

Public water supplies in southern Minnesota.

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City or vil- lage.	County.	Popu- la- tion. ^a	Water supply.									Plant.					
			Source.	Geologic source.	Dia- meter of wells.	Depth of wells.	Elevation of sur- face.	Head rela- tive to sur- face.	Head of water above sea level.	Test of wells. ^b	Effect of test. ^c	Method of lifting water to the sur- face. ^d	Capacity of pumps (or other device) for lifting water. ^e	Power. ^f	Reser- voirs. ^g	Capacity of reser- voirs. ^g	
Adams.....	Mower.....	575	Well.....	Devonian lime- stone.	In. 8	Ft. 291	Ft. 1,298	Ft. — 18	Ft. 1,280	Gall. 75	L. w. about 30'.	D.-w. p....	Gall. 75	G.....	El. tank...	M galls. 55	
Adrian.....	Nobles.....	1,184	do.....	Drift.....	120	47	1,550	— 30	1,520	500	L. w.....	Suc. p....	1,000	S.....	do. ^h	do. ^h	50
Albert Lea.....	Freeborn.....	5,657	2 wells j.....	(Galena, etc..... (St. Peter.....)	12 8	448 660	0	1,000	N. e.....	Nat. flow...	1,000	S.....	Sur. res. and el. tank.	96	
Alden.....	do.....	635	Well.....	Maquoketa and Galena.	6	215	1,278	— 50	1,228	60	N. e.....	D.-w. p....	60	G.....	El. tank ..	60	
Alpha.....	Jackson.....	241	do.....	Drift.....	8	96	1,392	100	N. e.....	D.-w. p....	150	G.....	Comp. ch	15	
Amboy.....	Blue Earth.....	490	do.....	Jordan.....	6	486	1,045	— 40	1,005	D.-w. p....	G.....	El. tank..	60	
Anoka.....	Anoka.....	4,053	River.....	Outwash sand.....	240	40	990	— 30	960	500	E. w. in 30 min.	Suc. p....	1,000	S.....	St. pipe ..	275	
Appleton.....	Swift.....	1,321	River and well.	500	S.....	El. tank ..	65		
Atwater.....	Kandiyohi.....	689	4 wells.....	do.....	3	35	1,211	— 20	1,191	75	N. e.....	Suc. p....	75	G.....	do.....	45	
Austin.....	Mower.....	6,489	River and 6 wells.	St. Peter and New Rich- mond.	6-12	Up to 710	1,195	— 10	1,185	Nat. flow...	S.....	2 res ..	110	
Avoca.....	Murray.....	251	Well.....	Drift.....	36	20	1,540	— 4	1,536	Small.	Suc. p....	G.....	El. tank ..	10	
Balaton.....	Lyon.....	350	do.....	Outwash gravel.....	96	27	1,532	— 13	1,519	45	N. e.....	Suc. p....	45	G.....	do.....	14	
Beardsley.....	Bigstone.....	441	do.....	do.....	72	40	1,099	— 32	1,067	65	L. w. 2'	Suc. p....	65	G.....	do.....	30	
Belle Plaine.....	Scott.....	1,301	do.....	8	213	880	— 100	780	50	L. w. 6" in 7 hrs.	D.-w. p....	50	G.....	do.....	50	
Bellingham	Lac qui Parle	406	do.....	Drift (?).	6	120	1,070	— 30	1,040	35	N. e.....	D.-w. p....	35	G. e.....	do.....	45	
Benson.....	Swift.....	1,766	2 wells	Drift.....	{ 6	167	1,049	— 13	1,036	2 160	L. w. 25' ..	2 suc. ps ..	560	{ S. and e. m.	do.....	75	
Bird Island	Renville.....	907	Well	do.....	8	298	1,081	— 30	1,051	100	N. e.....	D.-w. p....	140	G.....	do.....	40	
Blooming Prairie.....	Steele.....	900	do.....	Galena.....	245	do.....	
Blue Earth	Faribault.....	2,364	2 wells	Jordan m.....	{ 8	1,243	1,085	— 32	1,053	240	N. e.....	Sue. ps....	240	S.....	Sur. res. and el. tank.	96	
					{ 8	672	1,085	— 32	1,053	350	Air lift...	350	S.....			

Boyd.....	Lac qui Parle.....	420	Well.....	Drift.....	8	62	1,055	- 8	1,047	80	L. w. 4''.....	Air lift.....	70	G.....	(Sur. res. Comp. ch.)	42.5
Bricelyn.....	Faribault.....	335	do.....	6	107	1,177	- 19	1,158	80	N. e.....	D.-w. p.....	50	G. e.....	do.....	13.5
Brown Valley (main supply).}	Traverse.....	902	Springs.....	Drift.....						Nat. flow.....	Nat. flow.....	125	G.....	(Sur. res. at spring. Sur. res. at station. El. tank.)	14	
Brown Valley (soft water supply). ⁿ	do.....	902	2 wells....	Cretaceous.....	{	(500± 500±	981 1,014)	{ (+)	1,014+	Small.....	Nat. flow.....	Nat. flow.....		2 res.....	Small.	
Brownntown.....	McLeod.....	484	Well.....	Drift.....	6	304	1,021	- 24	997	95	Air-lift.....	95	G.....	(Sur. res. Comp. ch.)	3
Buffalo Lake.....	Renville.....	474	2 wells....	{Drift and Ar- chean.	{ 6	370	1,067	- 10	1,057	D.-w. ps.....	{ G.....	{ El. tank.....	17	
Caledonia.....	Houston.....	1,405	Well.....	Jordan.....	{ 10	400	1,067	- 10	1,057	D.-w. p.....	{ S.....	St. pipe.....	80	
Canby.....	Yellow Medi- cine.	1,505	do.....	Drift.....	8	p 100	1,240	- 18	1,222	125	Not great..	Suc. p.....	125	G.....	El. tank.....	60
CannonFalls.....	Goodhue.....	1,460	do.....	Jordan.....	8	270	794	{ (+)	794	300	N. e.....	Nat. flow.....	250	G.....	do.....	100
Ceylon.....	Martin.....	341	do.....	Drift (?).....	8	300	- 60	100	N. e.....	D.-w. p.....	100	G.....	Comp. ch.....	13.5
Chaska.....	Carver.....	2,085	do.....	Dresbach, etc.....	8	640	748	+ 30	778	500	Nat. flow.....	Nat. flow.....	Nat. flow.....	None.....	
Chatfield.....	Fillmore.....	925	do.....	Jordan.....	8	200	1,435	- 125(?)	1,310(?)	N. e.....	D.-w. p.....	S.....	Res.....	423	
Clarkfield.....	Yellow Medi- cine.	614	do.....	Drift.....	6	q 197	1,095	- 40	1,055	13	(r)	D.-w. p.....	100	G.....	El. tank.....	55
Clinton.....	Bigstone.....	400	do.....	do.....	8	344	- 120	80	N. e.....	D.-w. p.....	80	G.....	do.....	48
Cokato.....	Wright.....	721	do.....	do.....	3	125	1,065	- 45	1,020	D.-w. p.....	G.....	{ El. tank.....	14
Comfrey.....	Brown.....	299	do.....	8	140	- 20	60	N. e.....	D.-w. p.....	60	G.....	El. tank.....	50
Cottonwood..	Lyon.....	883	do. ^s	Archean	{ and 6	375	1,082	- 40	1,042	Small.....	D.-w. p.....	30	G.....	do.....	50

^a Population according to the state census of 1905.^b The most severe test reported.^c Abbreviations: N. e., no noticeable effect. L. w., lowered water. E. w., emptied well. Nat. flow, natural flow. St. flow, stopped flow.^d Abbreviations: D.-w. p., deep-water pump. Suc. p., suction pump. Nat. flow, natural flow. Air l., air lift.^e The reference here is only to the lifting of the water to the surface. No data are given in regard to other pumps.^f Abbreviations: G., gasoline. S., steam. G. e., gas engine. E. m., electric motor. W. m., windmill. W. p., water power. H. r., hydraulic ram.^g Abbreviations: El. tank, elevated tank; that is, one set upon a tower. St. pipe, standpipe. Comp. ch., compression chamber. Sur. res., surface reservoir. Cist., cistern.^h Large surface reservoir for fire reserve.ⁱ Elevated tank only.^j Fountain Lake for fire reserve.^k From the two wells combined.^l Water comes from depth of about 190 feet.^m Dresbach is not used.ⁿ No system. Supply used by all for bath and laundry purposes.^o Main supply comes from a depth of 100 feet.^p Drilled to depth of 426 feet.^q Water comes from depths of 120 to 140 feet.^r Sand is lifted if well is pumped more rapidly.^s Well was to be abandoned and water from lake used after Apr. 1, 1908.

