Susquehanna River Basin (LSUS)	lsuslusag1	--	29	160	102	33	1993

Table 2–2. Characteristics, principal aquifers, study units, and assessment studies of domestic wells sampled for the NAWQA Program in agricultural land-use studies, 1991–2004, by aquifer rock type.—Continued

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Principal aquifer	NAWQA study unit	Study code	Primary agricultural land use	Number of wells	Median well depth, in feet below land surface	Median depth to top of open interval, in feet below land surface	Median depth to water, in feet below land surface	Sampling period
Carbonate-rock aquifers (CARB)—Continued								
Valley and Ridge carbonate-rock aquifers (VRc)	Lower Susquehanna River Basin (LSUS)	lsuslusag2	--	29	170	100	64	1994
		lsuslusag3	--	29	158	109	56	1995
	Potomac River Basin and Delmarva Peninsula (PODL, POTO)	potolusag1	--	29	144	57	43	1993
		potolusag2	--	1	(280)	(42)	--	1995
Basaltic-rock aquifers (BAS)								
Columbia Plateau basaltic-rock aquifers (CPb)	Central Columbia Plateau (CCPT)	ccptlusag1a	Row crops	16	102	32	32	1993–94
		ccptlusag2a	Row crops	17	157	74	(96)	1993–94
		ccptlusor1a	Orchards and vineyards	9	170	98	30	1994–95
Snake River Plain basaltic-rock aquifers (SPb)	Upper Snake River Basin (USNK)	usnkluscr2	Row crops	27	228	63	180	1993
		usnkluscr3	Row crops	26	205	20	157	1994
		usnkluscr4	Row crops	14	357	19	292	1995
Aquifer not determined								
Aquifer not determined	Central Columbia Plateau (CCPT)	ccptlusag1a	--	1	(60)	--	--	1994
	Upper Snake River Basin (USNK)	usnkluscr2	Row crops	1	--	--	(132)	1995
		usnkluscr4	Row crops	1	(420)	(18)	--	1995