

APPENDIX A. LIST OF ALL MODELED POINTS

Watershed	Point ID	Type	DRBC Docket No.	Organization Name	Water Source Name	Sector
Brandywine-Christina	C02	SW Point	D-1975-019 CP	Aqua PA - West Chester	East Branch Brandywine Creek	Public Water Supply
Brandywine-Christina	C03	Impoundment	D-1996-016 CP-3	Pennsylvania American Water Company	Rock Run Reservoir	--
Brandywine-Christina	C04	SW Point	D-0000-004 ENT 140	Wilmington Department of Public Works	Brandywine Creek	Public Water Supply
Brandywine-Christina	C05	SW Point	D-2002-002 CP	City of Newark	White Clay Creek	Public Water Supply
Brandywine-Christina	C06	SW Point	D-1989-063 CP-3	Downingtown Municipal Water Authority	East Branch Brandywine Creek	Public Water Supply
Brandywine-Christina	C07	SW Point	D-1996-016 CP-3	Pennsylvania American Water Company	West Branch Brandywine Creek	Public Water Supply
Brandywine-Christina	C08	SW Point	D-2008-036-1	ISG Plate, LLC	West Branch Brandywine Creek	Industrial
Brandywine-Christina	C09	Impoundment	--	Chester County Water Resources Authority	Chambers Lake (Hibernia Reservoir)	--
Brandywine-Christina	C10	SW Point	D-2008-036-1	ISG Plate, LLC	Sucker Run	Industrial
Brandywine-Christina	C11	Impoundment	D-1964-015 CP	PA Dept of Conservation and Natural Resources	Marsh Creek Reservoir	--
Brandywine-Christina	C12	Impoundment	D-1990-038 REN	Wilmington Country Club	Adams Dam	--

Watershed	Point ID	Type	DRBC Docket No.	Organization Name	Water Source Name	Sector
Brandywine-Christina	C13	Impoundment	D-1964-050	Radley Run Country Club	Radley Run Creek	--
Brandywine-Christina	C14	SW Point	D-1990-104	DuPont Country Club	Husbands Run	Non-Agricultural Irrigation - Golf
Brandywine-Christina	C15	Impoundment	--	Downingtown Country Club	Pond	--
Brandywine-Christina	C16	Impoundment	ENT-356	Whitford Country Club	Colebrook Farm Creek	--
Brandywine-Christina	C18	Impoundment	--	Winterthur	Pond	--
Brandywine-Christina	C19	Impoundment	--	Ingleside Golf Club	Pond	--
Brandywine-Christina	C22	Impoundment	D-2002-13	Bidermann Golf Club	Pond	--
Brandywine-Christina	C23	Gage	--	USGS - Chadds Ford	Brandywine Creek	--
Brandywine-Christina	C24	Gage	--	USGS - Wilmington	Brandywine Creek	--
Brandywine-Christina	C25	Gage	--	USGS - Stanton	Red Clay Creek	--
Brandywine-Christina	C26	Gage	--	USGS - Coochs Bridge	Christina River	--
Brodhead	B01	Impoundment	D-1992-072 CP-2	East Stroudsburg Water Department	Sambo Creek	--
Brodhead	B02	SW Point	D-1991-001 CP-4	Brodhead Creek Regional Authority	Brodhead Creek	Public Water Supply

Watershed	Point ID	Type	DRBC Docket No.	Organization Name	Water Source Name	Sector
Brodhead	B03	SW Point	D-2001-040 -3	Camelback Mountain Resort	Pocono Creek	Non-Agricultural Irrigation - Ski
Brodhead	B04	Gage	--	USGS – Analomink	Brodhead Creek	--
Brodhead	B05	SW Point	D-1980-025 -2	WestRock Stroudsburg Mill	Brodhead Creek	Industrial
Brodhead	B07	SW Point	--	Buck Hill Falls Golf Club	Buck Hill Creek	Non-Agricultural Irrigation - Golf
Brodhead	B08	Impoundment	--	Country Club of the Poconos	Pond	--
Brodhead	B09	Impoundment	--	The Inn at Pocono Manor	Indian Run	--
Brodhead	B10	Gage	--	USGS – Minisink Hills	Brodhead Creek	--
Brodhead	B11	SW Point	--	Glen Brook Golf Club	McMichaels Creek	Non-Agricultural Irrigation - Golf
Brodhead	B12	SW Point	--	Glen Brook Golf Club	Pond	Non-Agricultural Irrigation - Golf
Brodhead	B14	Impoundment	D-1989-037-4	Mount Airy Lodge	Mount Airy Lake	--
Brodhead	B15	SW Point	D-2009-002 CP-1	Buck Hill Falls Water Company	Buck Hill Creek	Public Water Supply
Lehigh	L01	SW Point	D-2004-006 CP-2	Northampton Boro Municipal Authority	Lehigh River	Public Water Supply
Lehigh	L02	SW Point	D-1984-016 CP	Lehigh County Authority	Little Lehigh River	Public Water Supply

Watershed	Point ID	Type	DRBC Docket No.	Organization Name	Water Source Name	Sector
Lehigh	L03	SW Point	D-1984-016 CP	Lehigh County Authority	Lehigh River	Public Water Supply
Lehigh	L04	Impoundment	D-1995-019 CP-3	Bethlehem City	Wild Creek Reservoir	--
Lehigh	L06	Impoundment	D-1991-065 CP-4	Hazleton City Authority	Hudsondale Reservoir	--
Lehigh	L07	Impoundment	D-1991-065 CP-4	Hazleton City Authority	Dreck Creek Reservoir	--
Lehigh	L08	SW Point	D-1991-065 CP-3	Hazleton City Authority	Lehigh River	Public Water Supply
Lehigh	L09	SW Point	D-1974-189 -3	Holcim (US) Inc.	Lehigh River	Industrial
Lehigh	L10	Impoundment	D-2004-006 CP-2	Northampton Boro Municipal Authority	Spring Mill Pond	--
Lehigh	L11	SW Point	D-1981-024 CP-8	Palmerton Borough Municipal Authority	Pohopoco Creek	Public Water Supply
Lehigh	L12	SW Point	D-2010-026 -1	Tuthill Corporation & Aquashicola-Little Gap, Inc., Blue Mtn Ski Area	Aquashicola Creek	Non-Agricultural Irrigation - Ski
Lehigh	L13	Impoundment	D-1993-053 -3	JFBB Ski Areas, Inc.	Big Bolder Lake	--
Lehigh	L14	SW Point	D-1977-047 CP	Pennsylvania American Water Company	Ross Common Creek	Public Water Supply
Lehigh	L15	SW Point	D-1998-040 -2	Northampton Generating Company	Lehigh River	Thermoelectric Power
Lehigh	L16	Impoundment	D-1989-093 CP	Lehigh Water Authority	Pine Run	--

Watershed	Point ID	Type	DRBC Docket No.	Organization Name	Water Source Name	Sector
Lehigh	L17	Impoundment	D-1989-093 CP	Lehigh Water Authority	Long Run	--
Lehigh	L18	SW Point	D-2001-031	Calpine Corporation	Lehigh River	Thermoelectric Power
Lehigh	L19	Impoundment	D-2004-035 -2	Bear Creek Management Company	Pond	--
Lehigh	L20	Impoundment	D-1981-071 CP-5	Jim Thorpe Borough	Mauch Chunk Creek	--
Lehigh	L21	Impoundment	D-1994-047 CP-2	Nesquehoning Borough Authority	Fourth Hollow Reservoir	--
Lehigh	L22	SW Point	D-1993-057 -3	JFBB Ski Areas, Inc.	Tobyhanna Creek	Non-Agricultural Irrigation - Ski
Lehigh	L23	Impoundment	--	Olde Homestead Golf Club	Pond	--
Lehigh	L24	Impoundment	--	U.S. Army Corps of Engineers	Beltzville Reservoir	--
Lehigh	L25	Impoundment	--	U.S. Army Corps of Engineers	F.E. Walter Reservoir	--
Lehigh	L26	Gage	--	USGS – Walnutport	Lehigh River	--
Lehigh	L27	Gage	--	USGS – Glendon	Lehigh River	--
Lehigh	L28	Impoundment	D-1990-056	Mahoning Valley Country Club	Mahoning Creek	--
Lehigh	L29	SW Point	D-1967-022 -2	Saucon Valley Country Club	Saucon Creek	Non-Agricultural Irrigation - Golf
Lehigh	L30	SW Point	D-1967-022 -3	Saucon Valley Country Club	Saucon Creek	Non-Agricultural Irrigation - Golf

Watershed	Point ID	Type	DRBC Docket No.	Organization Name	Water Source Name	Sector
Lehigh	L31	Gage	--	USGS – Bethlehem	Lehigh River	--
Neshaminy	N01	SW Point	ENT-130	Aqua PA	Neshaminy Creek	Public Water Supply
Neshaminy	N02	Impoundment	--	Fairways Golf and Country Club	Pond	--
Neshaminy	N03	Impoundment	--	Pinecrest Golf Club, Inc.	Pond	--
Neshaminy	N04	SW Point	--	Neshaminy Valley Golf Club, Inc.	Little Neshaminy Creek	Non-Agricultural Irrigation - Golf
Neshaminy	N05	Impoundment	D-1965-076 CP (8)	N Penn & N Wales Water Authority - Forest Park	North Branch Neshaminy Creek	--
Neshaminy	N06	Impoundment	D-1996-027 -3	Commonwealth National Golf Club	Pond	--
Neshaminy	N07	Gage	--	USGS – Langhorne	Neshaminy Creek	--
Neshaminy	N08	Impoundment	--	Bucks County Water and Sewer Authority	Lake Galena	--
Neshaminy	N09	Impoundment	--	Bucks County Parks Department	Lake Luxembourg	--
Neshaminy	N10	Impoundment	--	Aqua PA	Churchville Reservoir	--
RCC	R01	SW Point	D-1985-029 CP	Aqua PA	Ridley Creek	Public Water Supply
RCC	R02	SW Point	ENT-131	Aqua PA	Crum Creek	Public Water Supply

Watershed	Point ID	Type	DRBC Docket No.	Organization Name	Water Source Name	Sector
RCC	R03	SW Point	D-1986-042 CP	Aqua PA	Chester Creek	Public Water Supply
RCC	R04	Impoundment	--	Paxon Hollow Golf Course	Trout Run Pond	Non-Agricultural Irrigation - Golf
RCC	R05	Impoundment	D-2009-022-2	White Manor Country Club	Pond	Non-Agricultural Irrigation - Golf
RCC	R06	Impoundment	D-2000-030 CP	Applebrook Golf Club	Irrigation Pond 1	Non-Agricultural Irrigation - Golf
RCC	R07	Impoundment	D-1966-225	Concord Country Club	Pond 1	Non-Agricultural Irrigation - Golf
RCC	R08	SW Point	ENT-185	Hanson Aggregates Inc	Chester Creek Diversion	Mining
RCC	R09	SW Point	ENT-271	Westlake Plastics Company	Chester Creek	Industrial
RCC	R10	Impoundment	D-1965-171 CP	Springton Reservoir	Crum Creek	Public Water Supply
RCC	R11	Gage	--	USGS – Newtown Square	Crum Creek	--
RCC	R12	Gage	--	USGS – Chester	Chester Creek	--
Schuylkill	S01	SW Point	D-1988--5 CP	Aqua PA	Schuylkill River	Public Water Supply
Schuylkill	S02	SW Point	D-2015-001 CP-1	Aqua PA	Perkiomen Creek	Public Water Supply
Schuylkill	S03	Impoundment	ENT-128	Aqua PA	Pickering Creek	--
Schuylkill	S04	Impoundment	D-1990-052 CP / ENT-103	Auburn Municipal Authority	Reservoir 2	--
Schuylkill	S05	Impoundment	D-1990-052 CP / ENT-103	Auburn Municipal Authority	Reservoir 1	--

Watershed	Point ID	Type	DRBC Docket No.	Organization Name	Water Source Name	Sector
Schuylkill	S06	SW Point	D-2018-010 -1	Berkshire Country Club	Schuylkill River	Non-Agricultural Irrigation - Golf
Schuylkill	S07	SW Point	D-0000-001 ENT 277	Birdsboro Municipal Authority	Hay Creek	Public Water Supply
Schuylkill	S08	Impoundment	D-1991-051 CP	Blythe Township Municipal Authority	Crystal Reservoir	--
Schuylkill	S09	Impoundment	D-1991-051 CP	Blythe Township Municipal Authority	Silver Creek Reservoir	--
Schuylkill	S10	Impoundment	D-1991-051 CP	Blythe Township Municipal Authority	Moss Glenn Reservoir	--
Schuylkill	S11	Impoundment	D-1980-074 CP	Boyertown Municipal Waterworks	Trout Run Reservoir	--
Schuylkill	S12	Impoundment	D-1980-074 CP	Boyertown Municipal Waterworks	Popodickon Creek (Boyertown Reservoir)	--
Schuylkill	S14	SW Point	D-2012-025 -2	Cambridge-Lee Industries, LLC	Schuylkill River	Industrial
Schuylkill	S15	Impoundment	D-2009-035 -2	Chester Valley Golf Club	Pond	--
Schuylkill	S16	SW Point	--	Dyer Quarry, Inc.	Indian Corn Creek	Mining
Schuylkill	S17	SW Point	D-2004-003 CP-3	East Greenville Borough	Perkiomen Creek	Public Water Supply
Schuylkill	S18	SW Point	D-1969-210 CP-15	Constellation Energy Limerick Generating Station	Schuylkill River	Thermoelectric Power
Schuylkill	S20	Gage	--	USGS – Norristown	Schuylkill River	--

Watershed	Point ID	Type	DRBC Docket No.	Organization Name	Water Source Name	Sector
Schuylkill	S21	SW Point	--	Heidelberg Country Club	Tulpehocken Creek	Non-Agricultural Irrigation - Golf
Schuylkill	S22	Gage	--	USGS – Reading	Schuylkill River	--
Schuylkill	S23	Impoundment	D-1992-024 -3	Hickory Valley Golf Club	Swamp Creek	Non-Agricultural Irrigation - Golf
Schuylkill	S24	SW Point	--	Indian Valley Country Club	Indian Creek	Non-Agricultural Irrigation - Golf
Schuylkill	S26	SW Point	--	Lederach Golf Club	East Branch Perkiomen Creek	Non-Agricultural Irrigation - Golf
Schuylkill	S27	Impoundment	D-1991-092	Moselem Springs Golf Club	Merkels Dam	--
Schuylkill	S29	Impoundment	--	U.S. Army Corps of Engineers	Blue Marsh Reservoir	--
Schuylkill	S30	SW Point	D-1990-027 CP	PA American Water Company - Royersford	Schuylkill River	Public Water Supply
Schuylkill	S31	SW Point	D-1966-100 CP-2	PA American Water Company - Norristown	Schuylkill River	Public Water Supply
Schuylkill	S32	Impoundment	--	City of Reading	Lake Ontelaunee	--
Schuylkill	S33	SW Point	D-0000-002 ENT PHL	Philadelphia Water Department - Queens Lane	Schuylkill River	Public Water Supply
Schuylkill	S34	SW Point	D-0000-002 ENT PHL	Philadelphia Water Department - Belmont	Schuylkill River	Public Water Supply
Schuylkill	S35	SW Point	D-1967-123 CP-3	Phoenixville Borough	Schuylkill River	Public Water Supply

Watershed	Point ID	Type	DRBC Docket No.	Organization Name	Water Source Name	Sector
Schuylkill	S36	SW Point	D-1964-036 CP-2	Pottstown Borough	Schuylkill River	Public Water Supply
Schuylkill	S37	Impoundment	D-2011-023 -2	Reading Alloys	Spring Creek	--
Schuylkill	S38	Impoundment	D-2000-059 CP-4	Reading Area Water Authority	Maiden Creek	--
Schuylkill	S39	SW Point	--	Reading Country Club	Antietam Creek	Non-Agricultural Irrigation - Golf
Schuylkill	S40	Impoundment	D-1990-049 CP-4	Schuylkill County Municipal Authority	Indian Run Reservoir	--
Schuylkill	S41	Impoundment	D-1990-049 CP-4	Schuylkill County Municipal Authority	Broad Mountain Eisenhuth Reservoir	--
Schuylkill	S42	Impoundment	D-1990-049 CP-4	Schuylkill County Municipal Authority	Pine Run Reservoir	--
Schuylkill	S43	Impoundment	D-1990-049 CP-4	Schuylkill County Municipal Authority	Mt Laurel Reservoir	--
Schuylkill	S44	Impoundment	D-1990-049 CP-4	Schuylkill County Municipal Authority	Kauffman Reservoir	--
Schuylkill	S46	Impoundment	D-2006-016 -2	Spring Ford Country Club	Mingo Creek	--
Schuylkill	S47	SW Point	--	Spring Mountain Ski Area	Perkiomen Creek	Non-Agricultural Irrigation - Ski
Schuylkill	S48	Impoundment	D-1965-171 CP	Aqua Pennsylvania	Green Lane Reservoir	--
Schuylkill	S49	Gage	--	USGS – Philadelphia	Schuylkill River	--
Schuylkill	S50	Gage	--	USGS – Graterford	Perkiomen Creek	--

Watershed	Point ID	Type	DRBC Docket No.	Organization Name	Water Source Name	Sector
Schuylkill	S51	Gage	--	USGS – Wissahickon	Wissahickon Creek	--
Schuylkill	S52	Impoundment	D-1990-049 CP-4	Schuylkill County Municipal Authority	Wolf Creek Reservoir	--
Schuylkill	S53	Gage	--	USGS – Berne	Schuylkill River	--
Schuylkill	S55	Impoundment	--	Arrowhead Golf Course	Pond	--
Schuylkill	S56	Gage	--	USGS – Pottstown	Schuylkill River	--
Schuylkill	S58	Impoundment	--	Lake Wynonah Property Owners Association	Lake Wynonah	--
Schuylkill	S59	SW Point	--	Mary D Community Association	Swift Creek	Public Water Supply
Schuylkill	S60	Gage	--	USGS – Phoenixville	French Creek	--
Schuylkill	S61	Impoundment	D-2010-013 -2	Butter Valley Golf Port	Pond	--
Schuylkill	S62	Impoundment	D-0000-001 ENT 277	Birdsboro Municipal Authority	Pond	--
Schuylkill	S63	Impoundment	D-2010-028 CP-2	Tamaqua Borough Authority	Still Creek Reservoir	--
Schuylkill	S64	Impoundment	D-2012-022 CP-1	Hamburg Municipal Authority	Furnace Creek Reservoir	--
Schuylkill	S65	Impoundment	D-2014-001 CP-1	Minersville Borough Municipal Authority	Minersville Reservoir	--