Public water supplies in southern Minnesota—Continued.

City or vil- lage.	County.	Popu- lation	Water supply.									Plant.					
			Source.	Geologic source.	Dia- meter of wells.	Depth of wells.	Eleva- tion of sur- face.	Head rela- tive to sur- face.	Head of water above sea level.	Test of wells.	Effect of test.	Method of lifting water to the sur- face.	Capa- city of pumps (or other device) for lifting water.	Power.	Reser- voirs.	Capac- ity of reser- voirs.	
Currie.....	Murray.....	311	Well.....	Drift.....	In.	Ft.	Ft.	Ft.	Ft.	Galls. per min.			Galls. per min.			M galls.	
Dassel.....	Meeker.....	592	do.....	do.....	6	120	1,511	— 20	1,491	60	N. e.....	D.-w. p.....	70	G.....	Comp. ch.....	13.5	
Dawson ^a	Lac qui Parle.....	1,056	2 wells.....	Cretaceous.....	8	180	1,089	— 55	1,034	45	N. e.....	D.-w. p.....	45	G.....	El. tank.....	50	
De Graff.....	Swift.....	222	Well.....	Drift.....	6 or 8	148	1,065	— 15	1,040	160	N. e.....	D.-w. ps.....		E. m.....	do.....	60	
Delano.....	Wright.....	1,023	14 wells.....	Drift or alluvium.....	3	46	912	— 1	911	250	N. e.....	D.-w. p.....		W. m.....	3 res.....	30	
Delavan.....	Faribault.....	281	Well.....	Jordan.....	8	473	— 15	Suc. p.....	400	S.....	El. tank.....	50		
Easton.....	do.....	328	do.....	{ and 4 }	110	1,050	— 6	1,044	110	N. e.....	Suc. p.....	110	G.....	do.....	50		
Echo.....	Yellow Medi- cine.....	600	do.....	Drift.....	144	53	1,090	— 35	1,055	Small.....		D.-w. p.....		G.....	do.....	55	
Eden Valley.....	Meeker.....	709	{ 8 wells 1 well }	Outwash sand.....	2½	44	1,123	— 15	1,108	75	N. e.....	Suc. p.....	40	G.....	{ do.....	60	
Edgerton.....	Pipestone.....	380	Well.....	do.....	2½	28	1,574	— 13	1,561	265	L. w. b.....	Suc. p.....	265	G.....	{ 2 sur. res.....	23	
Elgin.....	Wabasha.....	358	do.....	Jordan.....	10	275				El. tank.....	30		
Ellendale.....	Steele.....	252	do.....	Galena (?).....	6	212	1,280	— 80	1,200	112	N. e.....	D.-w. p.....		G.....	{ Sur. res.....	25	
Ellsworth.....	Nobles.....	537	do.....	Drift.....	144	33	— 15		D.-w. p.....		Comp. ch.....	do.....	15	
Elmore.....	Faribault.....	742	do.....	6	110	— 8		D.-w. p.....	240	G. e.....	El. tank.....	15	
Elysian.....	Lesueur.....	384	do.....	St. Peter.....	8	287	1,087	— 87	1,000	35±	N. e.....	D.-w. p.....	35±	G.....	do.....	50	
Emmons.....	Freeborn.....	235	do.....	Devonian lime- stone.....	4	160	1,287	— 32	1,255	45	N. e.....	D.-w. p.....	45	G.....	Sur. res.....	14	
Excelsior.....	Hennepin.....	850	Lake.....	10	203	— 17				G.....	El. tank.....	18	
Eyota ^c	Olmsted.....	400	Well.....										Comp. ch.....			
Fairfax.....	Renville.....	775	do.....	Drift.....	6	185	1,040	— 80	960	20	N. e.....	D.-w. p.....	20	G.....	{ El. tank.....	80	
Fairmont.....	Martin.....	2,955	Lake.....	10	800				S.....	{ 4 cist.....		
Faribault.....	Rice.....	8,279	2 wells ^d	{ Jordan, Dresbach, etc. }	10	1,000	— 7		Suc. ps.....		S.....	2 sur. res.....		
Fort Snelling.....	Hennepin.....		Well.....	St. Peter, New Richmond, Dresbach, etc.	10	638	+ 20	1,000	Nat. flow ..	Nat. flow and suc. ps.	700	S.....	Sur. res. ^e	1,000		
														2 el. tanks.	390		

Fountain....	Fillmore.....	364	Well.....	Jordan.....	{ 10 and 6	608	1,320	-340	980	85	N. e.....	D.-w. p...	65	G.....	Comp. ch.	15
Franklin....	Renville.....	524	do.....	Drift.....	{ 72 108	1,020	- 50	970	50	L. w. 14" ..	D.-w. p...	50	G.....	El. tank..	35	
Fulda....	Murray.....	701	do.....	Sioux quartzite ..	{ 8 and 6	225	1,507	- 40	1,467	30	N. e.....	D.-w. p...	{ S. and w. m.	{ Sur. res. and el. tank.	72	
Gibbon....	Sibley.....	528	do.....		2½	210	1,044	- 80	964			D.-w. p...	G.....	{ El. tank. 3 cist.		
Glencoe....	McLeod.....	1,805	do.....	Dresbach, etc.....	8-6	1,640	995	- 90	905	175	N. e.....	D.-w. p...	175	E. m.....	{ Sur. Res. El. tank.	165
Goodhue....	Goodhue.....	410	do.....	New Richmond or Jordan.	10	275	1,120			300	N. e.....	D.-p. w...	300	G.....	El. tank(?)	245
Good Thun- der.	Blue Earth.....	448	do.....		6	374	1,000	- 65	935	50	N. e.....	D.-w. p...	50	G.....	El. tank ..	80
Graceville....	Bigstone.....	1,032	2 wells...	Cretaceous.....	8	520	1,110	-100	1,010	f 60	N. e.....	D.-w. p...	S.....	do.....	60	
Grand Mead- ow.	Mower.....	459	Well.....	Devonian sand- stone (?).	8	125		- 35		75	N. e.....	D.-w. p...	75	G.....	do.....	52
Granite Falls.	{ Yellow Medi- cine.	{ 1,349	River.....										W. p.....	{ Sur. res. do.	6	
Grove City...	Meeker.....	339	Well.....	Drift.....	8	700	1,207	- 57	1,150	75	N. e.....	D.-w. p...	35	G.....	El. tank.	125
Hanley Falls.	Yellow Medi- cine.	309	do.....	Cretaceous.....	5	247	1,050	- 40	1,010	40	N. e.....	D.-w. p...	40	G.....	do.....	60
Hardwick....	Rock.....	269	do.....	Sioux quartzite ..	6	420	1,628	- 36	1,592	25	N. e.....	D.-w. p...	25	G.....	do.....	50
Harmony....	Fillmore.....	689	do.....	St. Peter.....	8	220		-130		45	N. e.....	D.-w. p...	45	G.....	Sur. res. and comp. ch.	17
Hartland....	Freeborn.....	209	do.....	Galena, etc.....	6	311		- 50				D.-w. p...			El. tank.	
Hastings....	Dakota.....	3,810	do.....	Galena, etc.....	8	377									El. tank.	
Hayfield....	Dodge.....	516	do.....													
Hector....	Renville.....	774	2 wells...	Drift.....	{ 144 and 8	380	1,073	- 12	1,061			D.-w. p...	45	G.....	do.....	70
Henderson....	Sibley.....	820	Well.....	Dresbach, etc.....	8	400	1,073	- 12	1,061	60	N. e.....	D.-w. p...	45	G.....	do.....	60
Hendricks....	Lincoln.....	380	do.....	Drift.....	192	16		- 10				Suc. p.....	S.....	{ 12 cist.		60
Hokah....	Houston.....	522	do.....	Dresbach, etc.....	6	544	674	+ 18	692	86	Nat. flow(?)	Nat. flow.....	G.....	El. tank.	56.7	
Houston....	do.....	639	do.....	do.....	6	302	684	+ 12	696	130	St. flow.....	Nat. flow and suc. p.	130	G.....	Sur. res.e	150
Howard Lake	Wright.....	763	Lake.....	Drift.....	10	180	1,030	+ 28	1,058	800	St. flow.....	Nat. flow and suc. ps.	800	S.....	El. tank.	53
Hutchinson..	McLeod.....	2,489	Well.....												do.....	100
Iona....	Murray.....	288	do.....	do.....	6	204	1,630	- 35	1,595	32	N. e.....	D.-w. p...	32	G.....	do.....	38
Ivanhoe....	Lincoln.....	451	do.....	do.....	10	315		-100							do.....	
Jackson....	Jackson.....	1,776	do.....	Alluvium.....	312	20	1,335	- 10	1,325	300	(h)	Suc. p.....	300	S.....	do.....	68

^a Installed in 1908.^b Nearly to bottom.^c Recently installed.^d Also two shallow wells for emergencies.^e On high ground.^f One well alone tested at this rate.^g Water comes from depth of 220 to 260 feet.^h Depends on the season.

Public water supplies in southern Minnesota—Continued.

City or vil- lage.	County.	Popu- la- tion.	Water supply.										Plant.				
			Source.	Geologic source.	Dia- meter of wells.	Depth of wells.	Eleva- tion of sur- face.	Head rela- tive to sur- face.	Head of water above sea level.	Test of wells.	Effect of test.	Method of lifting water to the sur- face.	Capacity of pumps (or other device) for lifting water.	Power.	Reser- voirs.	Capacity of reser- voirs.	
Jasper.....	Pipestone.....	619	Spring.....	Sioux quartzite.....	In.	Ft.	Ft.	Ft.	Ft.	Galls. per min.	Nat. flow...	Nat. flow...	G...	{Sur. res...	12	M galls.	
Kasson.....	Dodge.....	1,049	Well.....	St. Peter.....	8	275	1,256	— 25	1,231			Suc. p...	300	{El. tank...	60	do	
Kenyon.....	Goodhue.....	1,252	do.....	Galena, etc.....	240	18		— 15				S...		do	50		
Kilkenny.....	Lesueur.....	239	do.....	St. Peter.....		250		— 0									
Kiester.....	Faribault.....	211	do.....		8	400											
Lake Benton.....	Lincoln.....	848	do.....	Drift.....	144	16	1,755	— 2		400	N. e...	D.-w. p...	500	G...	El. tank...	50	
Lake City.....	Wabasha.....	2,877	Wells b.....	Alluvium.....		40		— 15		Large.		Suc. p...	500	S...	Sur. res.a	81	
Lake Crystal.....	Blue Earth.....	1,231	Well o r lake.....	Dresbach, etc.....		719		— 70				Suc. ps...	2,000	S...	Sur. res...	90	
Lakefield.....	Jackson.....	916	Well.....	Drift.....	10	190	1,490	— 100	1,390	175	N. e...	D.-w. p...	175	S...	do	46	
Lamberton.....	Redwood.....	657	do.....	do.....	8	64	1,450	— 30	1,420	60	N. e...	D.-w. p...	35	G...	El. tank...	70	
Lanesboro.....	Fillmore.....	1,041	Spring.....	Oneota.....											Res.		
Leroy.....	Mower.....	788	Well.....		8	422	1,289	— 28	1,261	85	N. e...	D.-w. p...	85	G...	El. tank...	60	
Lester Prairie.....	McLeod.....	454	do.....	Alluvium.....	240	22	982	— 8	974	200	E.w.in1hr.	Suc. p...	400	S...	do	60	
Lesueur.....	Lesueur.....	1,842	do.....	Dresbach, etc.....	8	668	770	+ 18	788	415	L. w. 33'	{Nat. flow...	415	S...	St. pipe...	142	
Les e u e u r Center.....	do.....	698	do.....			8	340	— 180				{Suc. p.}		S...	El. tank...	30	
Lewiston.....	Winona.....	388	2 wells....	Jordan.....	{ 6	350	1,230	— 260	970	40	N. e...	D.-w. p...		G...	do	60	
Litchfield.....	Meeker.....	2,415	28 wells....	Outwash sand...	2	42	1,134	— 20	1,114	600	N. e...	Suc. ps...	600	S...	do	70	
Lonsdale.....	Rice.....	172	Well.....	St. Peter.....		332									do		
Luverne.....	Rock.....	2,272	2 wells....	Alluvium.....	{ 156	19	1,432	— 10	1,422	750	L. w., 3'.	Suc. ps...	1,000	S...	St. pipe...	140	
Lyle.....	Mower.....	451	Well.....	Devonian sand- stone (?).	8	240	1,203	— 12	1,191	35	N. e...	D.-w. p...	35	G...	El. tank ..	55	
Mabel.....	Fillmore.....	546	do.....	New Rich- mond (?).	6	140		— 40		50	N. e...	D.-w. p...	50	S...	do	84	
Madelia.....	Watowwan....	1,290	2 wells....	Drift (?).....	{ 6	216	1,027	— 30	997	{ 75	L.W.greatly	D.-w. ps...		S...	do	60	
					{ 8	249(?)				{ 75							

PUBLIC WATER SUPPLIES.

Mankato.....	Blue Earth....	10,996	4 wells....	Dresbach, etc....	8-10	650	790	+ 30	820		(D.-w. p.)	S.....	Res.....	870	
Mapleton.....do.....	938	Well....	St. Peter.....	4	224		- 30		50	(Nat. flow.)	50 G.....	El. tank..	60	
Marshall.....	Lyon.....	2,243	3 wells....	Cretaceous.....	{ (c)	90	1,174	- 8	1,166	35	Suc. p.....	100 S.....	Sur. res..	150	
Maynard.....	Chippewa.....	445	Well....	Drift.....	8	410	1,174	+ 25	1,200	20	Nat. flow.....	S.....			
Mazeppa.....	Wabasha.....	556	do....	8	250	1,174	- 120	1,054	Small.	D.-w. p.....	G.....	Comp. ch..		
Milan.....	Chippewa.....	488	do....	Drift.....	108	25	990	- 14	976	25	N. e.....	Suc. p.....	El. tank..	60	
Minneapolis.....	Hennepin.....	261,974	River....							Nat. flow.....	25 G.....	do....	36	
Minneiska.....	Wabasha.....	338	do....							S.....	S.....	2 sur. res. ^a	96,000	
Minneota.....	Lyon.....	954	Well....	Cretaceous.....	6	111	1,184	- 20	1,164	30	N. e.....	D.-w. p.....	El. tank..	60	
Minn e s o t a Lake.....	Faribault.....	482	do....	Drift.....	8	185	1,049	- 15	1,034		D.-w. p.....	G.....	do....	50	
Montevideo..	Chippewa.....	2,595	Spring....do.....						350	Nat. flow.....	G., e. m.	Sur. res. and el. tank.	200	
Montgomery.....	Lesueur.....	1,281	Well....	10	213		- 150			D.-w. p.....	100 G.....	El. tank..		
Monticello.....	Wright.....	973	do....	Alluvium (?).....	8	237	923	- 5	918	275	L. w. 2'.....	Suc. p.....	Comp. eh..	14	
Morton.....	Renville.....	755	Spring....	Drift.....			905				Nat. flow.....	G.....	Sur. res. ^a	105	
Mountain Lake.....	Cottonwood.....	1,063	Well....	do....	144	40	1,305	- 20	1,285	50	(d)	Suc. p.....	El. tank..	45	
New London.....	Kandiyohi.....	392	Mill pond....								G., w. p.	None		
New Prague..	Scott and Le- sueur.	1,419	Well....	Jordan (?).....	8	289		- 116		25-50	Air lift.....	25-50 S.....	El. tank..	66	
New Rich- land.....	Waseca.....	697	do....	Galena, etc....		150		- 34					do....		
New Ulm....	Brown.....	5,720	(2 wells.... 1 well....)	Cretaceous.....	6	195	842	- 75	767	350	N. e.....	D.-w. ps...	(Sur. res.... St. pipe....	100 31	
Nicollet.....	Nicollet.....	341	2 wells....do.....	8							D.-w. p.....	{ G. and w.m.	El. tank..	55
Northfield....	Rice.....	3,438	Well....	Jordan.....	{ 3	175	1,000	- 145	855			Nat. flow.....	S.....	Sur. res. ^a	240
North St. Paul.....	Ramsey.....	1,400	Well and lake.	8	647	905	+ 20	925	1,000	N. e.....	D.-w. p.....	40 S.....	El. tank..	56
Olivia.....	Renville.....	1,019	Well....	Drift.....	6	320	1,079	- 14	1,065	60	N. e.....	D.-w. p.....	45 G.....	do....	74
Ortonville...	Bigstone.....	1,612	do....do....	{ 240	60	998	- 12	986			Suc. p.....	300 S.....	do....	100
Owatonna....	Steele.....	5,651	(5 wells.... 1 well....)	St. Peter.....	95		- 13					St. pipe.....		
Pine Island..	Goodhue.....	760	Well....	Jordan (?).....	640						Suc. p.....	100 S.....	Sur. res. ^a	55
Pipestone....	Pipestone.....	2,885	2 wells....	New Richmond(?)	8	156		- 10		100	N. e.....	Air lift.....	140 S.....	(Sur. res.... St. pipe....	135 90
Plainview....	Wabasha.....	1,140	do....	Sioux quartzite	{ 6	200	1,726	- 96	1,630	140	N. e.....	Nat. flow.....	S.....	El. tank..	
Preston.....	Fillmore.....	1,320	Spring....	8	350				250			Sur. res. ^a		
Red Wing....	Goodhue.....	8,149	River....	New Richmond.....	692			- 6							