Watershed	Point ID	Type	DRBC Docket No.	Organization Name	Water Source Name	Sector
Schuylkill	S66	Impoundment	--	Plymouth Country Club	Pond	--
Schuylkill	S67	Impoundment	D-1989-096 CP REV	Schuylkill Haven Borough Water Department	Tumbling Run Reservoir	--
Schuylkill	S68	Impoundment	--	Forest Park Water	Pump Outfall: East Branch Perkiomen Creek	--

APPENDIX B. ANNUAL WITHDRAWALS & RESULTS FOR ALL SW POINTS

Note: Some SW points have a change in withdrawals in 2060 relative to Baseline due to an observed trend. Others have a change because the 2060 scenario used a long-term data average instead of the recent average (2013–2017) applied in the Baseline scenario. Appendix C contains graphs showing data and projections; the methodology is outlined in [Section Error! Reference source not found.](#)

Point ID	Sector	SW Withdrawals (MGY)		Difference (2060 – Baseline)		Baseline, 1961–1967: Impacted Withdrawals		2060, 1961–1967: Impacted Withdrawals	
		Baseline	2060	MGY	Percent	MGY	Percent	MGY	Percent
C02	Public Water Supply	1,636	1,636	0	0%	0	0%	0.2	0%
C04	Public Water Supply	5,866	5,866	0	0%	1.6	0.03%	2.7	0.05%
C05	Public Water Supply	559	589	+30	+5.4%	33	5.9%	36	6.1%
C06	Public Water Supply	519	614	+95	+18%	0	0%	0	0%
C07	Public Water Supply	485	485	0	0%	66	14%	66	14%
C08	Industrial	189	34	–156	–82%	0	0%	0	0%
C10	Industrial	93	104	+10	+11%	0	0%	0	0%
C14	Golf	18	32	+14	+74%	11	60%	18	56%
B02	Public Water Supply	262	80	–182	–70%	0	0%	0	0%
B03	Ski	240	615	+375	+156%	85	35%	378	61%
B05	Industrial	126	127	+1.3	+1.0%	0	0.0%	0	0%
B07	Golf	18	18	0	0%	0.15	0.8%	0.03	0.2%

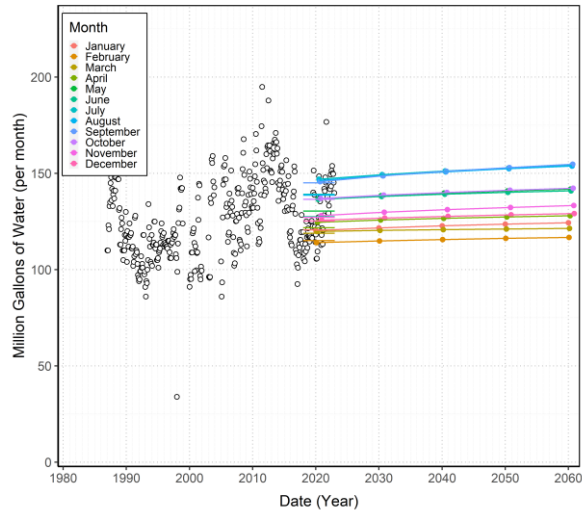
Point ID	Sector	SW Withdrawals (MGY)		Difference (2060 – Baseline)		Baseline, 1961–1967: Impacted Withdrawals		2060, 1961–1967: Impacted Withdrawals	
		Baseline	2060	MGY	Percent	MGY	Percent	MGY	Percent
B11	Golf	2.7	3.1	0.4	+13%	0	0%	0	0%
B12	Golf	1.2	1.5	0.3	+27%	0	0%	0	0%
B15	Public Water Supply	4.8	4.8	0.0	0%	0	0%	0	0%
L01	Public Water Supply	1,285	1,363	+77	+6.0%	0	0%	0	0%
L02	Public Water Supply	3,399	6,293	+2,894	+85%	1,670	49%	3527	56%
L03	Public Water Supply	58	58	0	0%	0	0%	0	0%
L08	Public Water Supply	408	408	0	0%	85	21%	84	21%
L09	Industrial	394	119	–275	–70%	0	0%	0	0%
L11	Public Water Supply	156	156	0	0%	40	26%	40	26%
L12	Ski	237	313	+76	+32%	0	0%	0	0%
L14	Public Water Supply	433	499	+65	+15%	156	36%	188	38%
L15	Thermoelectric Power	240	185	–55	–23%	4.9	2.0%	2.5	1.4%
L18	Thermoelectric Power	1,413	2,348	+935	+66%	132	9%	211	9.0%
L22	Ski	96	96	0	0%	1.3	1.4%	1.6	1.7%
L29	Golf	33	33	0	0%	15	45%	15	45%
L30	Golf	31	29	–1.9	–6.0%	11	36%	13	45%

Point ID	Sector	SW Withdrawals (MGY)		Difference (2060 – Baseline)		Baseline, 1961–1967: Impacted Withdrawals		2060, 1961–1967: Impacted Withdrawals	
		Baseline	2060	MGY	Percent	MGY	Percent	MGY	Percent
N01	Public Water Supply	3,693	3,802	+109	+3.0%	0	0%	0	0%
N04	Golf	1.7	2.4	+0.7	+39%	0	0%	0	0%
R01	Public Water Supply	793	688	–105	–13%	135	17%	126	18%
R02	Public Water Supply	6,011	5722	-288	-5%	0	0%	0	0%
R03	Public Water Supply	566	566	0	0%	2	0%	2	0%
R08	Industrial	47	47	0	0%	0	0%	0	0%
R09	Industrial	6	6	0	0%	0	0%	0	0%
S01	Public Water Supply	6,031	5,641	–390	–6.5%	0	0%	0	0%
S02	Public Water Supply	4,810	4,821	+11	+0.2%	0	0%	0	0%
S06	Golf	3.3	3.3	0	0%	0	0%	0	0%
S07	Public Water Supply	30	27	–3.2	–10%	0	0%	0	0%
S14	Industrial	362	364	+2.2	+0.6%	0	0%	0	0%
S16	Mining	3.2	2.5	–0.6	–20%	0	0%	0	0%
S17	Public Water Supply	28	30	+1.4	+5.0%	0	0%	0	0%
S18	Thermoelectric Power	13,654	17,043	+3,389	+25%	766	5.6%	805	4.7%
S19	Thermoelectric Power	1,516	1,516	0	0%	907	60%	910	60%

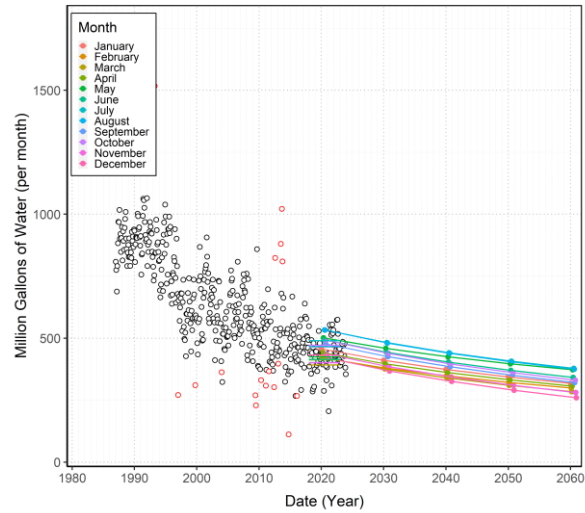
Point ID	Sector	SW Withdrawals (MGY)		Difference (2060 – Baseline)		Baseline, 1961–1967: Impacted Withdrawals		2060, 1961–1967: Impacted Withdrawals	
		Baseline	2060	MGY	Percent	MGY	Percent	MGY	Percent
S21	Golf	21	18	–3.0	–15%	0	0%	0	0%
S24	Golf	21	14	–7.0	–34%	0	0%	0	0%
S26	Golf	22	22	0	0%	0	0%	0	0%
S30	Public Water Supply	734	1,046	+312	+42%	0	0%	0	0%
S31	Public Water Supply	3,957	3,741	–216	–5.5%	0	0%	0	0%
S33	Public Water Supply	22,243	18,252	–3,991	–18%	0	0%	0	0%
S34	Public Water Supply	16,783	13,390	–3,393	–20%	0	0%	0	0%
S35	Public Water Supply	825	683	–142	–17%	0	0%	0	0%
S36	Public Water Supply	1,405	634	–771	–55%	0	0%	0	0%
S39	Golf	7.8	7.4	–0.4	–4.7%	0	0%	0	0%
S47	Ski	15	18	+2.6	+18%	0	0%	0	0%
S59	Public Water Supply	7.7	7.7	0	0%	0	0%	0	0%

APPENDIX C. SURFACE WATER WITHDRAWAL TRENDS PROJECTED TO 2060 FOR ALL SW POINTS

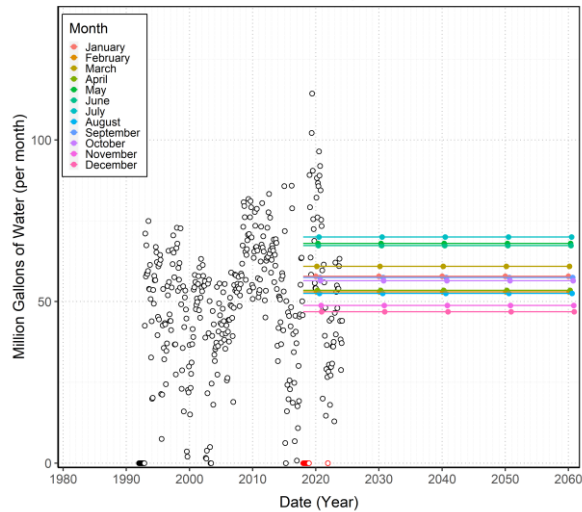
Selected monthly models
C02: 6172(Multiple (See Comments))
Aqua PA - Main - West Chester



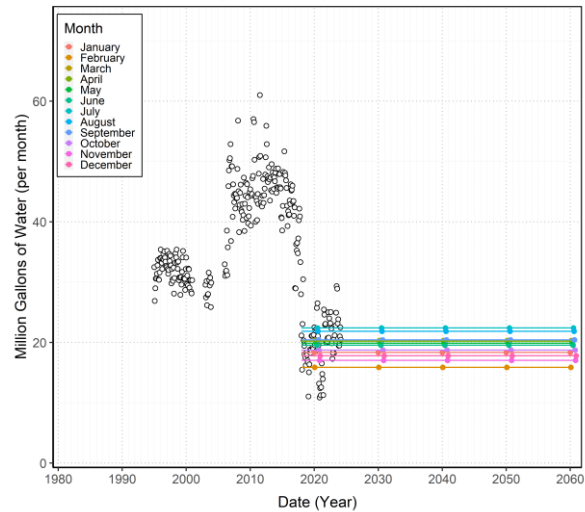
Selected monthly models
C04: 8834(D-0000-004 ENT 140)
Wilmington Department of Public Works/Water Division

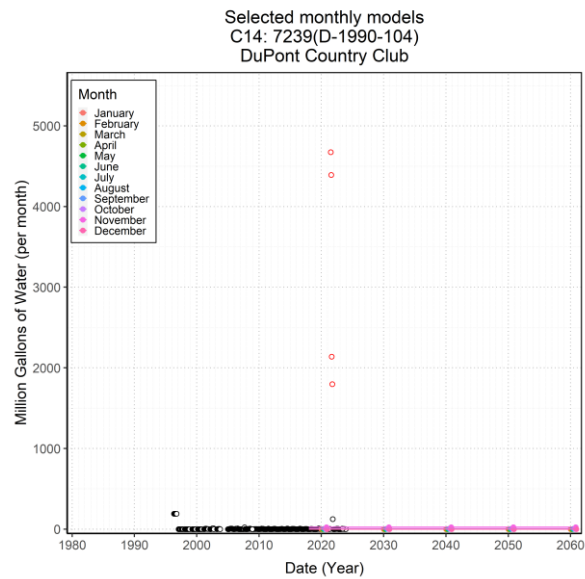
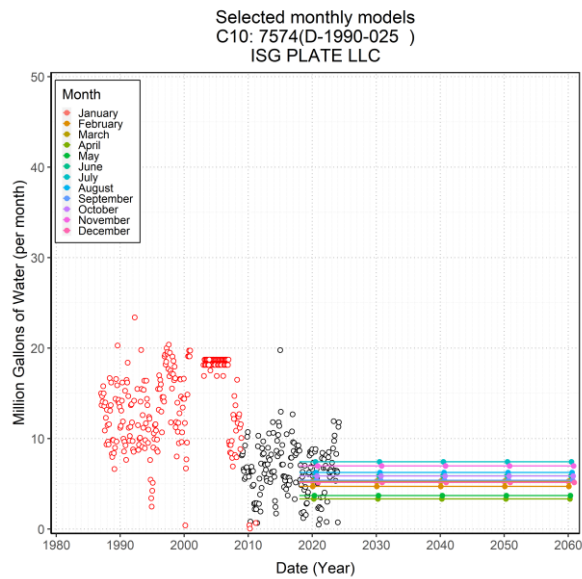
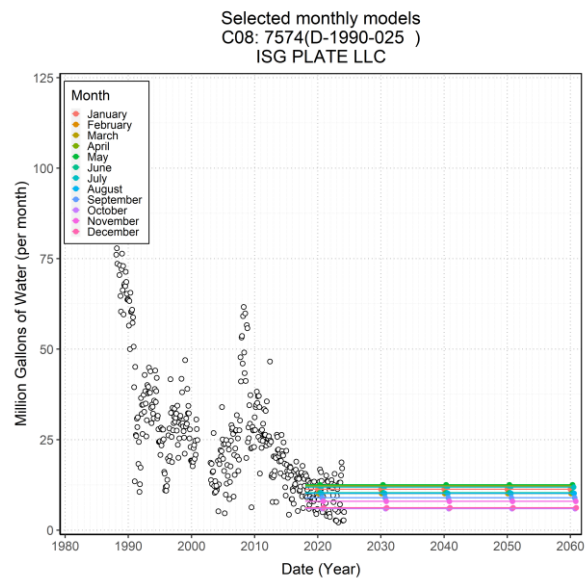
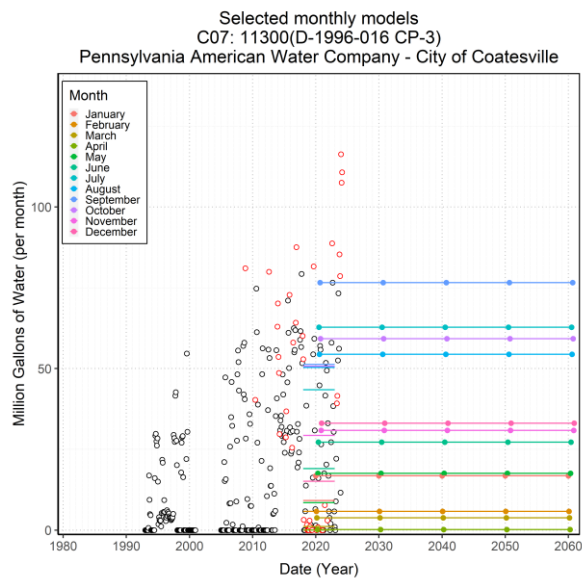


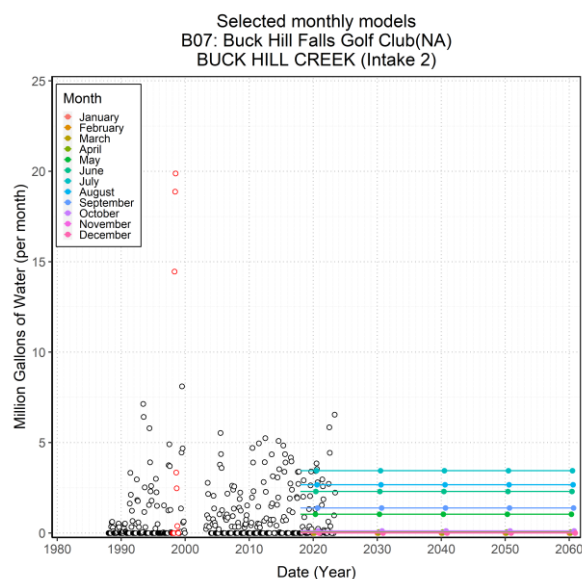
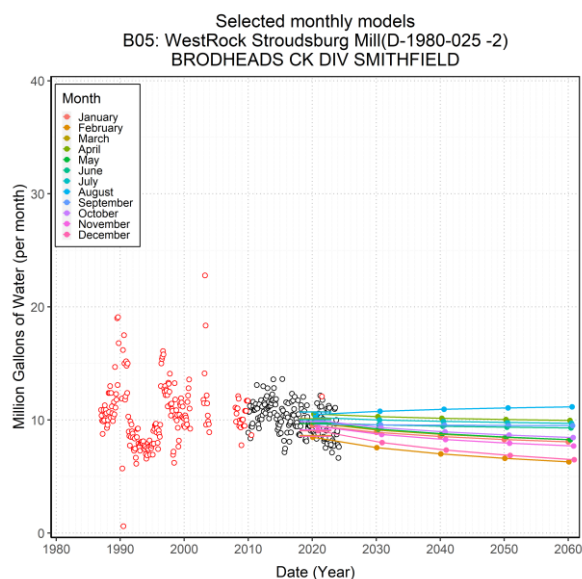
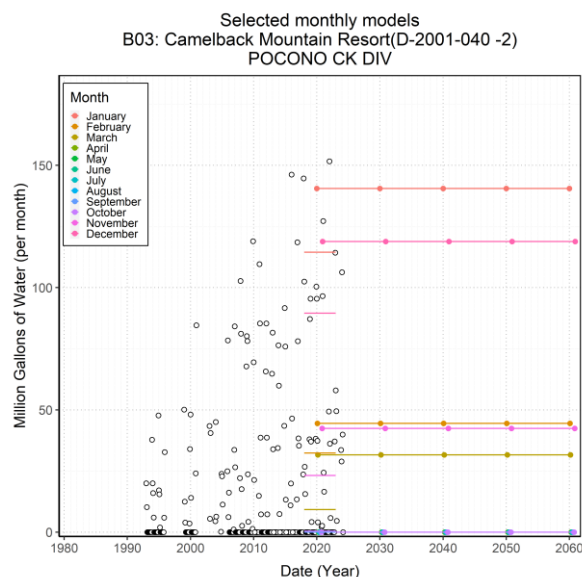
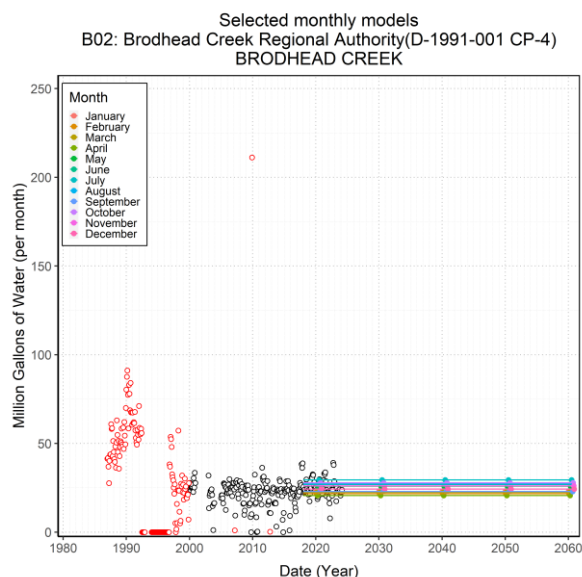
Selected monthly models
C05: 7945(D-2002-002 CP)
Newark, City of