^a On high ground.

^b Twenty 4-inch driven wells, discharging into a dug well 16 feet in diameter. Water from the lake can be used in case of fire.

^c Dug and drilled.

^d Varies with season.

^e Water from a depth of 300 feet.

Public water supplies in southern Minnesota—Continued.

City or village.	County.	Popula-tion.	Water supply.									Plant.				
			Source.	Geologic source.	Dia-meter of wells.	Depth of wells.	Eleva-tion of sur-face.	Head relative to sur-face.	Head of water above sea level.	Test of wells.	Effect of test.	Method of lifting water to the sur-face.	Capac-ity of pumps (or other device) for lifting water.	Power.	Reser-voirs.	Capac-ity of reser-voirs.
Redwood Falls.	Redwood....	1,806	Springs...	Drift.....	In.	Ft.	Ft.	Ft.	Ft.	Galls. per min.	Nat. flow...	Galls. per min.	{E.m and S.	Sur. res... El. tank...	M gall.s.	
Renville....	Renville....	1,229	Well....	do.....	6	236	1,053	— 50	1,003	50	N. e.....	D.-w. p...	50	G.....	30 100 60	
Rochester....	Olmsted....	7,233	Several wells. ^a	Alluvium.....	{ 204 240 }	32	968	— 12	956	Suc. p....	1,000	S.....	St. pipe...	240
Rolling Stone	Winona....	192	Well....	Devonian sand-stone(?).	6	340	— 60	50	N. e.....	D.-w. p...	50	E. m....	Sur. res. ^b ...	120
Rose Creek....	Mower....	194	do.....	(St. Lawrence..... Dresbach, etc....)	8	175	1,295	— 130	1,165	100	N. e.....	D.-w. p...	G.....
Rushford....	Fillmore....	1,133	do.....	Drift.....	6	180	— 140	Res.....
Ruthton....	Pipestone....	323	do.....	(Dresbach, etc....)	8	553	+ 3	El. tank...	25
Sacred Heart.	Renville....	639	do.....	Drift.....	6	260	1,740	— 60	1,680	35	N. e.....	D.-w. p...	35	G.....	do.....	20
St. Charles....	Winona....	1,238	do.....	Jordan and Dresbach.	10	942	— 150	Sur. res. ^b
St. James....	Watonwan....	2,320	2 wells....	Various sand-stones.	{ 8 10 }	541 480	1,085	— 32	1,053	{ 200 400 }	N. e..... N. e.....	D.-w. ps...	600	S.....	St. pipe...	145
St. Paul....	Ramsey....	197,023	Lakes and many wells. ^b	St. Peter, Jordan, Dresbach, etc.	{ 100 685 }	Suc. ps....	S.....	Res.....	20,000
St. Peter....	Nicollet....	4,514	Well....	Dresbach, etc....	8	362	+ 0	Nat. flow...	Sur. res., St. pipe.
Sherburn....	Martin....	871	do.....	Drift.....	8	248	1,307	— 96	1,211	160	N. e.....	D.-w. p...	80	G.....	Sur. res... El. tank...	30 68
Silver Lake.	McLeod....	390	Lake....	Drift.....	8	205	1,611	— 50	1,561	45	N. e.....	D.-w. p...	S.....	Res.....	30
Slayton....	Murray....	839	Well....	Drift.....	8	222	1,034	— 45	989	100	D.-w. p...	45	G.....	Sur. res. and el. tank.	168
Sleepy Eye...	Brown....	2,312	2 wells....	do.....	{ 4 4 }	180 222	1,034	— 60	974	40	D.-w. p...	110	{S..... S.....}	El. tank...	66

South St.)	Dakota.....	3,458	Well.....	Dresbach, etc....	8	880	+ 7	{Nat. flow.....	S.....	St. pipe....	150		
Paul.	Washington....	1,572	Well and creek.	216	20	686	+ 0	686	{Sue. p.....	S.....		
South Still-water.	Brown.....	1,546	2 wells and springs.	Alluvium.....	4	36	1,030	Nat. flow.....		
Springfield	Spring Grove	Houston.....	627	Well.....	St. Peter, New Richmond.	5	396	-300	Sue. p....	250	S.....	Sur. res. and el. tank.	
Spring Valley	Fillmore.....	1,573	Spring and well.	Galena, etc....	480	18	45	
Stewart.....	McLeod.....	460	Well.....	Drift.....	8	320	1,060	-13	1,047	60	N. e.....	D.-w.p....	60	G.....	El. tank....
Stewartville.	Olmsted.....	851	do c.	Drift (?).....	6	63	-33	70
Stillwater....	Washington....	12,435	Lake.....	Dresbach, etc....	8	3,447	-30	3 st. pipes	300	
Tracy.....	Lyon.....	2,015	Well.....	Cretaceous.....	{10, 8 and 6}	600	1,408	-180	1,228	50	N. e.....	D.-w.p....	50	G. and s.....	Sur. res....
Truman.....	Martin.....	450	do.....	Drift.....	8	104	1,100	-6	1,094	87
Tyler.....	Lincoln.....	699	do.....	do.....	8	230	1,750	-70	1,680	35	N. e.....	D.-w.p....	35	G.....	El. tank....
Vernon Center.	Blue Earth....	313	do.....	8	147	1,035	-90	945	80	N. e.....	D.-w.p....	80	G.....	do....
Walnut Grove.	Redwood.....	392	do.....	Cretaceous.....	6	312	1,228	-12	1,216	37	N. e.....	D.-w.p....	37	G.....	do....
Waseca.....	Waseca.....	2,838	2 wells.....	{St. Peter. Jordan.....}	10	600	1,153	-125	1,028	100	N. e.....	Air lift....	50	S.....	Res. and el. tank.
Waterville....	Lesueur.....	1,383	Well.....	Drift.....	10	1,157	1,007	-10	997	600
Waverly.....	Wright.....	582	Lake.....	8	185	1,007
Welcome.....	Martin.....	500	Well.....	Drift.....	60	150	1,251	-100	1,151	60	E.w. in 1 hr.	D.-w.p....
Wells.....	Faribault....	1,814	2 wells.....	{Galena, etc. St. Peter (?).}	8	216	-10	100	Sue. p....	500	S.....	Sur. res....
Westbrook....	Cottonwood....	460	Well.....	Drift.....	12	265	90
West Concord	Dodge.....	616	do.....	36	64	1,425	-25	1,400	25	E.w. in 1 hr.	D.-w.p....	El. tank....
West Minneapolis....	Hennepin....	2,530	do.....	{St. Peter. New Richmond. Dresbach.....}	8	600	13.5
White Bear Lake.	Ramsey.....	1,724	do.....	St. Peter.....	10	112	-34	85	N. e.....	D.-w.p....	85	G.....	do....
Willmar.....	Kandiyohi....	4,040	do.....	Drift.....	8	273	1,133	-4	1,129	500	N. e.....	Sue. ps....	500+	S.....	do....
Wilmont.....	Nobles.....	279	do.....	do.....	8	345	1,745	-120	1,625	100	N. e.....	D.-w.p....	100	G.....	do....
Windom.....	Cottonwood....	1,884	2 wells.....	{Drift and Cretaceous.....}	{168 and 3}	65	1,358	-10	1,348	Sue. p....	300	S.....	do....
Winnebago.....	Faribault....	1,553	Well.....	8	280	1,358	-100	1,258	120	N. e.....	D.-w.p....	120	S.....	129
Winona.....	Winona.....	20,334	2 wells d.	Alluvium.....	720	28	-6	St.pipe....
Winsted.....	McLeod.....	314	Lake.....	{Dresbach, etc....}	8	500

^a River for reserve in case of fire.^b See p. 304.^c A new well is being installed.^d Also river.

Public water supplies in southern Minnesota—Continued.

City or vil- lage.	County.	Popu- lation.	Water supply.										Plant.				
			Source.	Geologic source.	Dia- meter of wells.	Depth of wells.	Eleva- tion of sur- face.	Head rela- tive to sur- face.	Head of water above sea level.	Test of wells.	Effect of test.	Method of lifting water to the sur- face.	Capac- ity of pumps (or other device) for lifting water.	Power.	Reser- voirs.	Capac- ity of reser- voirs.	
Winthrop....	Sibley.....	1,031	Well.....	Drift.....	In.	Ft.	Ft.	Ft.	Ft.	Galls. per min.			Galls. per min.			M galls.	
Wood Lake..	Yellow Medi- cine.....	347	do.....	do.....	10	239	—	—	75	N. e.....	D.-w. p.....	S.....	55	El. tank.....	do.....	50	
Worthington.	Nobles.....	2,276	2 wells ^a	do.....	6	186	1,069	— 45	1,024	25	N. e.....	D.-w. p.....	25	G.....	do.....	50	
Wykoff.....	Fillmore.....	488	Well.....	Jordan.....	12	77	1,585	— 7	1,578			Suc. ps....	1,000	S.....	None.....		
Zumbrota....	Goodhue.....	1,129	do.....	St. Peter, New Richmond (?)	8	600	—	— 300	—	180	N. e.....	D.-w. p....	40	S.....	(El. tank.....	50	
					10	210	—	— 30	—			D.-w. p....	50	G.....	15 cist.....	150	
														Sur. res. ^b ..		150	

^a Also two shallow wells and the lake for reserve in case of fire.^b On high ground.

Public water supplies in southern Minnesota—Continued.

City or vil- lage.	Plant—Continued.				System.			Consumption.							
	Do- mestic pres- sure ^a per square inch.	Method of applying domestic pressure. ^b	Fire pressure ^c per square inch.	Method of applying fire pres- sure. ^b	Length of mains.	Num- ber of fire hy- drants.	Num- ber of taps. ^d	Average daily con- sump- tion. ^e	Maximum daily capac- ity of source. ^f	Number of people sup- plied. ^g	Per- cent- age of total popu- lation. ^h	Is water used for drinking in public schools?	Price charged. ⁱ		
Adams.....	40	Gravity...	Pounds.	40 Gravity...	Miles.	1	11	60	9,000	Gallons.	100,000 (?)	400	65	Yes....	Flat, \$3.
Adrian.....	40-45	do.....	80-100	Direct.....	Several.	20	64	40,000			700	50	No....	Flat, meter, 50 to 40 c.	
Albert Lea.....	50	do.....	100	do.....		6	75	650	200,000		1,500,000 (?)	3,250	50	Yes....	Flat, \$5; meter, 20 to 8 c.
Alden.....	44	do.....	44	Gravity...		1	15	25	19,000		80,000	150	25	Yes....	Flat, \$5.
Alpha.....	55-70	Comp. air.	70	Comp. air.		5	0	Small.	150,000		0	0	No....		
Amboy.....	43	Gravity...	43	Gravity...		10	20	10,000	Large.		200	30	Yes....	Flat, \$5.	
Anoka.....	45	do.....	100-120	Direct.....		7 $\frac{1}{2}$	65	Many.	300,000		Many.			Meter, 45 c. and less (min. \$9 a yr.).	
Appleton.....	45	do.....	90	do.....		4	16	87	20,000		400	30	No....	Meter, 15 c.	
Atwater.....	43	do.....	43	Gravity ^j ...		1	8	16	15,000		40	5	No....	Meter, 25 c.	
Austin.....	60	Direct.....	115	Direct.....		12	96	650	500,000		1,000,000	2,700	40	Yes....	Meter, 20 to 15 c.
Avoca.....	40	Gravity...	40	Gravity...		1 $\frac{1}{2}$	3	0	Small.		2,250	0	0	No....	
Balaton.....	40	do.....	40	do.....		10	30	10,000			200	50		Meter, 25 c. (min. \$3 per yr.).	
Beardsley.....	43	do.....	43	do.....		8	20	6,000			350	66 $\frac{2}{3}$	Yes....	Flat, \$6.	
Belle Plaine.....	50	do.....	60	Gravity and di- rect.		10	10	(i)	100,000		(i)	(i k)	Yes....	Meter, 40 c.	
Bellingham.....	45	do.....	45	Gravity...		3	3	Small.	50,000				No....		
Benson.....	50	do.....	50+	Gravity or direct. ^j	Several.	21	130	25,000	225,000		800	40		Flat; meter, 27 to 19 c.	
Bird Island.....	45	do.....	45	Gravity...		1 $\frac{1}{2}$	9	16	16,000		150,000	100	10	Yes....	Meter, 10 to 8 c.
Blooming Prairie.....	65	do.....	65	do.....		1	15	100	20,000						

^a The pressure given is generally the average for the business section.^b The term "direct" indicates that the pressure is applied by the pumps discharging directly into the mains.^c The pressure here recorded is commonly the maximum that is applied.^d This column gives the number of dwellings, places of business, factories, etc., supplied.^e Nearly all the figures given are estimated.^f This column shows the extent to which the source has been tested. For many towns the actual maximum capacity is greater.^g Estimated.^h The percentage is based on the approximate population Jan. 1, 1908, and not on that given in the column headed "Population."ⁱ Flat: Minimum for one year. Meter: Maximum and minimum for 1,000 gallons.^j Portable fire engine.^k From the wells.^l Installed in 1908. More taps, etc., will be added.

Public water supplies in southern Minnesota—Continued.