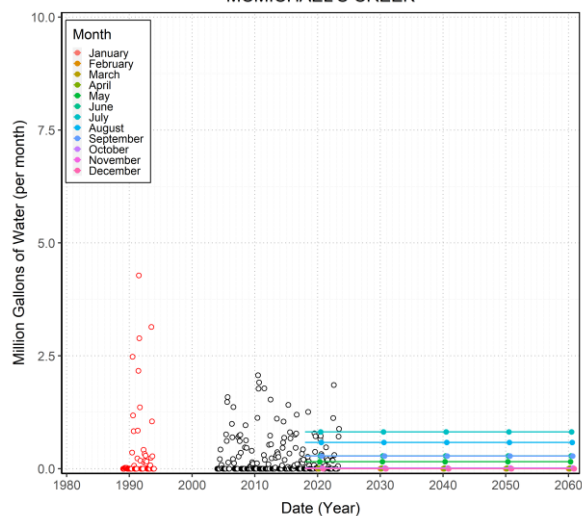
Selected monthly models
C06: 657(D-1989-063 CP-3)
Downtown Municipal Water Authority



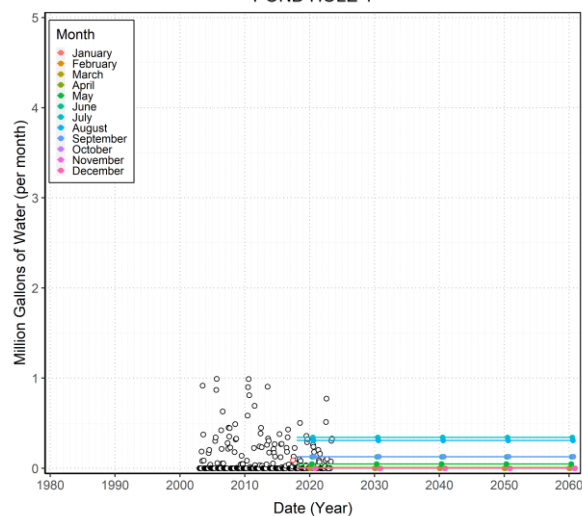




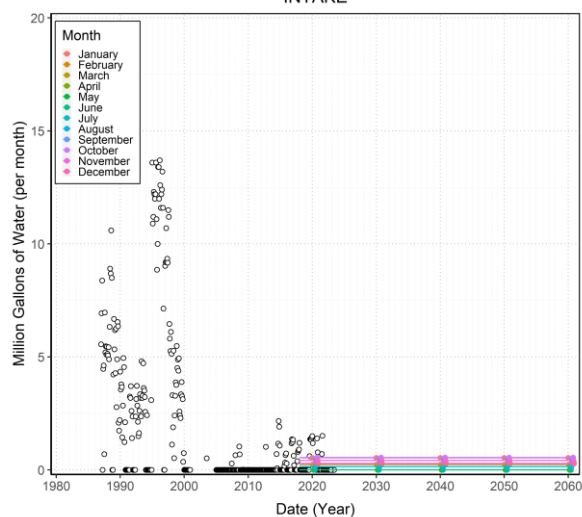
Selected monthly models
B11: GLEN BROOK GOLF CLUB(NA)
MCMICHAEL'S CREEK



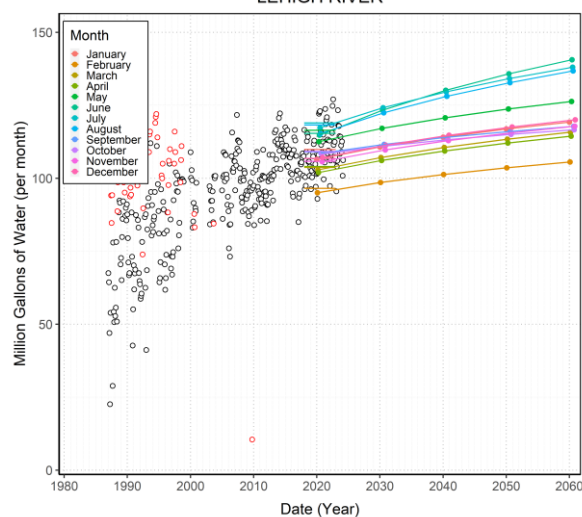
Selected monthly models
B12: GLEN BROOK GOLF CLUB(NA)
POND HOLE 1

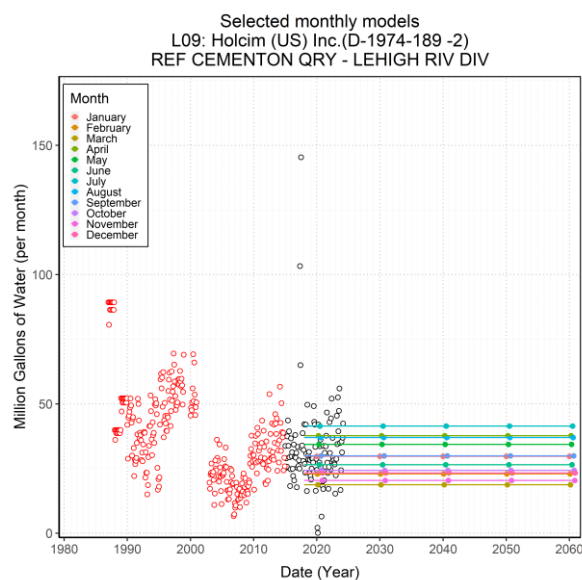
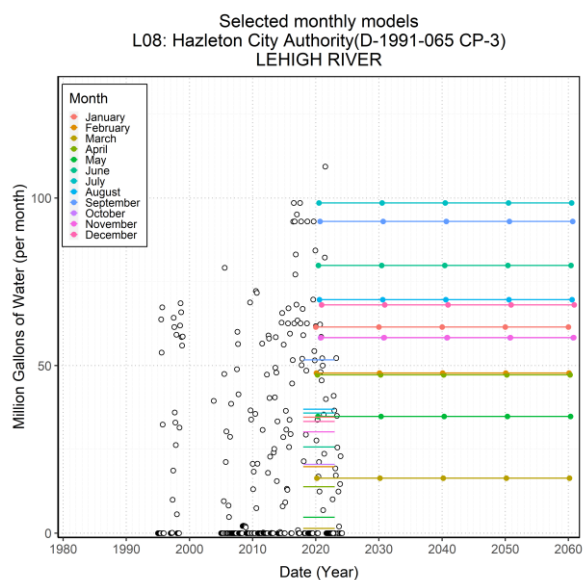
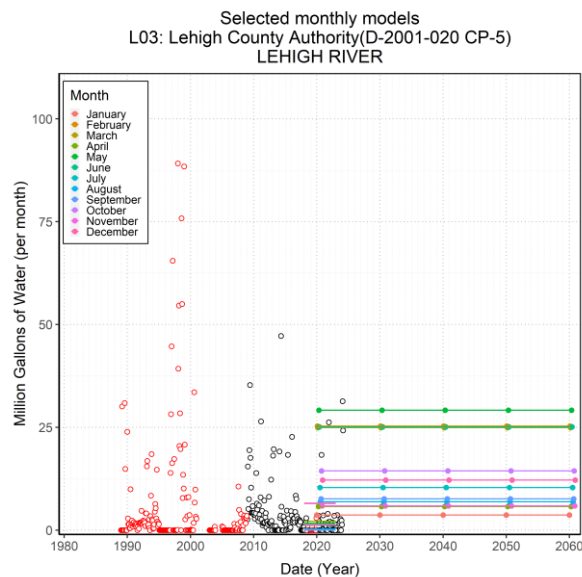
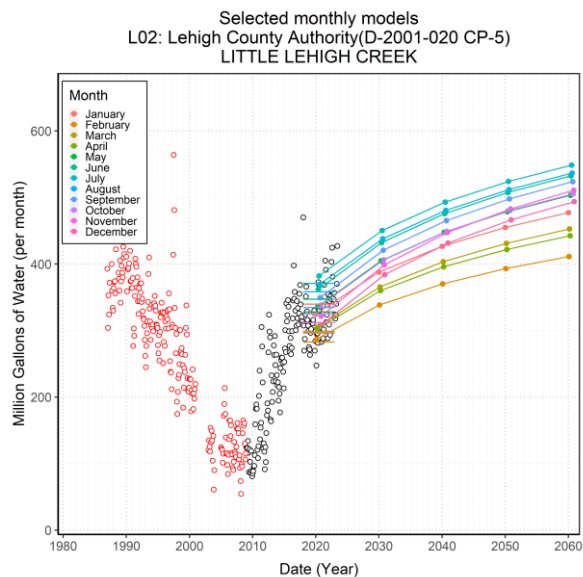


Selected monthly models
B15: BUCK HILL FALLS WATER COMPANY(D-2009-002 CP-1)
INTAKE

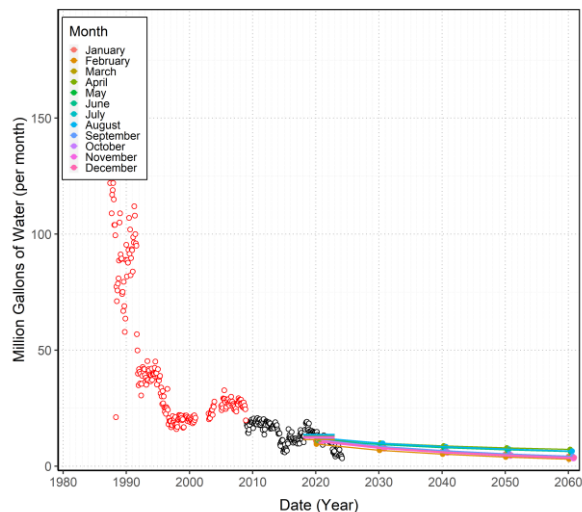


Selected monthly models
L01: Northampton Boro MA(D-2004-006 CP-2)
LEHIGH RIVER

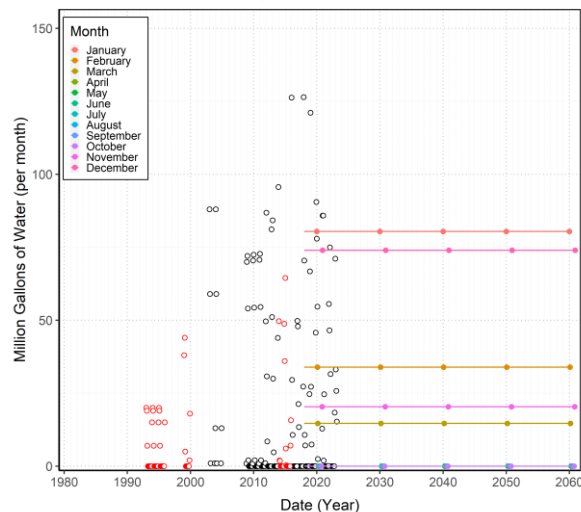




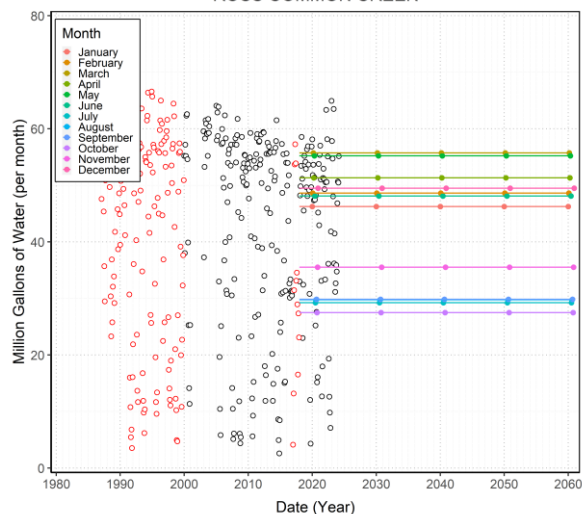
Selected monthly models
L11: Palmerton Borough(D-1981-024 CP-8)
POHOPOCO CREEK



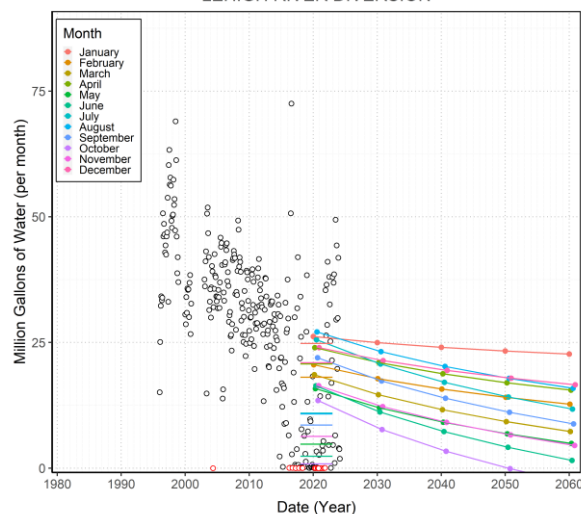
Selected monthly models
L12: Tuthill Corporation & Aquashicola-Little Gap, Inc.(D-2010-026 -1)
AQUASHICOLA DIV



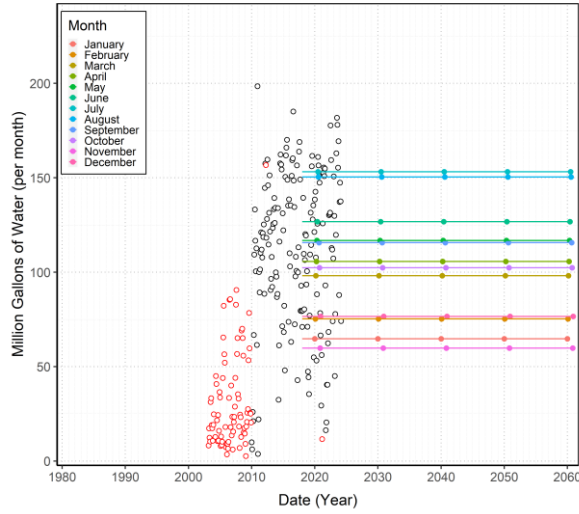
Selected monthly models
L14: Pennsylvania American Water Company(D-1977-047 CP)
ROSS COMMON CREEK



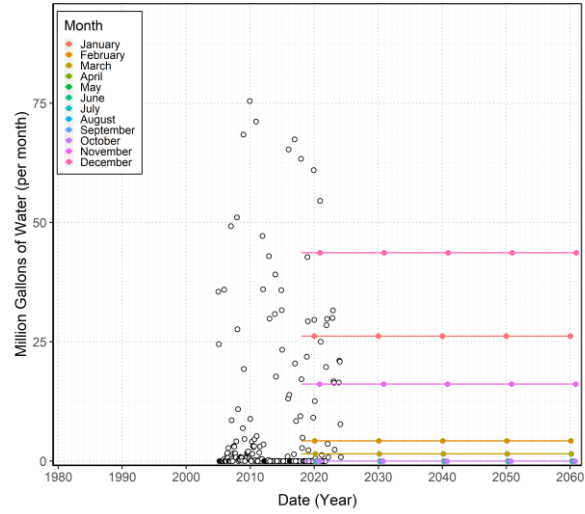
Selected monthly models
L15: Northampton Generating Company(D-1998-040)
LEHIGH RIVER DIVERSION



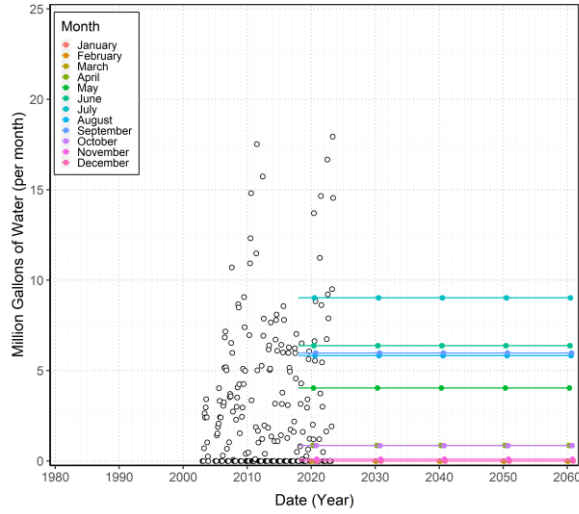
Selected monthly models
L18: Calpine Corporation(D-2001-031)
LEHIGH RIVER INTAKE 1



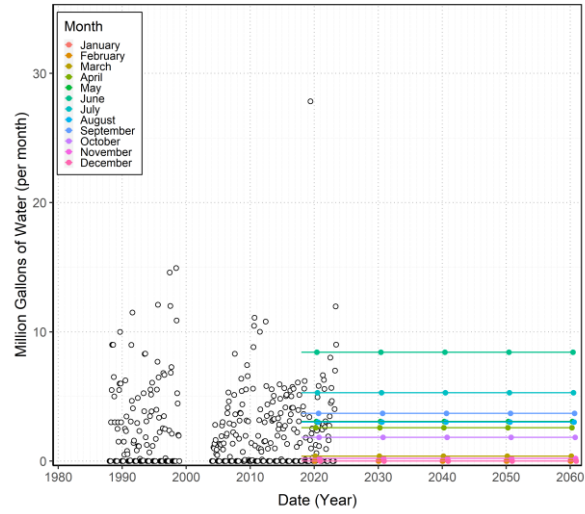
Selected monthly models
L22: JFBB Ski Areas, Inc.(D-1993-057 -3)
TOBYHANNA CR