City or village	Plant—Continued.				System.			Consumption.						Price charged.
	Domestic pressure per square inch.	Method of applying domestic pressure.	Fire pressure per square inch.	Method of applying fire pressure.	Length of mains	Number of fire hydrants.	Number of taps.	Average daily consumption.	Maximum daily capacity of source.	Number of people supplied.	Percentage of total population.	Is water used for drinking in public schools?		
Blue Earth...	Pounds. 33	do...	Pounds. 85	Direct...	Miles. 5½	60	225	Gallons. 60,000	Gallons. 500,000	1,200	50	Yes....	Flat, \$4.	
Boyd...	65	Comp. air.	80	Comp. air.		11	1	50		5	1	No....	Flat, \$12.	
Bricelyn...	65	do...	65	do...	1½	12	60	5,000	125,000	300	75	Yes....	Flat, \$5.	
Brown Valley (main supply).	43	Gravity...	43	Gravity...	1	11	21	18,000	25,000	450	50	Yes....	Flat, \$4; meter, 25 to 20 c.	
Brown Valley (soft-water supply). ^a	Small	do...												
Brownston...	65	Comp. air.	65	Comp. air.	2½	10	90	4,000	125,000	450	92	Yes....	Flat, \$5; meter, 30 c.	
Buffalo Lake...	45	Gravity...	45	Gravity...	2	7	12	3,000	Not great.	25	5	Yes....	Flat.	
Caledonia...	47	do...	120	Direct...	2	20	100	25,000						
Canby...	45	do...	45	Gravity...	1½	18		10,000	b 195,000			Yes....	Meter, 14 c.	
Cannon Falls...	65	do...	85	Gravity and direct.	1½	15	39	4,000	500,000	200	12½	Yes....	Meter, 40 to 10 c.	
Ceylon...	40-50	Comp. air.	70-75	Comp. air.	1½	3	4	1,500	150,000	15	3	No....	Free.	
Chaska...	15	Direct from well.	(c)		1½	4	5	Small.	750,000	Small.	Small.	No....		
Chatfield...	60	Gravity...	60	Gravity...				200	30,000		60(?)	Yes....	Flat, \$5.	
Clarkfield...	45	do...	45	do...	1½	4	0	Small.	20,000	None.	0			
Clinton...	37	do...	37	do...	1½	9	15	14,000	120,000	400	80	Yes....	Flat, \$5.	
Cokato...	50	do...	50	do...	Short.	1	0	Small.		Few.	No.			
Comfrey...	45	do...	45	do...	1½	4	0	Small.	86,000	None.	0	No....		
Cottonwood...	40	do...	40	Gravity and direct. ^d	1½	6	0	Small.	1,200	None.		No....		
Currie...	60-80	Comp. air.	60-80	Comp. air.	1½	4	5	1,200	75,000	80	20	No....	Flat, \$4.	
Dassel...	40	Gravity...	40	Gravity...	1½	12	30	7,000	65,000	100	15		Flat and meters.	
Dawson ^e ...	50	do...	50-150	Gravity and direct.	1½	9	42		200,000(?)	210	20	No....	Flat, \$12; meters.	
De Graff...	None	None		Direct ^d ...	0	0	0	Small.				No....		

Delano.....	45	Gravity...	45	Gravity and di- rect.	8	13	52	30,000	350,000	250	25	No.....	Meter, 20 to 10 c.	
Delavan.....		do.....	36	Gravity...	9	8	5,000							
Easton.....	36	do.....	36	Gravity...	9	19	7,000	165,000		150	45	Yes.....	Free.	
Echo.....	40	do.....	40	do.....	5	2	Small.			None.	0	No.....		
Edgerton.....		do.....		Gravity and di- rect. ^d	4	10	4,500	60,000					No.....	
Elgin.....	44	do.....	44	Gravity...	2	8	32	7,000	250,000	100	25	No.....	Flat, \$6.	
Ellendale.....	55-65	Comp. air.	65	Comp. air and di- rect.	1	9	23			150	60	No.....	Flat, \$5.	
Ellsworth.....	70-95	do.....	70-95	Comp. air.	1 $\frac{1}{4}$	7	12	200		12	2		Flat, \$8.	
Elmore.....		Gravity...				19	1							
Elysian.....	75	do.....	75	Gravity...	2 $\frac{1}{4}$	8	15	5,000	55,000	100	20	Yes.....	Flat, \$5.	
Emmons.....	None		80	Direct.....	0	1	0	Small.	60,000	None.	0	No.....		
Excelsior.....	25	Gravity...	(f)	(f)	0	0	30	3,500		100	10	No.....	Flat, \$18.	
Eyota ^g	65	Comp. air.	100	Comp. air.	1	10	0							
Fairfax.....	40	Gravity...	40	Gravity and di- rect. ^d	1 $\frac{1}{2}$	8	12	2,500	30,000	Few.	Small.	No.....	Meter, 50 c.	
Fairmont.....	50	Direct....	150	Direct....	2 $\frac{1}{2}$	39	175	120,000		1,500	50	In part..	Flat, \$4; meter, 35 c.	
Faribault.....	100	Gravity...	100	Gravity...	15	105	500	450,000	1,500,000	3,000	33 $\frac{1}{2}$	Yes.....	Meter, 40 and 10 c.	
Fort Snelling.....	55	Gravity and di- rect	100	Direct ^h ...	4	47	200	240,000	1,500,000		100		Free.	
Fountain.....	60	Comp. air.	100	Comp. air.	1 $\frac{1}{2}$	10	25	15,000	95,000	425	99	Yes.....	Flat, \$6; meter, 40 c.	
Franklin.....	45	Gravity...	45	Gravity...	2 $\frac{1}{2}$	9	42	10,000	70,000	500	90	Yes.....	Flat, \$4; meter, 40 c.	
Fulda.....	50	do.....	50-100	Gravity ^e ...	1 $\frac{1}{2}$	14	45		45,000	225(?)		Yes.....	Flat, \$5.	
Gibbon.....		do.....		Gravity and di- rect. ^d	1 $\frac{1}{2}$	3	2	Small.		None.	0	No.....		
Glencoe.....	65	do.....	125	Direct....	4 $\frac{1}{4}$	37	200	125,000	300,000	1,000	50	Yes.....	Flat, \$4; meter, 20 to 10 c.	
Goodhue.....		do.....		Gravity...	2	15	100	10,000	432,000	400	95	Yes.....	Flat, \$4; meter, 47 c.	
Good Thunder.....	60	do.....	60	do.....	1 $\frac{1}{2}$	8	27	9,400	75,000	126	25	No.....	Flat, \$3.	
Graceville.....	47	do.....	47	do.....	2	21	212	10,000	100,000	1,032	100	Yes.....	Meter, 80 to 40 c.	
Grand Meadow.....	44	do.....	44	do.....	2 $\frac{1}{2}$	10	14	2,350	110,000	60	10	Yes.....	Flat, \$5.	
Granite Falls.....	70-80	do.....	70-80	do.....	2	16		40,000	Large.....	Large.....			Meter, 27 to 11 c.	
Grove City.....	40-50	do.....	40-50	do.....	4 $\frac{1}{2}$	11	33	6,000	100,000	80	20	Yes.....	Flat, \$2.	
Hanley Falls.....	45	do.....	45	do.....	6	20	12,000	60,000	400	100	Yes.....	Free.		
Hardwick.....	23	do.....	23	do.....	0	0	0	Small.	35,000	None.	0	No.....		

^a No system. Supply used by all for bath and laundry purposes.^b Less in dry years.^c Portable fire engine.^d Fire engine.^e Water can be used direct from lake in case of fire.^f Fire engine pumps direct from lake.^g Recently installed.^h Fire engine is also used.

Public water supplies in southern Minnesota—Continued.