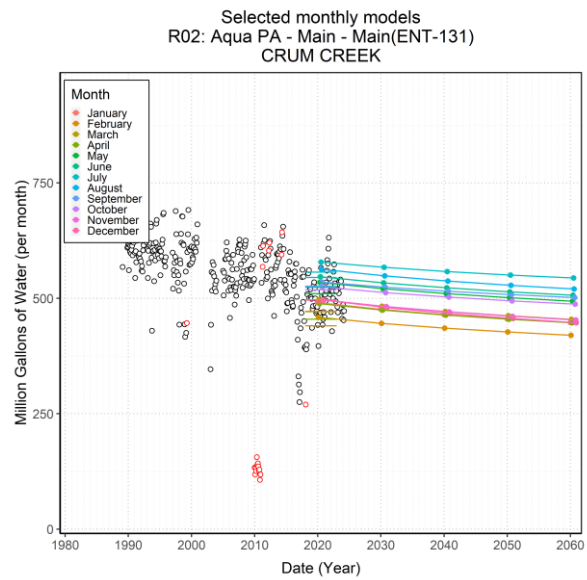
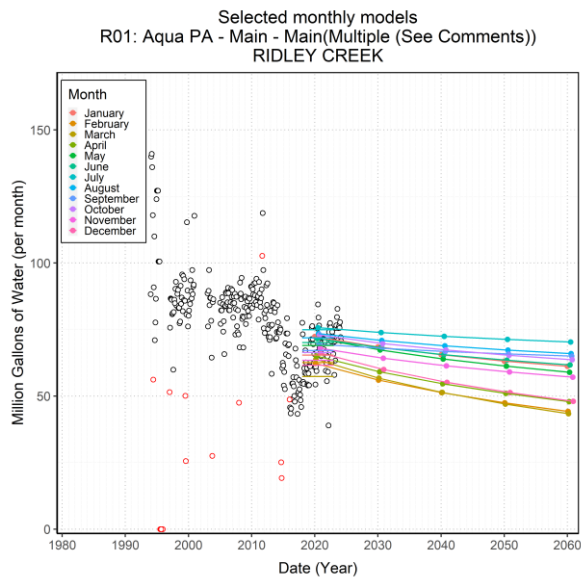
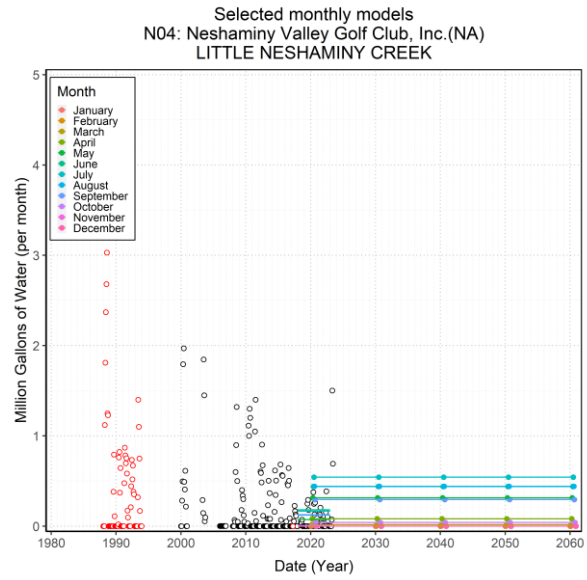
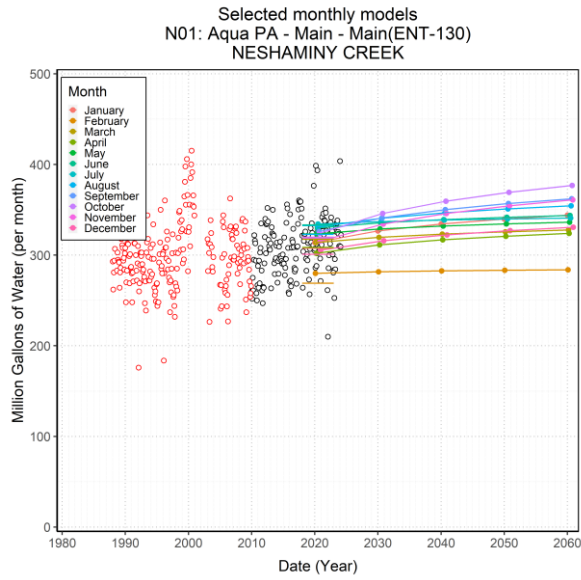


Selected monthly models
L29: Saucon Valley Country Club(D-1967-022 -3)
SAUCON CREEK INTAKE 2

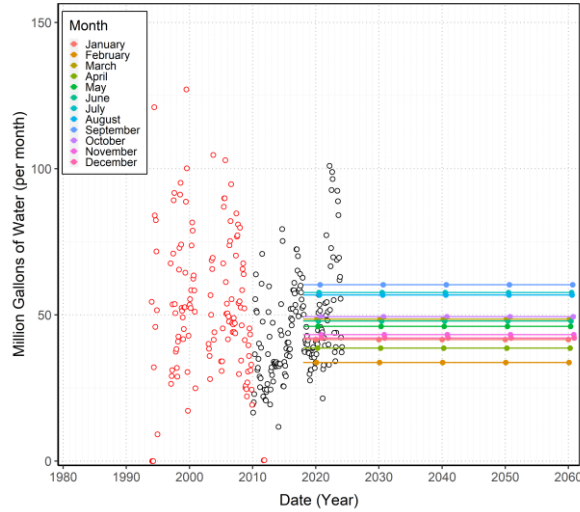


Selected monthly models
L30: Saucon Valley Country Club(D-1967-022 -3)
SAUCON CREEK INTAKE 1

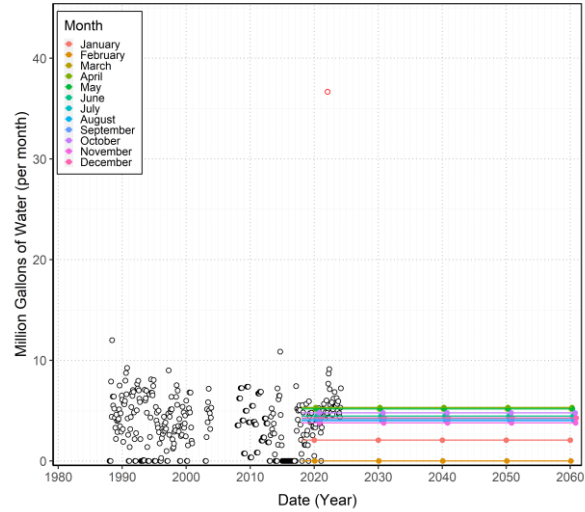




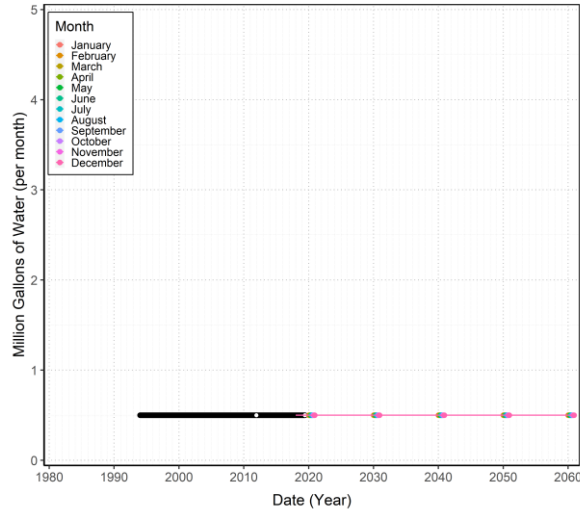
Selected monthly models
R03: Aqua PA - Main - Main(Multiple (See Comments))
CHESTER CREEK (Media Plant)



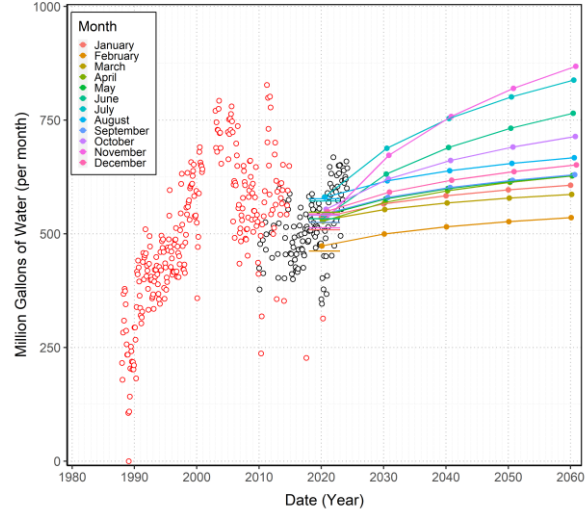
Selected monthly models
R08: HANSON AGGREGATES INC(ENT-185)
CHESTER CREEK DIV

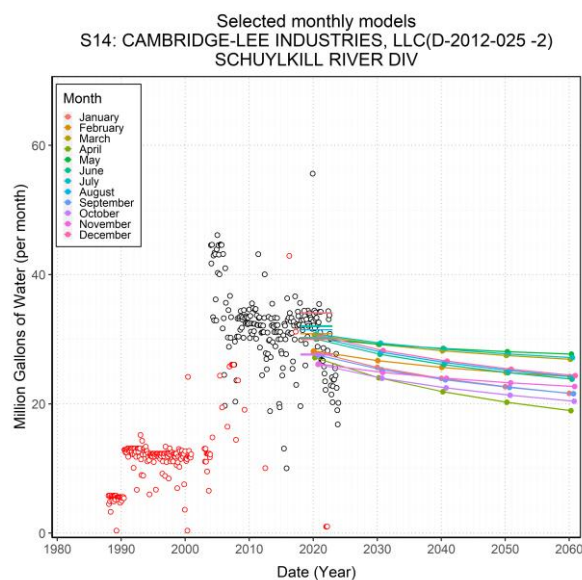
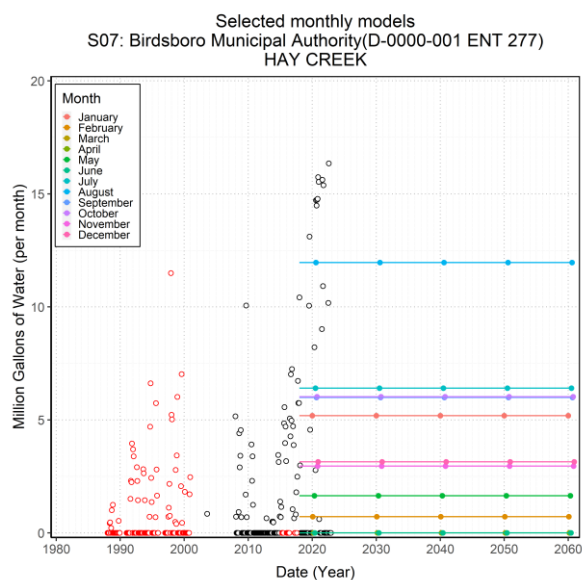
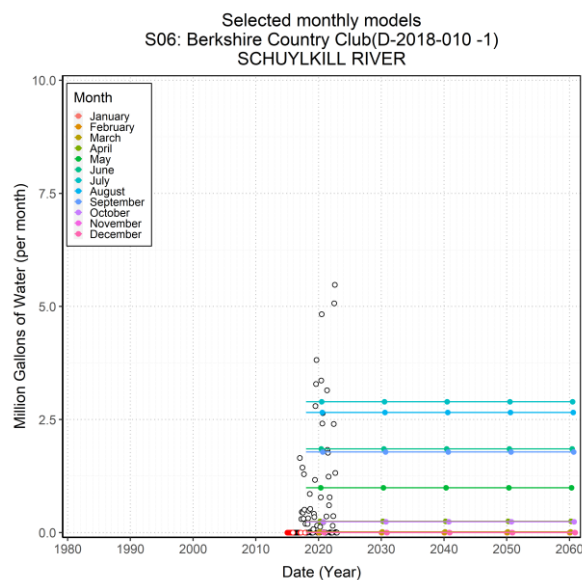
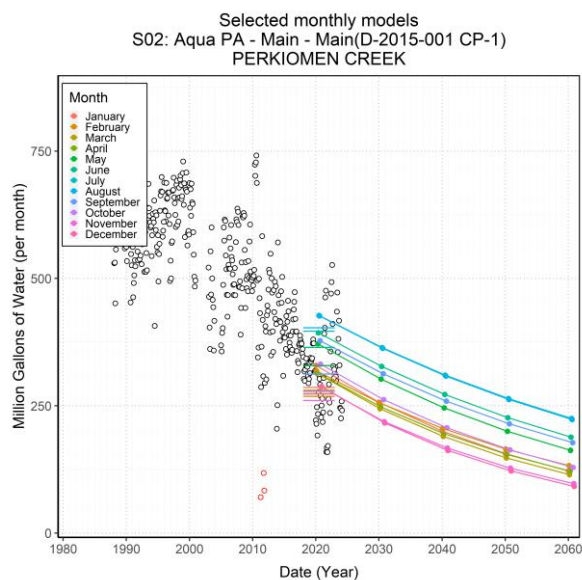


Selected monthly models
R09: Westlake Plastics Company(ENT-271)
CHESTER CREEK

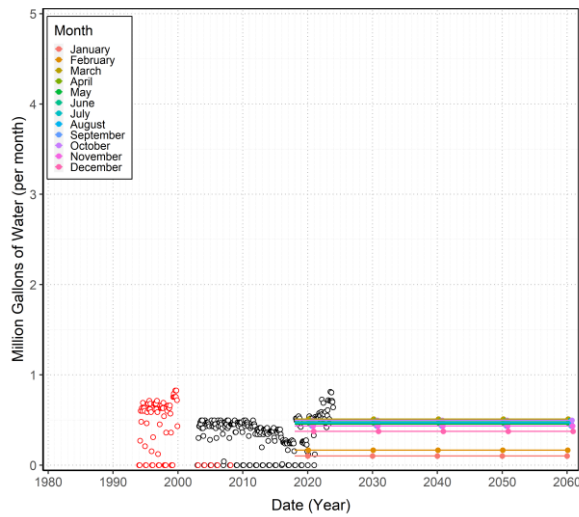


Selected monthly models
S01: Aqua PA - Main - Main(Multiple (See Comments))
SCHUYLKILL RIVER

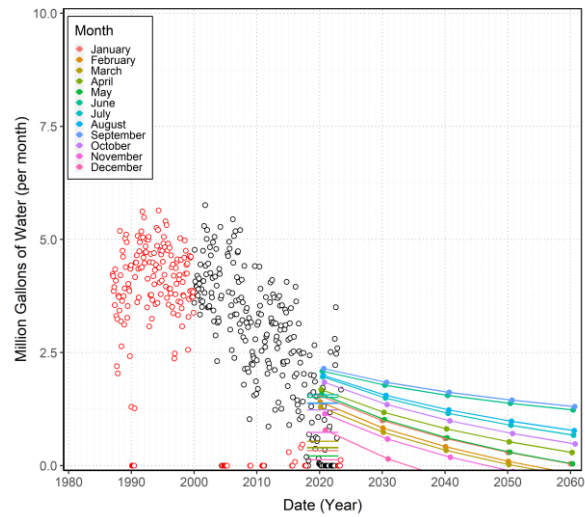




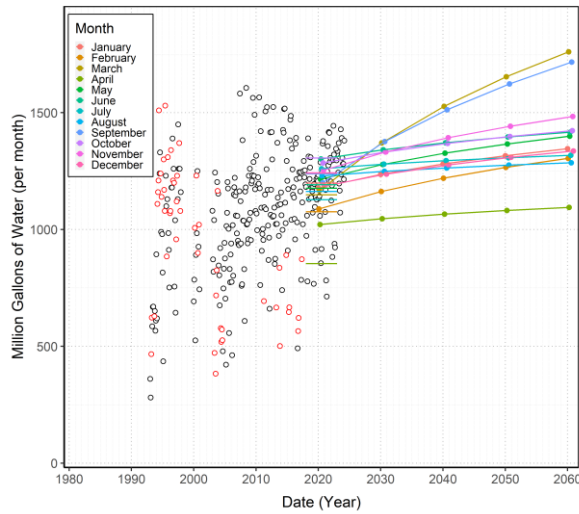
Selected monthly models
S16: Dyer Quarry, Inc.(NA)
INDIAN CORN CREEK



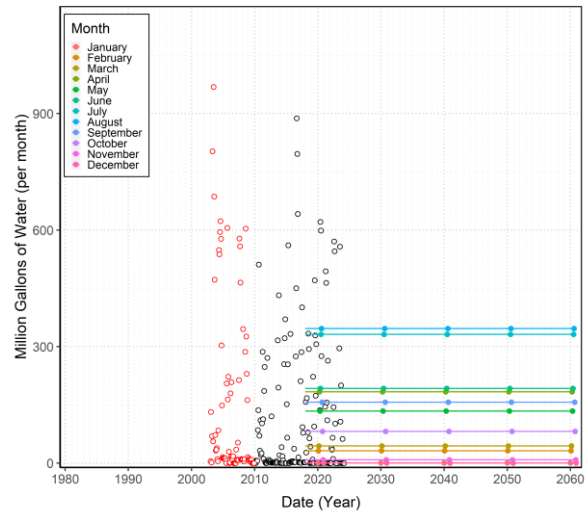
Selected monthly models
S17: East Greenville Borough(D-2004-003 CP-3)
PERKIOMEN CREEK

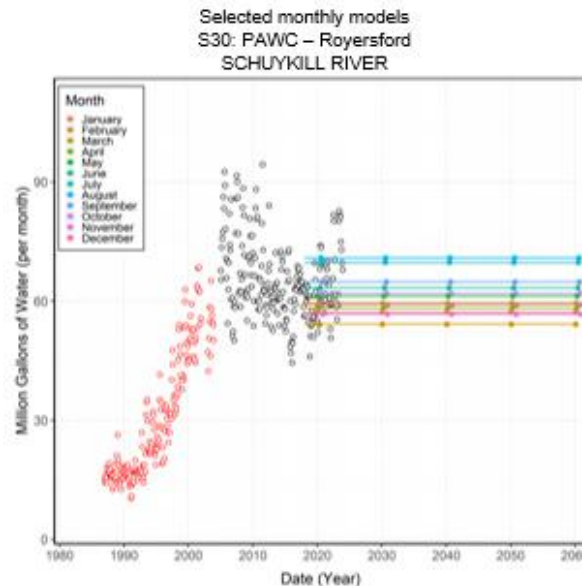
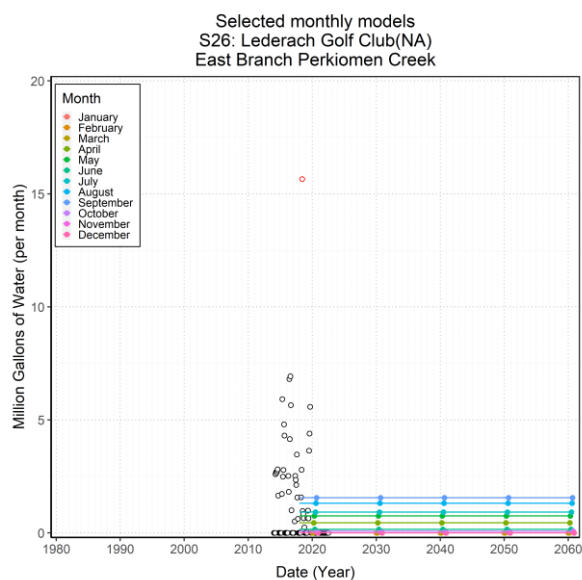
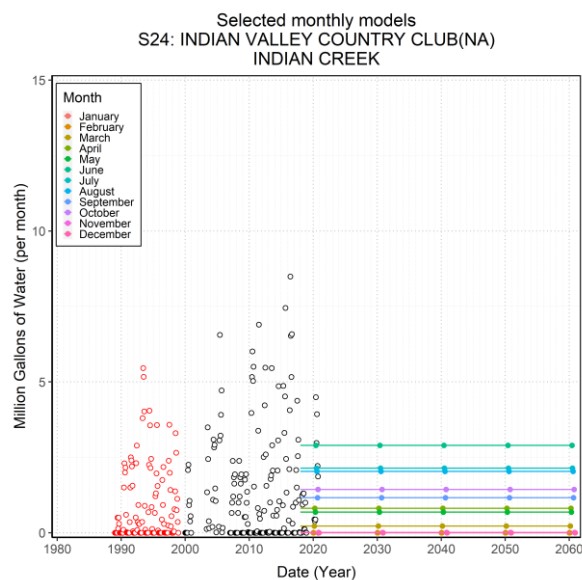
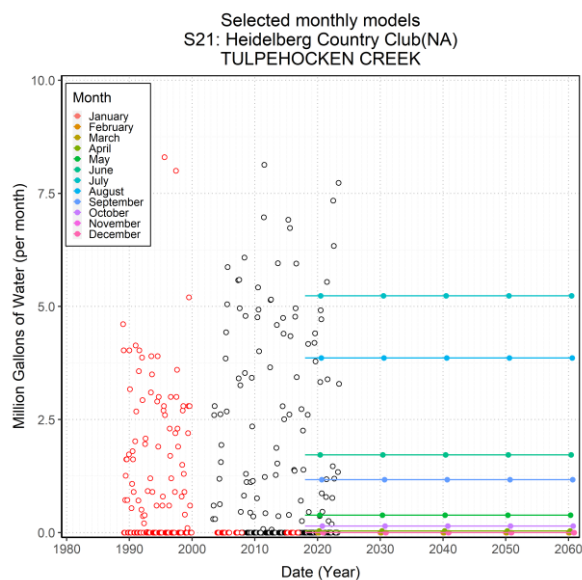


Selected monthly models
S18: Exelon - Limerick Generating Station(D-1969-210 CP-15)
SCHUYLKILL

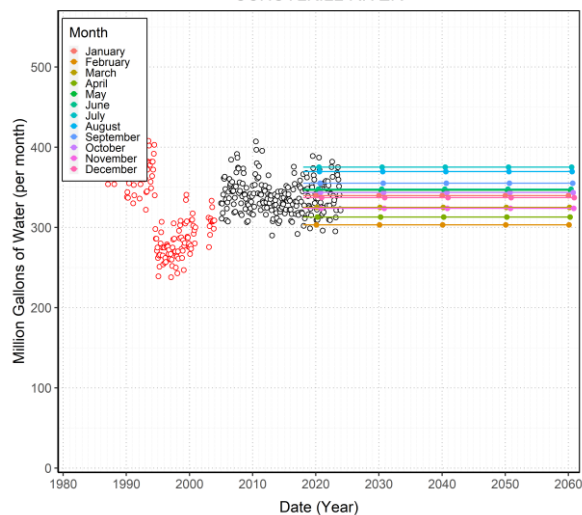


Selected monthly models
S19: Exelon - Limerick Generating Station(D-1969-210 CP-15)
PERKIOMEN CREEK

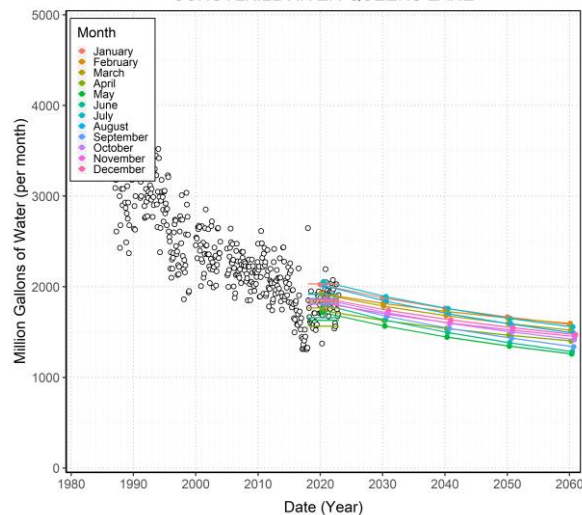




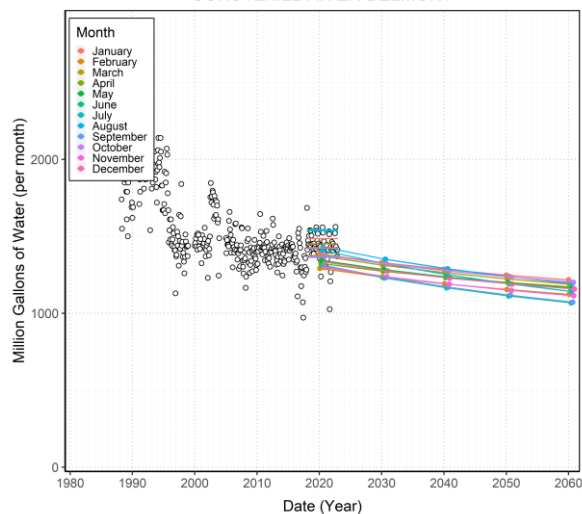
Selected monthly models
S31: Pennsylvania American Water Company - Norristown(D-1966-100 Cf
SCHUYLKILL RIVER



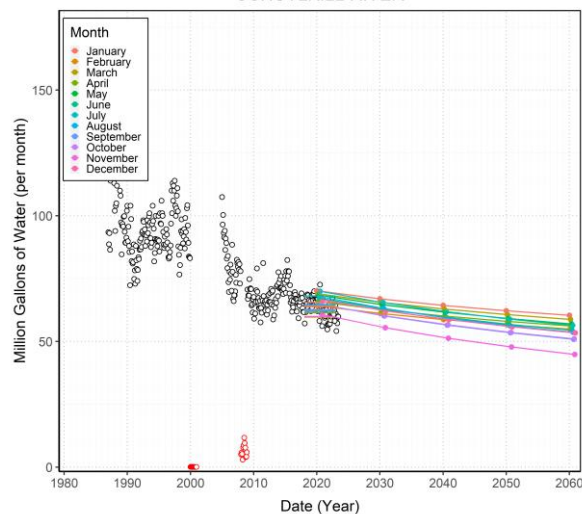
Selected monthly models
S33: Philadelphia Water Department(D-0000-002 ENT PHL)
SCHUYLKILL RIVER-QUEENS LANE



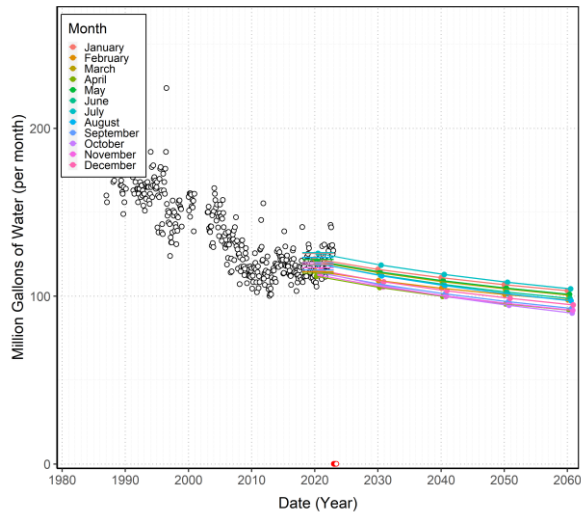
Selected monthly models
S34: Philadelphia Water Department(D-0000-002 ENT PHL)
SCHUYLKILL RIVER-BELMONT



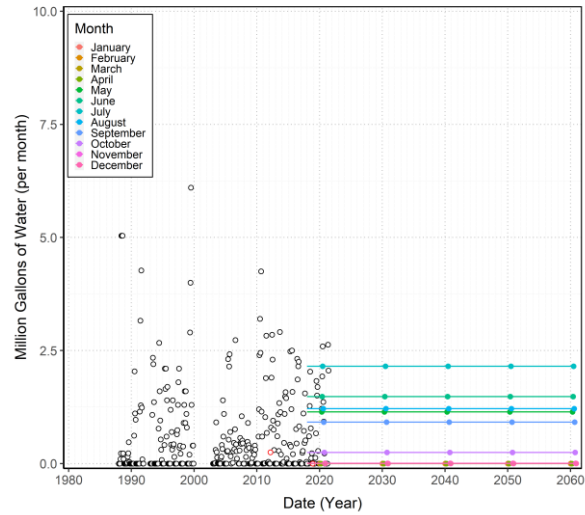
Selected monthly models
S35: Phoenixville Borough [DO NOT USE](D-1967-123 CP-3)
SCHUYLKILL RIVER



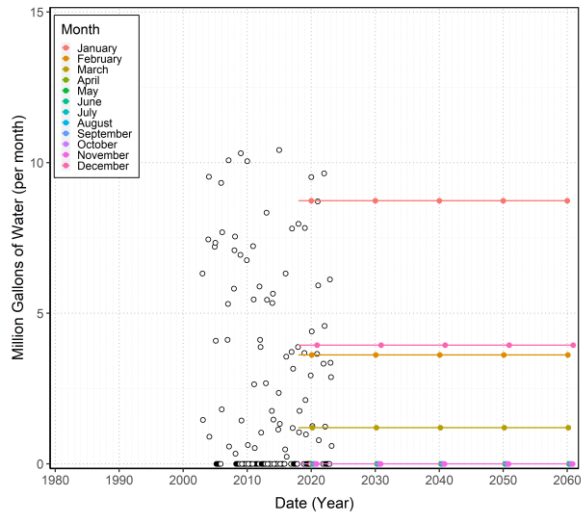
Selected monthly models
S36: Pottstown Borough(D-1964-036 CP-2)
SCHUYLKILL RIVER



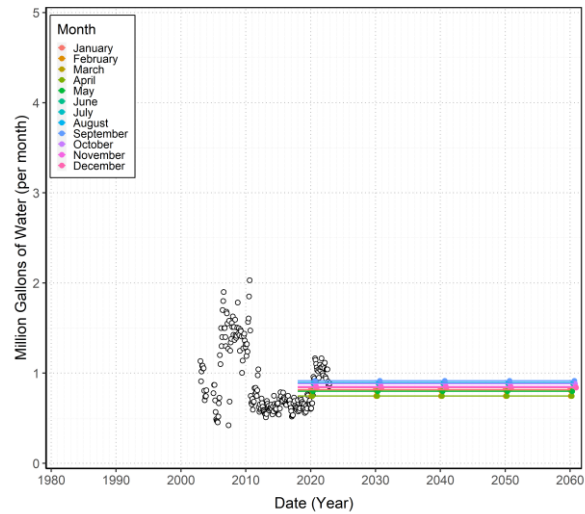
Selected monthly models
S39: Reading Country Club(NA)
ANTIETAM CREEK



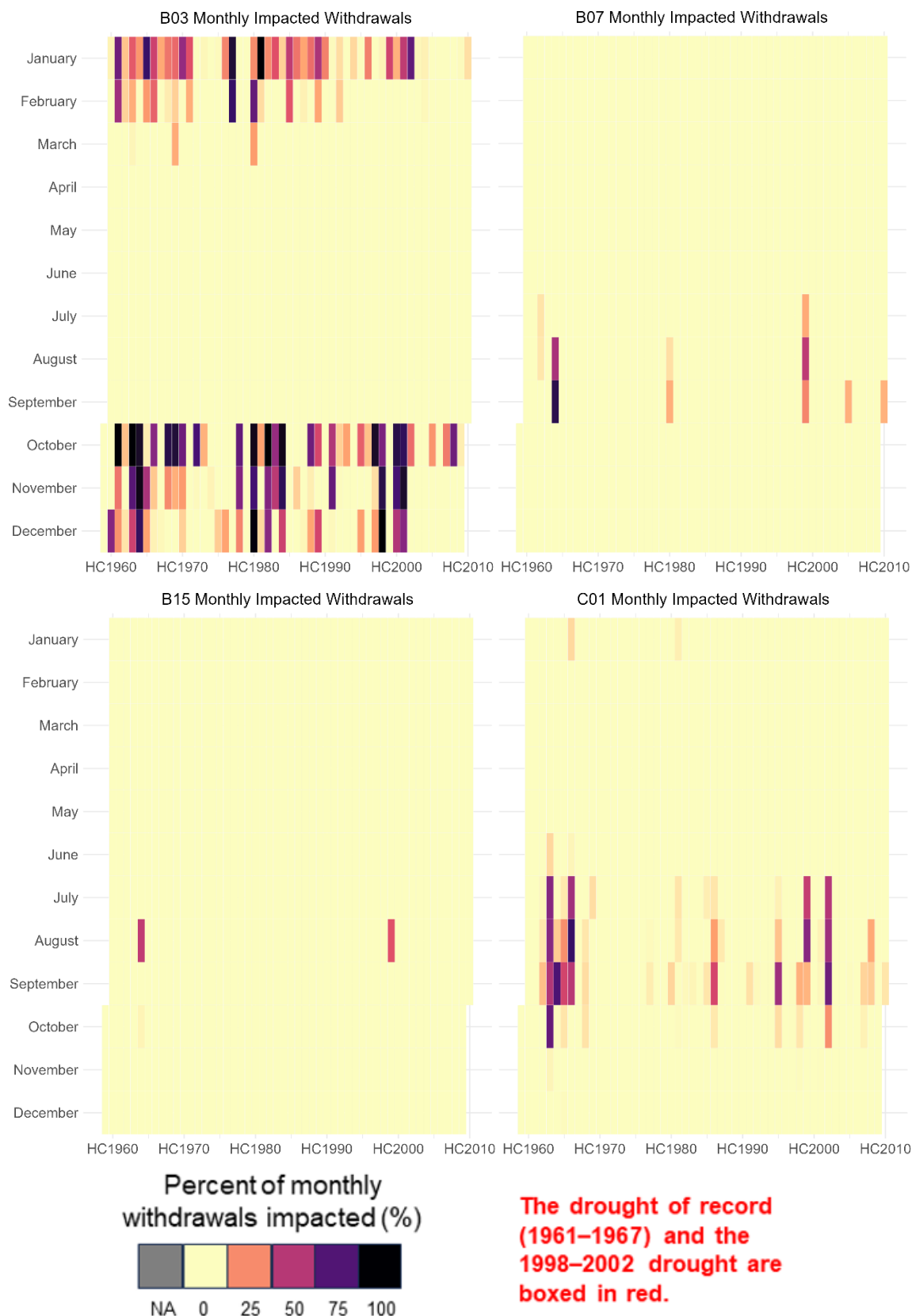
Selected monthly models
S47: Spring Mountain Ski Area(NA)
PERKIOMEN CREEK