City or village.	Plant—Continued.				System.			Consumption.					Price charged.
	Domestic pressure per square inch.	Method of applying domestic pressure.	Fire pressure per square inch.	Method of applying fire pressure.	Length of mains.	Number of fire hydrants.	Number of taps.	Average daily consumption.	Maximum daily capacity of source.	Number of people supplied.	Percentage of total population.	Is water used for drinking in public schools?	
Harmony...	Pounds. 65	Comp. air.	Pounds. 65-100	Comp. air and direct.	Miles. 1 $\frac{1}{4}$	14	100	Gallons. 10,000	Gallons. 65,000	Large.	Yes....	Flat, \$5; meter, \$1.
Hartland...	59	Gravity...	59	Gravity...	1 $\frac{1}{2}$	6	8	1,800
Hastings...	1 $\frac{1}{2}$	12	2,000
Hayfield...	1 $\frac{1}{2}$	10	16	12,000
Hector...	45	Gravity...	45	Gravity...	1 $\frac{1}{2}$	13	1	Small.	450,000	80	10	Yes....	Meter, 50 c.
Henderson...	80-85	do...	85-135	Gravity and direct.	1 $\frac{1}{2}$	None.	0	Yes....
Hendricks...	55	do...	55	Gravity...	10	25	3,000	75	20	No....	Flat, \$3.
Hokah...	65	do...	65	do...	1	9	45	5,000	125,000	250	50	Yes....	Flat, \$4.
Houston...	70	Comp. air.	70	Comp. air.	1 $\frac{1}{2}$	7	None.	Small.	185,000	None.	0	No....
Howard Lake	64	Gravity...	64+	Gravity and direct.	1 $\frac{1}{4}$	13	25,000	480	60	Flat, \$5.
Hutchinson...	60	do...	125	Direct...	3 $\frac{1}{4}$	36	33,000	1,000,000(?)	Yes....	Flat, \$5; meter, 25 c. (min., \$5).
Iona...	40	do...	40	Gravity...	1 $\frac{1}{4}$	4	17	7,680	46,000	150	50	No....	Flat, \$6.
Ivanhoe...	45	do...	45	do...	8	16
Jackson...	65	do...	65	do...	1 $\frac{1}{2}$	18	100	50,000	600	33 $\frac{1}{3}$	Yes....	Flat, \$6.
Jasper...	30-60	do...	80	Gravity and direct.	1 $\frac{1}{4}$	16	40	10,000	75,000	200	33 $\frac{1}{3}$	Flat, \$5.
Kasson...	55	do...	100	Direct...	2 $\frac{1}{2}$	38	96	30,000	500	50	Yes....	Flat, \$4.50.
Kenyon...	100	do...	100	Gravity...	1	20	60	10,000
Kilkenny...
Kiester...	35-40	Gravity...	35-40	Gravity...	1 $\frac{1}{2}$	6	23	85	35	No....	Flat, \$6.
Lake Benton...	80	do...	110	Direct...	1 $\frac{1}{2}$	11	50	7,500	250	30	Yes....	Meter, 25 c.; (min., \$5.40.)
Lake City...	60	Direct...	100	do...	5 $\frac{1}{4}$	36	315	100,000	2,800	90	Yes....	Meter, 33 $\frac{1}{3}$ to 13 $\frac{1}{3}$ c.
Lake Crystal...	0	do...	100	Direct a...	1 $\frac{1}{2}$	9	0	Fire only.	None.	0	No....
Lakefield...	40	Direct...	140	Direct...	1 $\frac{1}{2}$	12	45	25,000	250,000	200	20	Yes....	Flat, \$6.
Lamberton...	48	Gravity...	48	Gravity...	1	13	27	10,000	40,000	125	20	Yes....	Do.
Lanesboro...	60	do...	100	Direct...	1 $\frac{1}{2}$	15	40	27,000
Leroy...	40	do...	40	Gravity...	2	16	75	8,000	120,000	300	33 $\frac{1}{3}$	No....	Flat, \$5.
Lester Prairie	45	do...	45	do...	1 $\frac{1}{2}$	8	22	6,000	100	15	Flat, \$4.

Lesueur.....	70	do.....	70	Gravity and di- rect.	3 $\frac{1}{2}$	42	200	40,000	500,000	1,000	50	Yes.....	Flat, \$5; meter, 20 c.
Le s ue u r Center.	42	do.....	100	Direct....	2	7	13	10,000	18	3	No.....	Meter, 20 c.
Lewiston.....	42	do.....	42	Gravity...	1 $\frac{3}{4}$	14	60	2,000	60,000	350	75	Yes.....	Flat, \$3.
Litchfield.....	43	do.....	165	Direct....	6	28	100	60,000	800,000	500	20	Yes.....	Meter, 20 c.
Lonsdale.....	do.....	do.....	Gravity....	1 $\frac{1}{2}$	5	20
Luverne.....	45	do.....	80	Direct....	6	44	480	100,000	Great.	2,000	70	Yes.....	Meter, 56 to 8 c.
Lyle.....	40	do.....	40	Gravity...	1 $\frac{1}{2}$	12	19	8,000	50,000	150	20	No.....	Flat, \$5.
Mabel.....	55	do.....	55	do.....	1 $\frac{1}{2}$	14	50	1,900	95,000	175	25	Yes.....	Flat, \$3.75.
Madelia.....	40	do.....	40	do.....	2	36	125	12,000	100,000	700	45	Yes.....	Meter, 40 to 25 c.
Mankato.....	100	do.....	100	Gravity and di- rect.	17	162	1,125	783,000	1,500,000	8,000	66 $\frac{2}{3}$	Yes.....	Meter, 12 to 10 c. (min., \$6).
Mapleton.....	55	do.....	55	Gravity...	1 $\frac{1}{2}$	14	78	10,000	70,000	Yes.....	Meter, 25 to 15 c.
Marshall.....	45	Direct....	100-120	Direct....	3 $\frac{1}{2}$	30	112	40,000	80,000	600	25	Meter, 27 to 20 c.
Maynard.....	Comp. air	Comp. air	1 $\frac{1}{2}$	10	0	Small.	None.	0	No.....
Mazeppa.....	40	Gravity...	40	Gravity...	1 $\frac{1}{2}$	6	29	1,000
Milan.....	52	do.....	52	do.....	2	6	10	36,000	No.....
Minneapolis.....	90	do.....	(b)	(b)	349	4,015	c17,591,834	(c)	No.....	Flat, \$2; meter, 8 c.
Minneiska.....	Fire only.
Minneota.....	40	Gravity...	40	Gravity...	1 $\frac{3}{4}$	20	40	7,000	45,000	280	25	Flat, \$5; meter, 25 c.
Min n e s o t a Lake.	35	do.....	35	do.....	1 $\frac{1}{2}$	16	20	1,000	100	20	No.....	Flat, \$5.
Montevideo.....	80	do.....	80	do.....	2 $\frac{1}{2}$	35	143	100,000	500,000	900	33 $\frac{1}{3}$	Yes.....	Meter, 40 to 12 c.
Montgomery.....	52	do.....	52	do.....	1 $\frac{3}{4}$	18	75	25,000	750	60	No.....	Flat, \$4.
Monticello.....	40-80	Comp. air	40-80	Comp. air	1 $\frac{1}{2}$	19	48	25,000	800,000	250	25	Yes.....	Flat, \$4; meter, 30 to 20 c.
Morton.....	20	Direct....	60	Gravity...	1 $\frac{1}{2}$	16	80	20,000	650	80	Yes.....	Flat, \$5.
M o u n t a i n Lake.	40	Gravity...	40	do.....	2	19	60	20,000	60,000	400	33 $\frac{1}{3}$	Yes.....	Do.
New London.....	150	Direct....	1 $\frac{1}{4}$	3	0	None.	None.	0	No.....
New Prague.....	50	Gravity...	50	Gravity...	1	18	40	45,000	750	75 (?)	Yes.....	Flat; meter, 50 to 20 c.
New Rich- land.	53	do.....	53	do.....	22	28	1,750 (?)
New Ulm.....	do.....	Direct....	11	8	450	80,000	400,000	3,400	60	Meter, 25 c. (more or less).
Nicollet.....	50	do.....	50	Gravity...	1 $\frac{1}{2}$	6	6	1,600	32,000	35	10	Yes.....	Meter, 50 c. (min., \$5).
Northfield.....	80	do.....	80-150	Gravity and di- rect.	8	81	377	230,000	1,500,000	33 $\frac{1}{3}$	Yes.....	Meter, 20 to 8 c. (min., \$6).
North St. Paul.	20	do.....	60-80	Direct....	2	27	10	6,000	d 150,000	No.....	Meter, 20 c.
Olivia.....	50	do.....	50	Gravity...	2	20	58	17,000	90,000	250	25	Yes.....	Flat, \$5; meter, 40 c.
Ortonville.....	70	do.....	70	do.....	1 $\frac{3}{4}$	19	125	65,000	200,000	500	25	Meter, 53 to 13 c. (min., \$6).
Owatonna.....	50	do.....	100	Direct....	14	105	800	400,000
Pine Island.....	50	do.....	50	Gravity...	1 $\frac{1}{2}$	18	75	40,000	150,000	500	66 $\frac{2}{3}$	No.....	Flat, \$3.
Pipestone.....	20-40	do.....	140	Direct....	6	42	375	60,000	216,000	2,300	90	Yes.....	Flat, \$6; meter, 30 c.
Plainview.....	40	do.....	40	Gravity...	4	10	220	25,000
Preston.....	95	do.....	95	do.....	29	167	30,000	Yes.....	Flat, \$5.	
Redwing.....