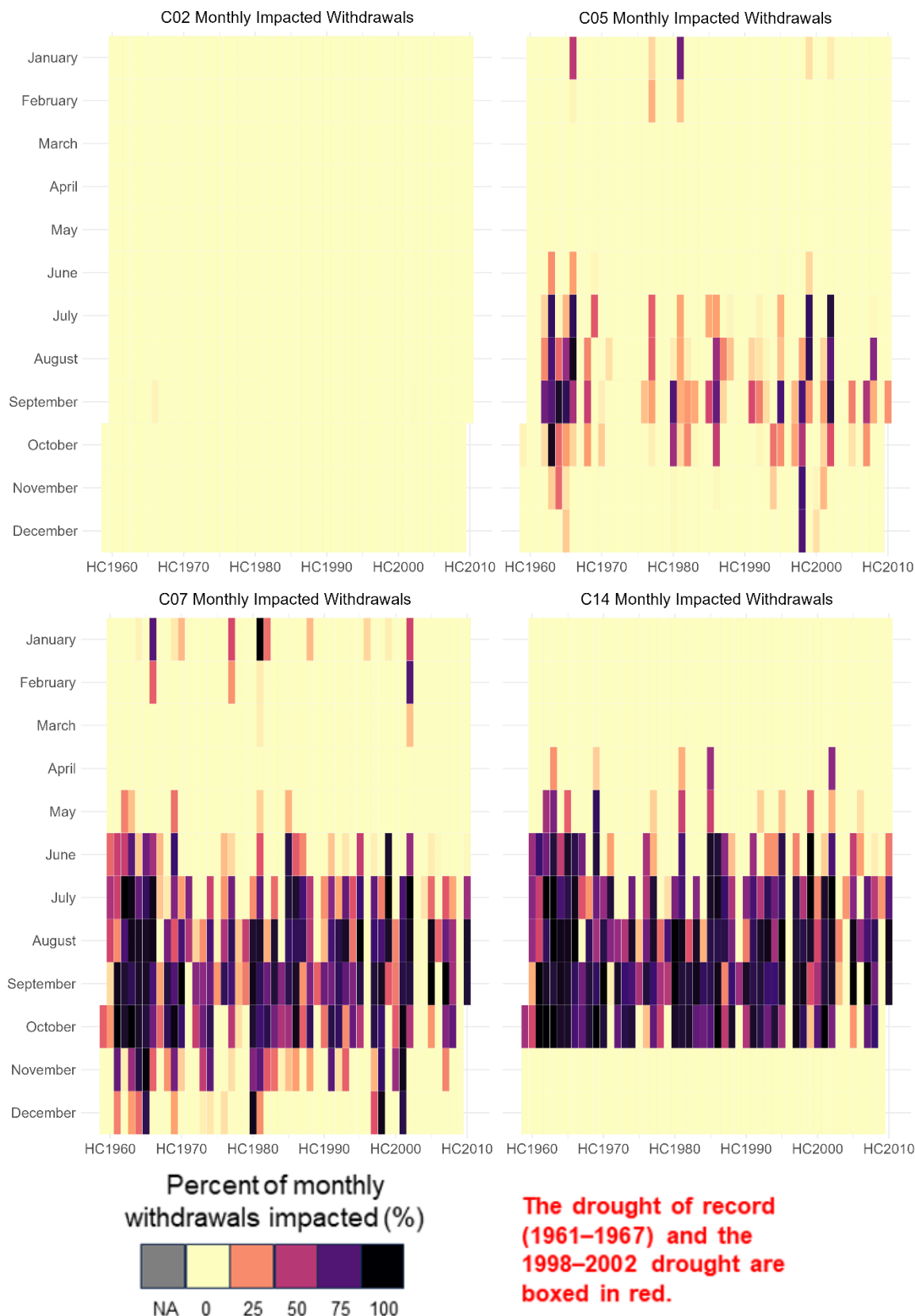


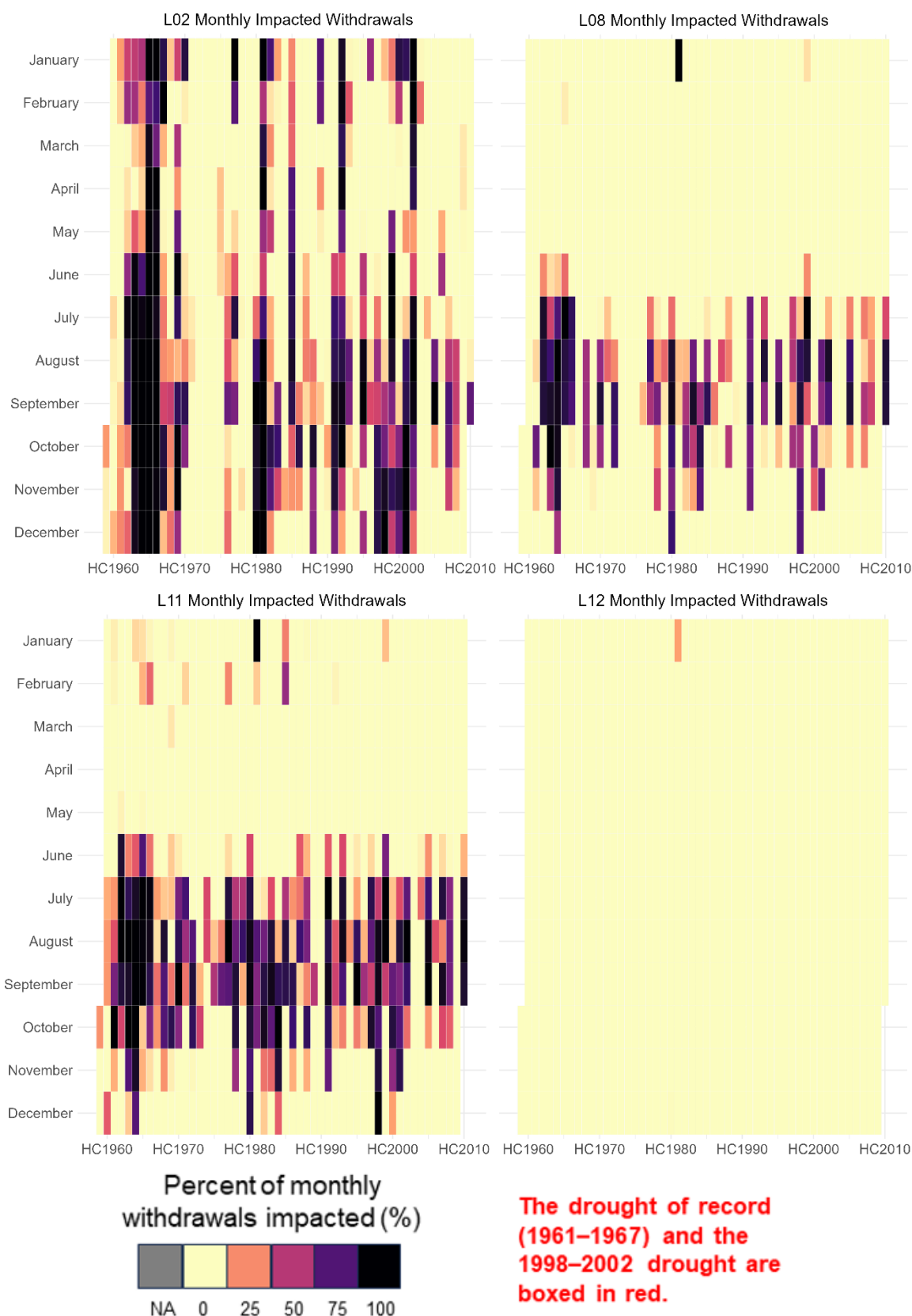
Selected monthly models
S59: MARY D COMM ASSN(NA)
SWIFT CREEK DIVERSION 1

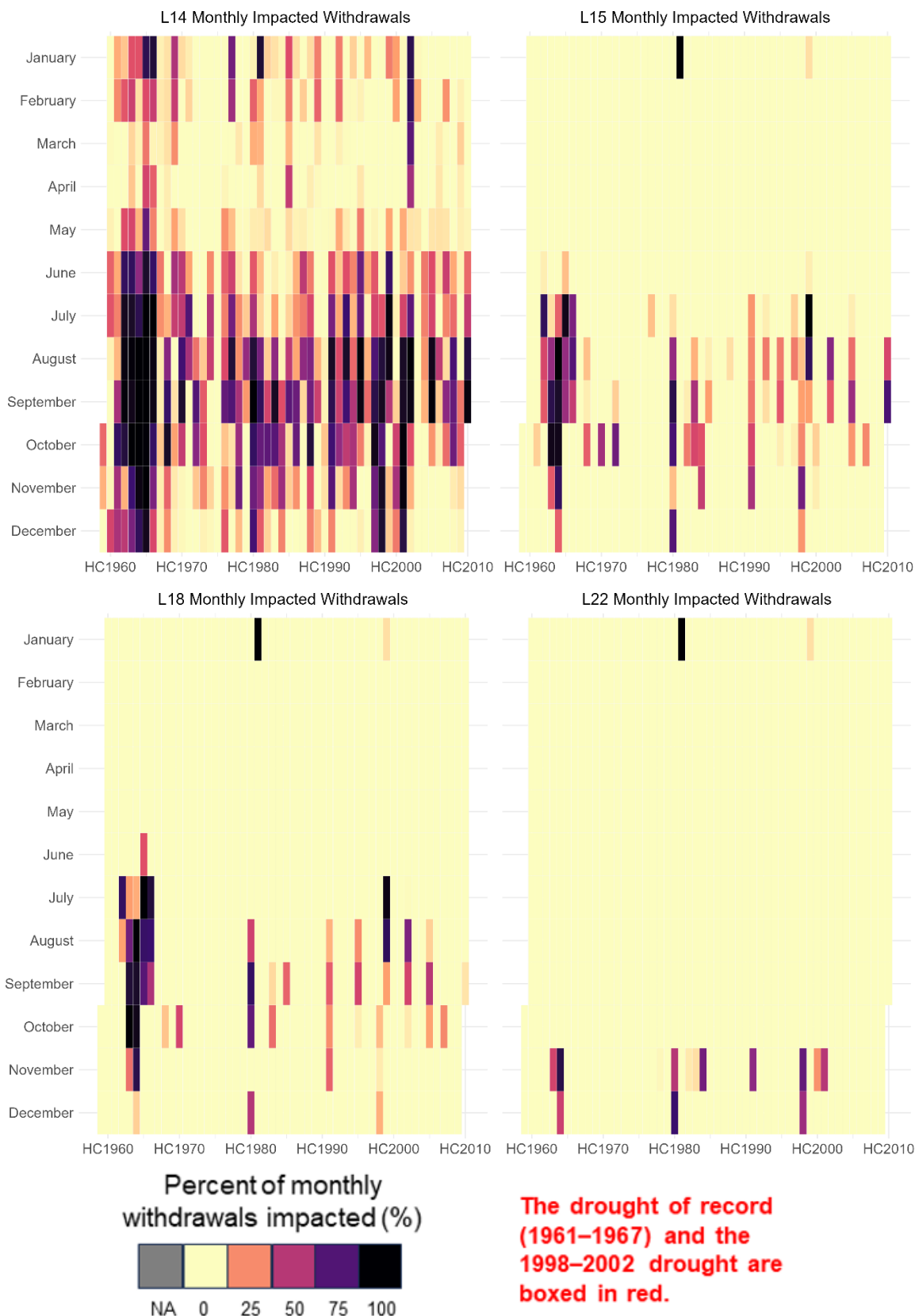


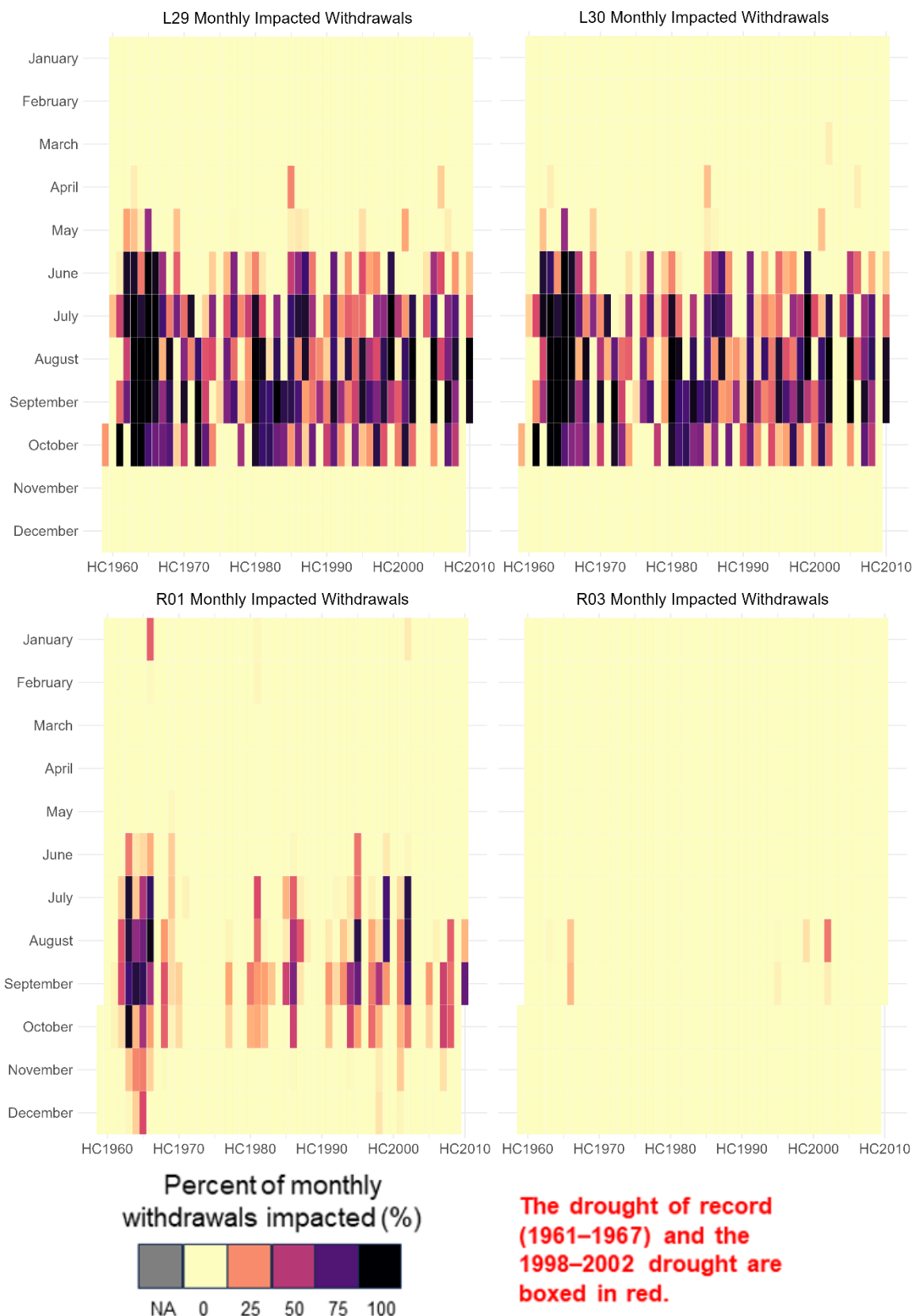
APPENDIX D. IMPACTED WITHDRAWAL RESULTS FOR ALL SW POINTS WITH NON- ZERO RESULTS, BASELINE RUN

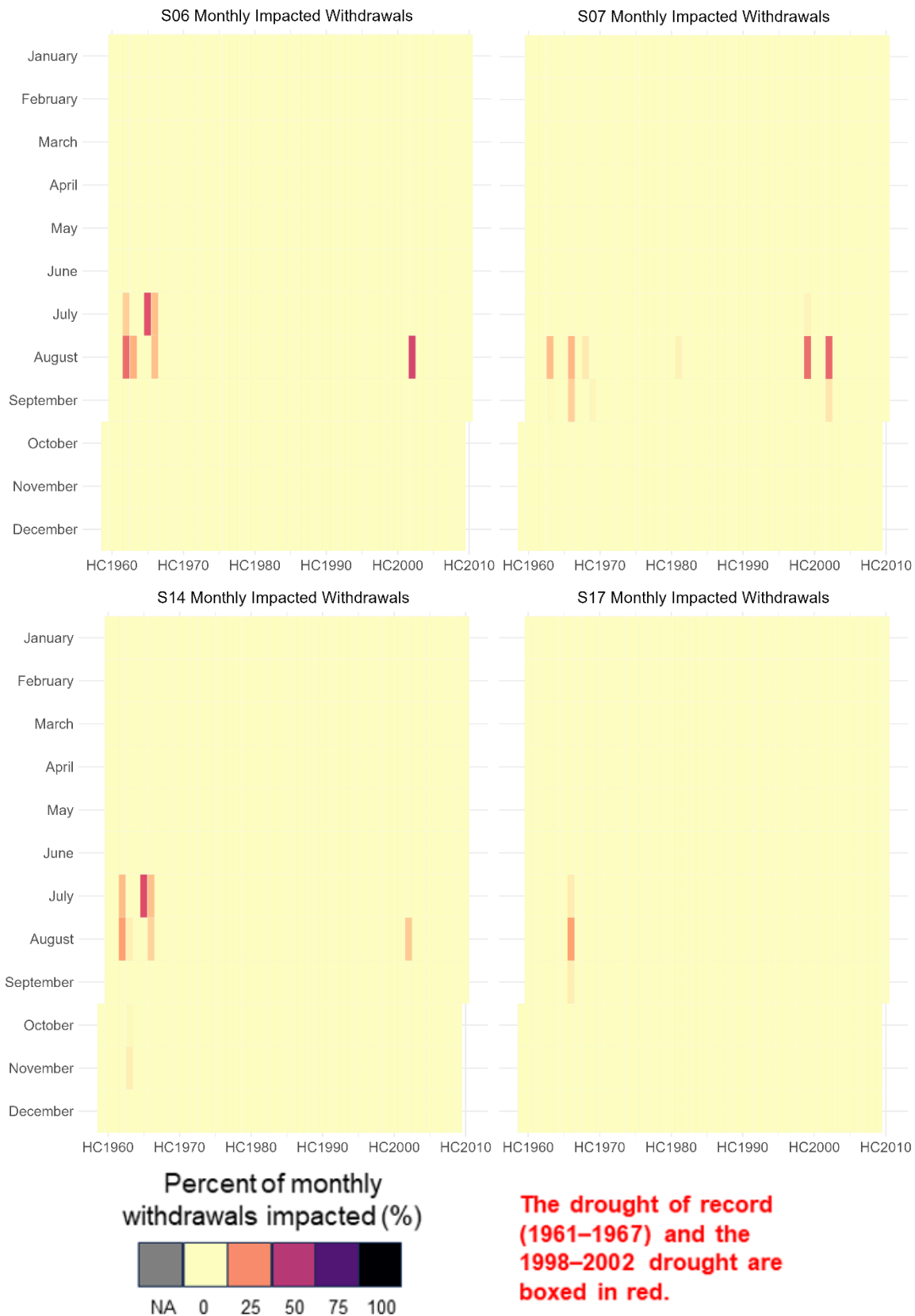


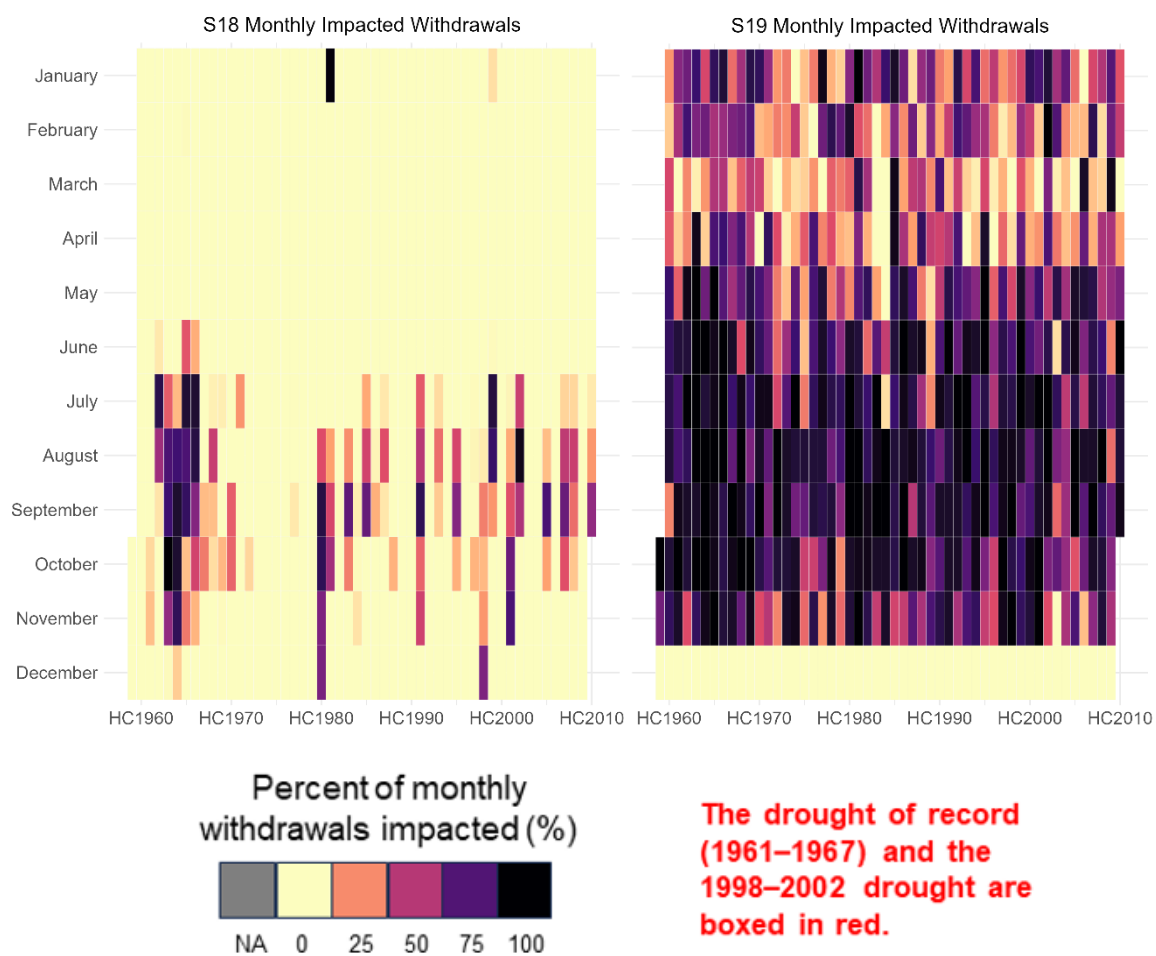




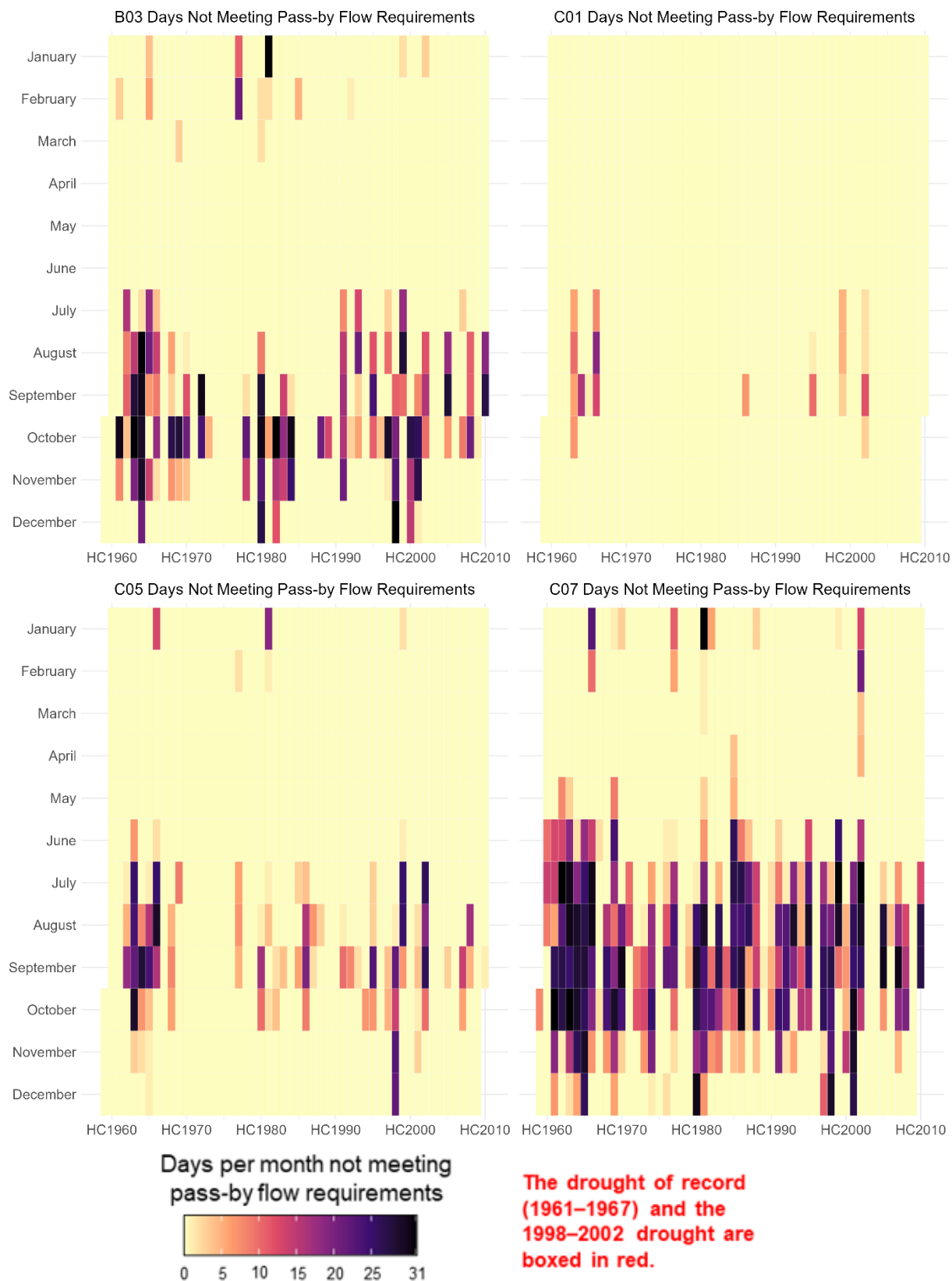


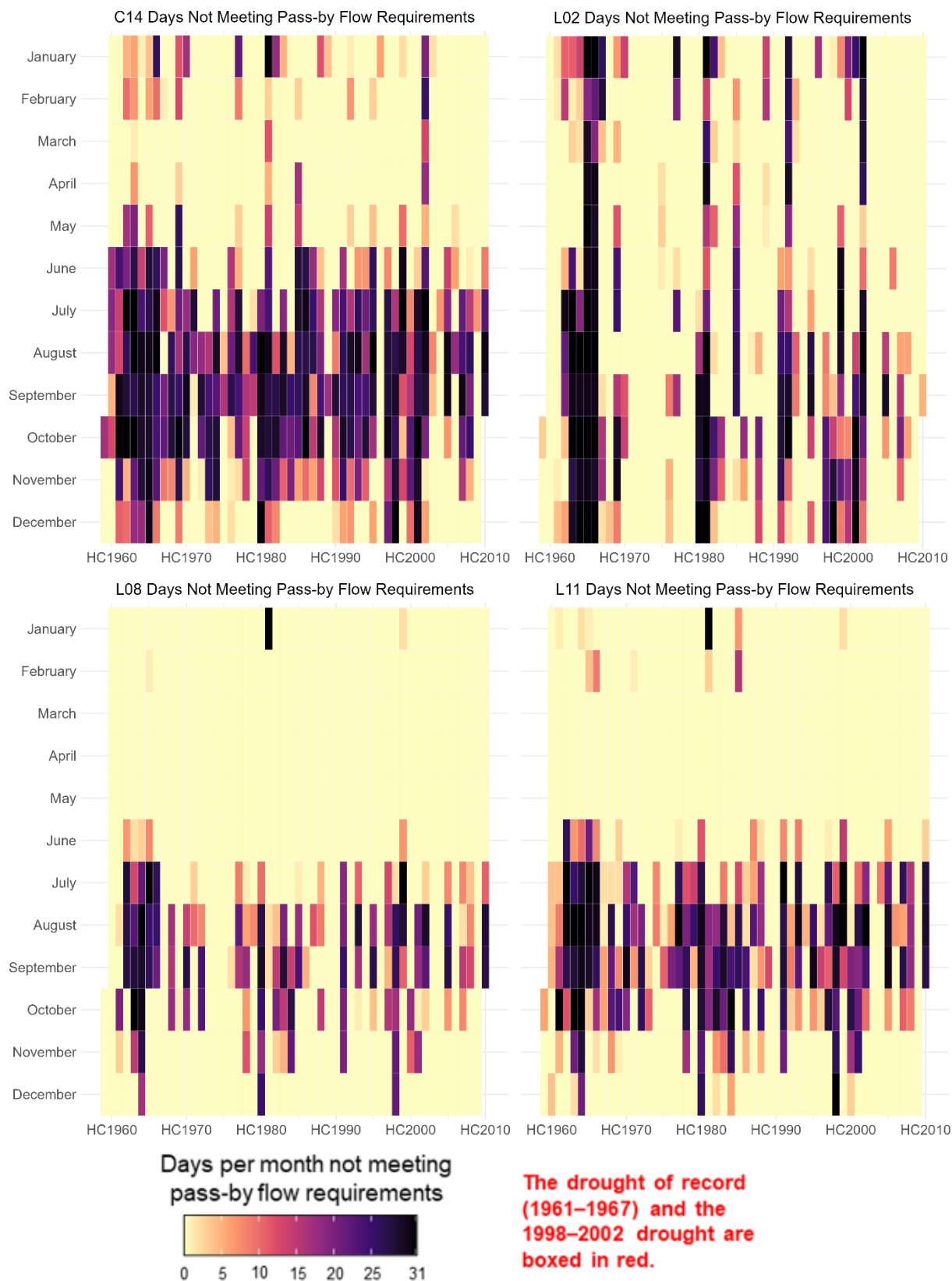


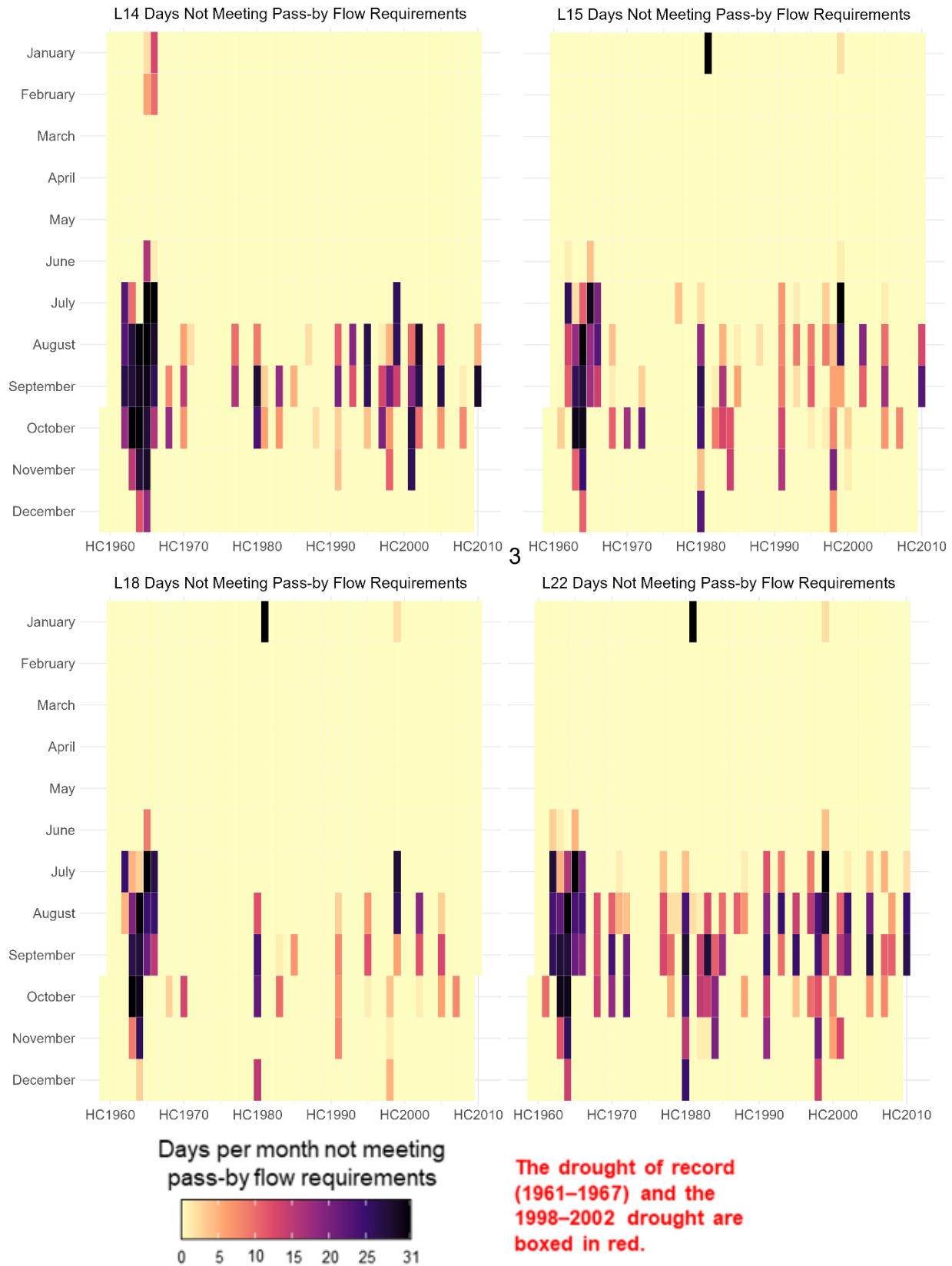


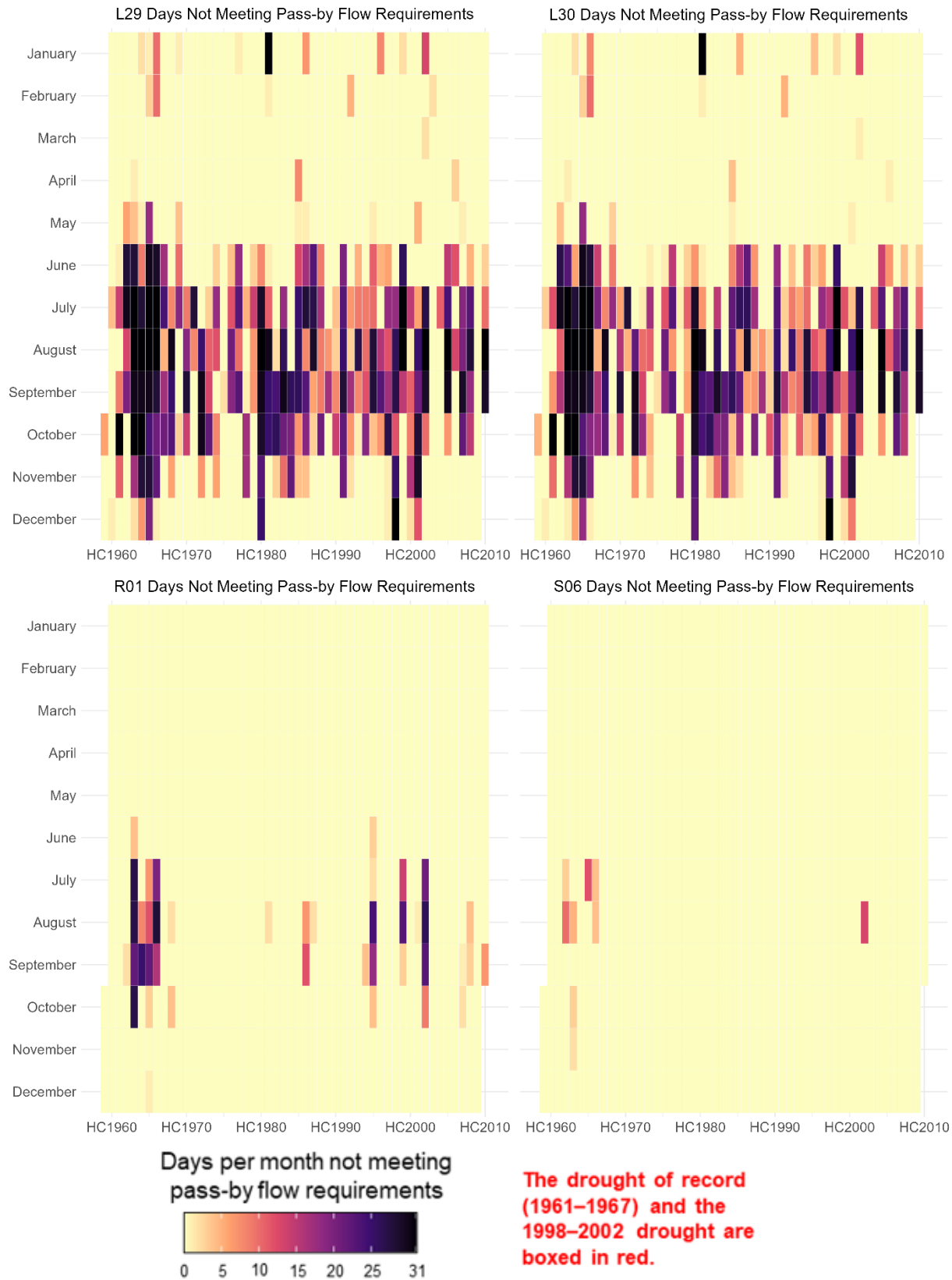


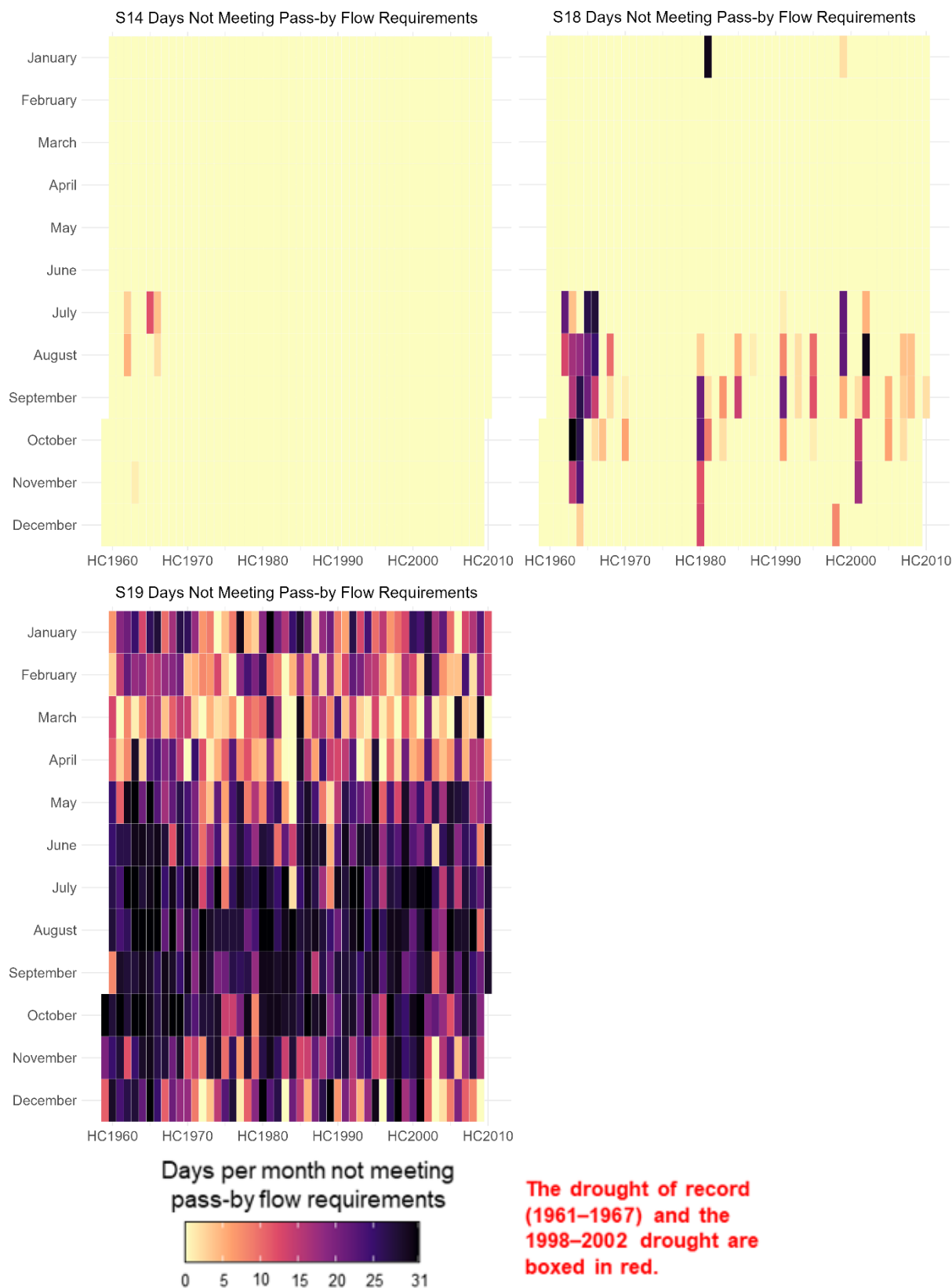
APPENDIX E. PASS-BY FLOW RESULTS FOR ALL SW POINTS WITH PASS-BY FLOW REQUIREMENTS, BASELINE RUN