^a Capacity of pump 500 gallons per minute.^c Daily capacity of plant 80,000,000 gallons.^b Portable fire engines.^d From well alone.

Public water supplies in southern Minnesota—Continued.

City or vil- lage.	Plant—Continued.				System.			Consumption.						Price charged.
	Do- mestic pres- sure per square inch.	Method of applying domestic pressure.	Fire pressure per square inch.	Method of applying fire pres- sure.	Length of mains.	Num- ber of fire hy- drants.	Num- ber of taps.	Average daily con- sump- tion.	Maximum daily capac- ity of source.	Number of people sup- plied.	Per- cent- age of total popu- lation.	Is water used for drinking in public schools?		
Redwood Falls.	Pounds. 45	do.....	Pounds. 80	Direct.....	Miles. 6	210	Gallons. 30,000	Gallons. 100,000	980	50	Yes.....	Meter, 40 to 15 c.	
Renville.....	45	do.....	45	Gravity.....	1 $\frac{1}{2}$	23	60	10,000	65,000	300	25	Yes.....	Flat, \$4.80.	
Rochester.....	80	Gravity and di- rect.	80-110	Gravity and di- rect.	12	165	900	400,000	1,000,000	4,000	50	Yes.....	Flat, \$5; meter, 30 to 10 c.	
Rolling Stone	78	Gravity.....	78	Gravity.....	1 $\frac{1}{2}$	12	30	75,000	200	90	Yes.....	Flat, \$3.	
Rose Creek.....			60	Direct.....	1 $\frac{1}{2}$	6	11	3,000	150,000	20	10	No.....	Flat, \$5.	
Rushford.....					2 $\frac{1}{2}$	35	75	15,000			
Rutherford.....	40	Gravity.....	40	Gravity.....	1 $\frac{1}{2}$	3	0	Small.	50,000	None.	0	No.....		
Sacred Heart.....	40	do.....	40	do.....	1 $\frac{1}{2}$	8	28	4,000	75,000	125	20	Yes.....	Flat, \$6.	
St. Charles.....	50	do.....	50	do.....	3	40	200	10,000			
St. James.....	40	do.....	80-120	Direct.....	3 $\frac{1}{2}$	43	135	30,000	800,000			
St. Paul.....	10-75	do.....	(a)	(a)	300	2,773	24,773	b10,781,044	(b)	Yes.....	Flat; meter, 50 c. and less.	
St. Peter.....	85	do.....	85	Gravity.....	4 $\frac{1}{2}$	41	225	20,000	1,050	28	Yes.....	Flat, \$3; meter, 13 to 7 c.	
Sherburn.....	50	do.....	50	do.....	Several	38	50	13,000	240,000	250	25	Yes.....	Meter, 30 c. (min., \$3).	
Silver Lake.....				Direct.....	1 $\frac{1}{2}$	9	No.....	Flat, \$3; meter, 25 c.	
Slayton.....	40	Gravity.....	60	Gravity and di- rect.	1 $\frac{1}{2}$	23	72	15,000	65,000	600	66 $\frac{2}{3}$	Yes.....	Flat, \$5.	
Sleepy Eye.....	45	do.....	100	Direct.....	2	25	65	28,800	150,000	400	20	Yes.....	Flat, \$4.80; meter, 40 to 20 c.	
South St. Paul.	100	do.....	100	Gravity.....	6	34	190	22,500	2,000,000	3,000	50	Yes.....	Meter, 40 to 20 c.	
South Still- water.			150	Direct.....	2	21	20	No.....		
Springfield.....	68	Gravity.....	68	Gravity.....	3	36	25	30,000	180,000	Yes.....	Flat, \$5.	
Spring Grove.....		do.....		do.....	1	14	40	8,000			
Spring Valley.....	40	Direct.....	100	Direct.....	3	45	150	65,000		Do.	
Stewart.....	43	Gravity.....	43	Gravity.....	2 $\frac{1}{2}$	9	23	20,000	80,000	50	10		
Stewartville.....	50	do.....	50	do.....	1 $\frac{1}{2}$	7	40	8,000			
Stillwater.....	65-100	do.....	65-100	Direct.....	14	130	750	1,250,000	3,000,000	75	Yes.....	Flat, \$6.	
Tracy.....	45	do.....	100-150	do.....	3 $\frac{1}{2}$	28	250	50,000	75,000	1,800	85	Do.	
Truman.....	50-60	Comp. air	50-60	Comp. air	4	3	Small.	Few	Small.	No.....	Do.		
Tyler.....	45	Gravity.....	45	Gravity.....	2 $\frac{1}{2}$	9	25	45,000	Yes.....	Flat, \$5.40; meter, 40 c.		

Vernon Center.	44	do	44	Gravity and direct.	¹ / ₂	5	15	120,000	40	10	No.....	
Walnut Grove.	44	do	44	Gravity...	⁴ / ₅	10	50	3,000	50,000	300	75	Yes.....	Flat, \$4.
Waseca	45	do	150	Direct...	⁶ / ₂	46	50,000	150,000	2,000	66 ²	Yes.....	Flat, \$6; meter, 30 c. (min. meter, \$5.)
Waterville	45	do	45	Gravity...	⁹ / ₃	22	10,000	No.....	Flat, \$6; meter, 80 to 30 c.
Waverly	50	Comp. air	75	Comp. air and direct.	1	13	30	3,500	No.....	Flat, \$4.
Wekome	60-65	do	60-65	Comp. air	³ / ₄	7	10	2,000	20,000	25	5	Yes.....	Flat, \$6.
Wells	45	Gravity...	100	Direct...	² / ₁	23	125	100,000	150,000	1,250	65	Yes.....	Flat, \$5; meter, 25 c.
Westbrook	45	do	45	Gravity...	⁵ / ₃	0	500	5,000	0	0	0	No.....	
West Concord	80	Direct...	80	Direct...	1	7	0	Small.	Great.	0	0	No.....	
West Minneapolis.	50	Gravity...	50	Gravity...	
White Bear Lake.	50	do	50	do	2	24	30	15,000	125,000	235	13	No.....	Flat, \$5.
Willmar	43	do	80-100	Direct...	⁵ / ₂	46	300	100,000	750,000	1,500	30	Meter, 47 to 11 c.
Wilmont	40	do	40	Gravity...	¹ / ₂	5	1	500	150,000	None.	0	No.....	
Windom	65	do	65	do	4	28	100	15,000	300,000	450	25	Yes.....	Flat, \$5; meter, 50 to 25 c.
Winnebago	40	Direct...	100	Direct...	5	14	250	100,000	
Winona	50	Gravity...	90	do	36	365	2,735	2,000,000	
Winsted	10	No.....	
Winthrop	45	Gravity...	45	Gravity...	2	17	4,500	75,000	No.....	
Wood Lake	45	do	45	do	¹ / ₂	5	0	Small.	35,000	None.	0	No.....	
Worthington	40-60	Direct...	100-110	Direct...	⁴ / ₂	26	317	65,000	Great.	1,000	40	Yes.....	Flat; meter, 25 to 20 c.
Wykoff	45	Gravity...	45	Gravity...	¹ / ₂	15	85	12,000	250,000	500	90	Yes.....	Flat, \$5.
Zumbrota	65	do	65	do	² / ₁	21	100	5,000	250	15	Yes.....	Meter, 30 c.

^a Portable fire engines.^b Daily capacity of plant, 20,000,000 gallons.