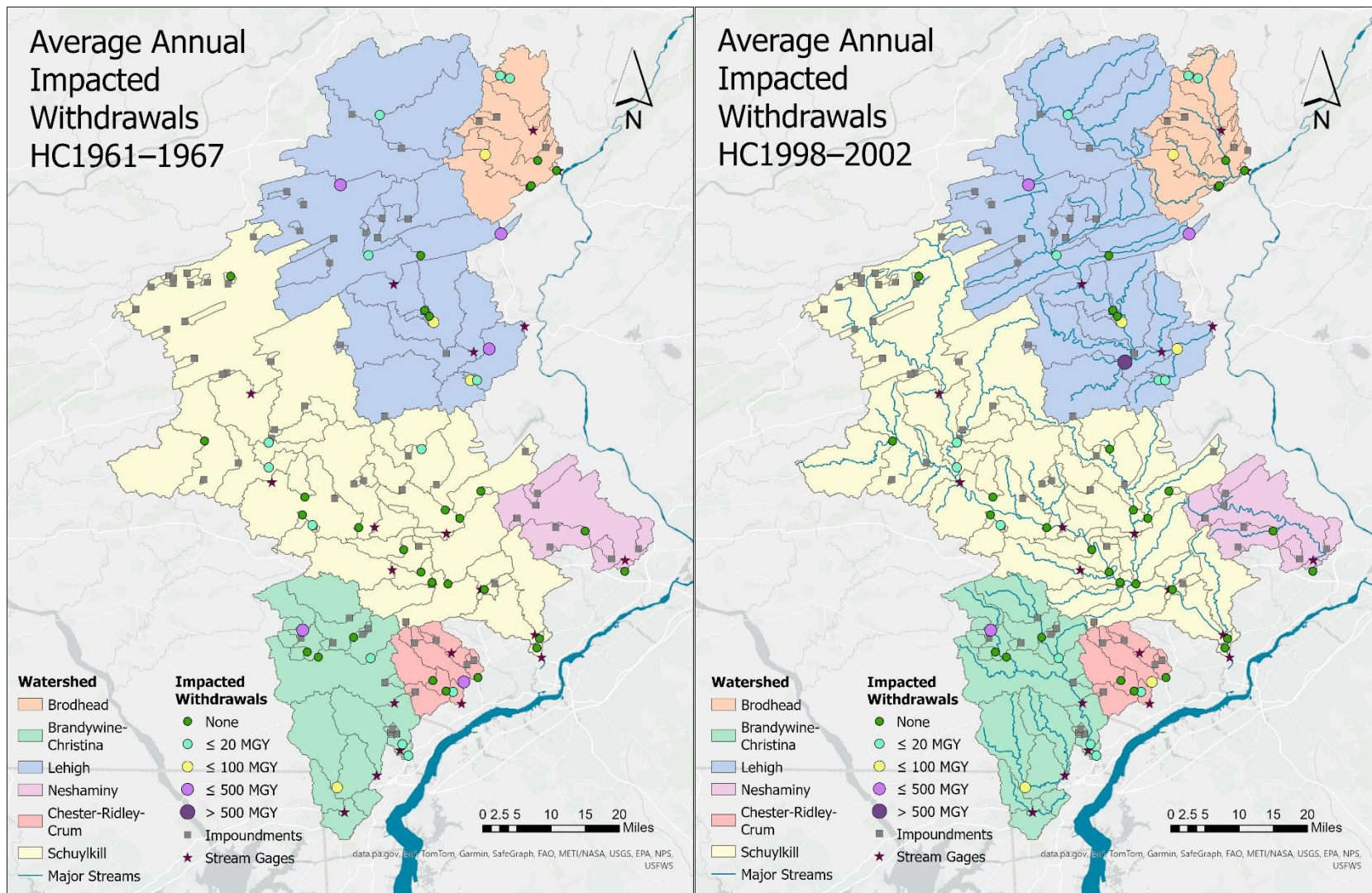




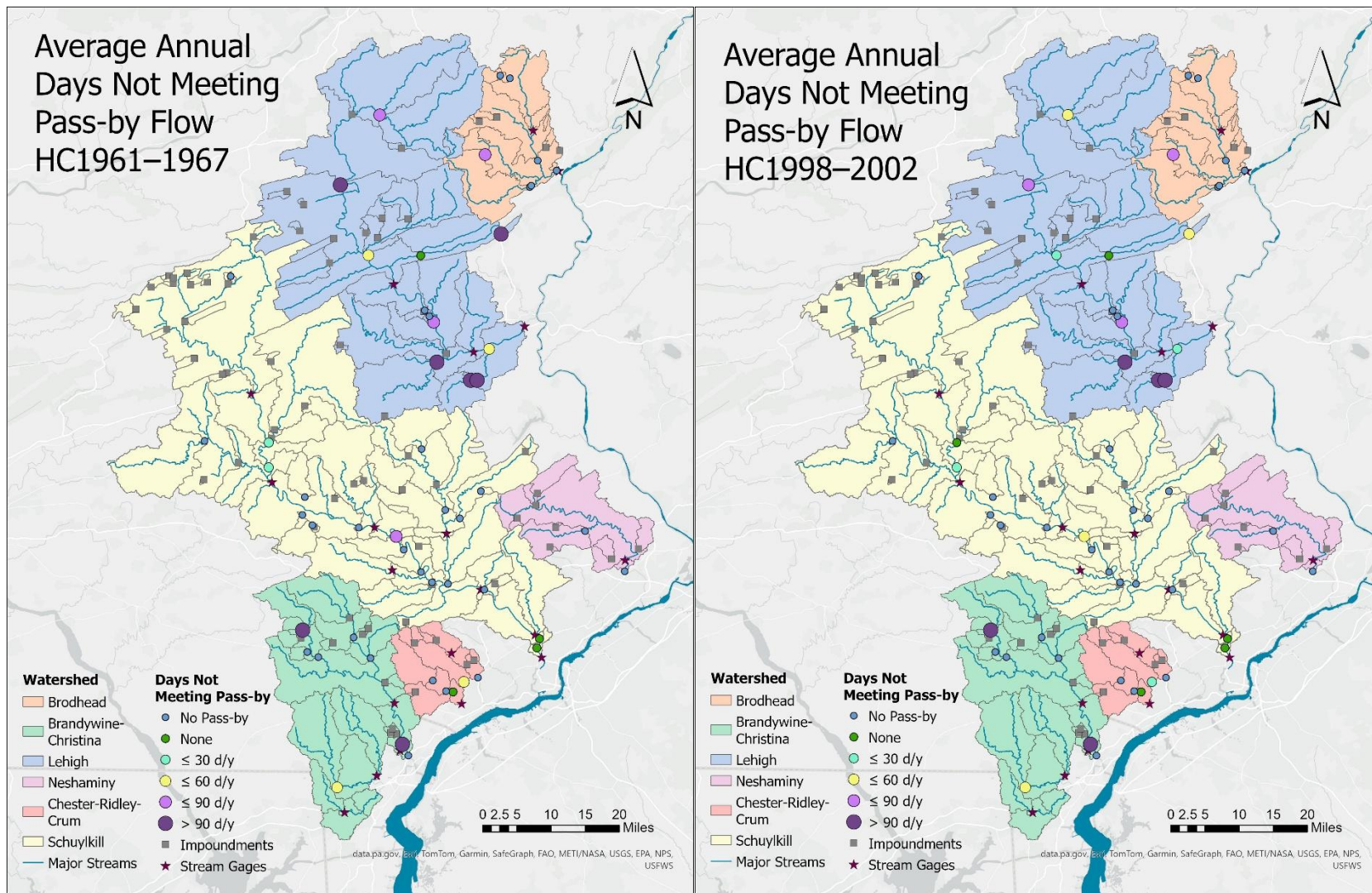




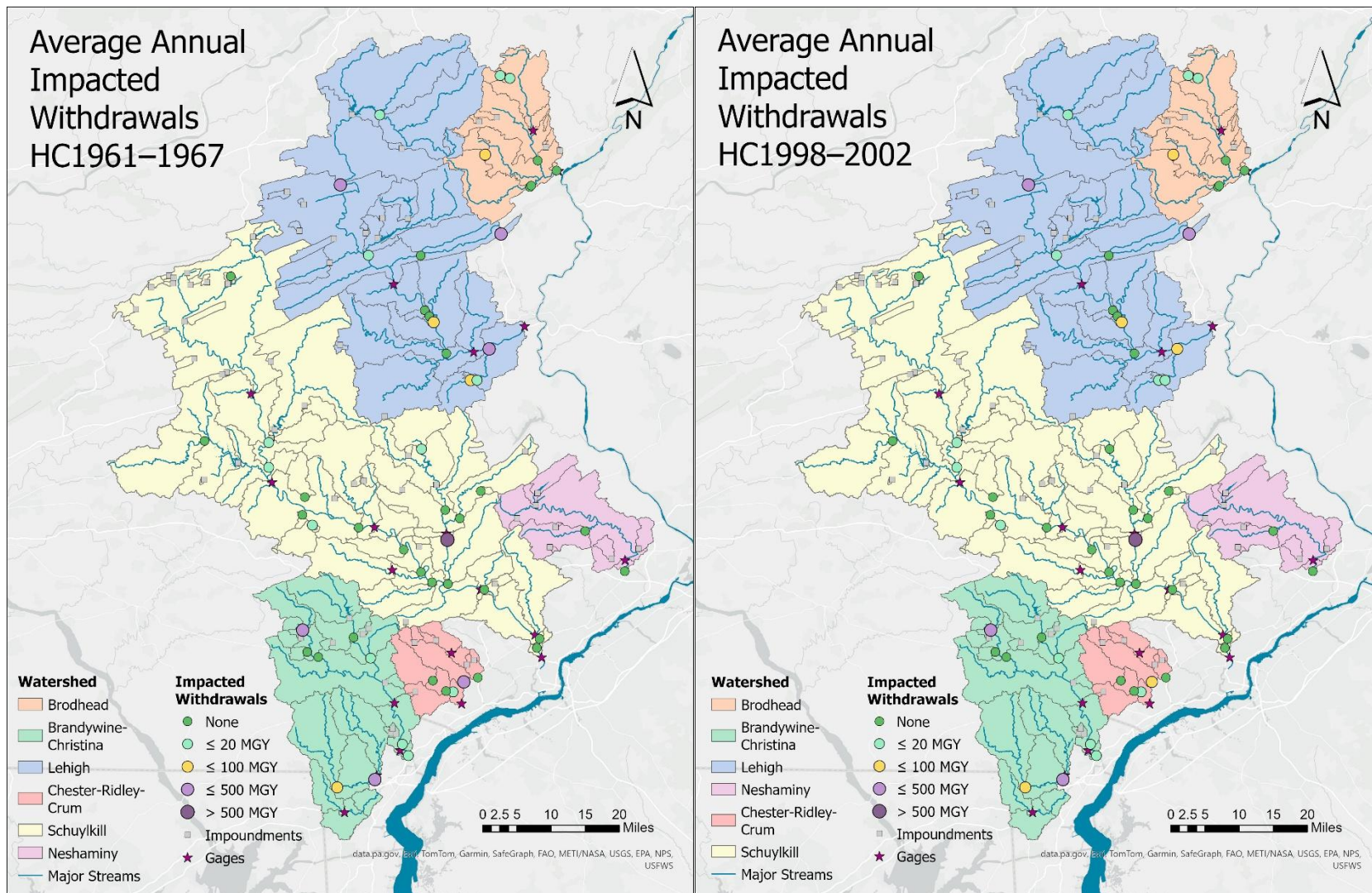
APPENDIX F. RESULTS MAPS FOR ALL SWEET RUNS



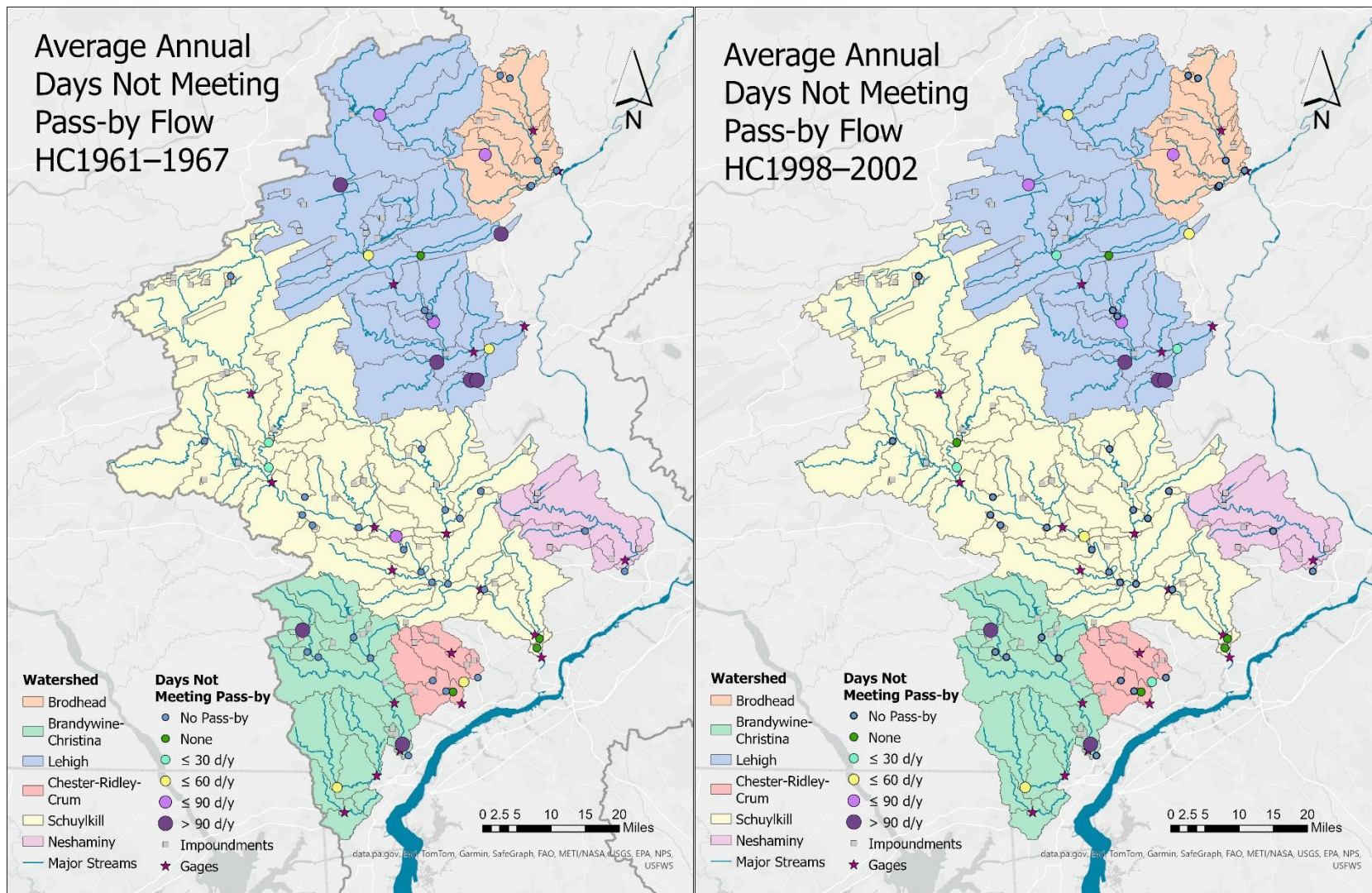
CDER impacted withdrawal, MGY, results mapped for HC1961-1967, left, and HC1998-2002, right.



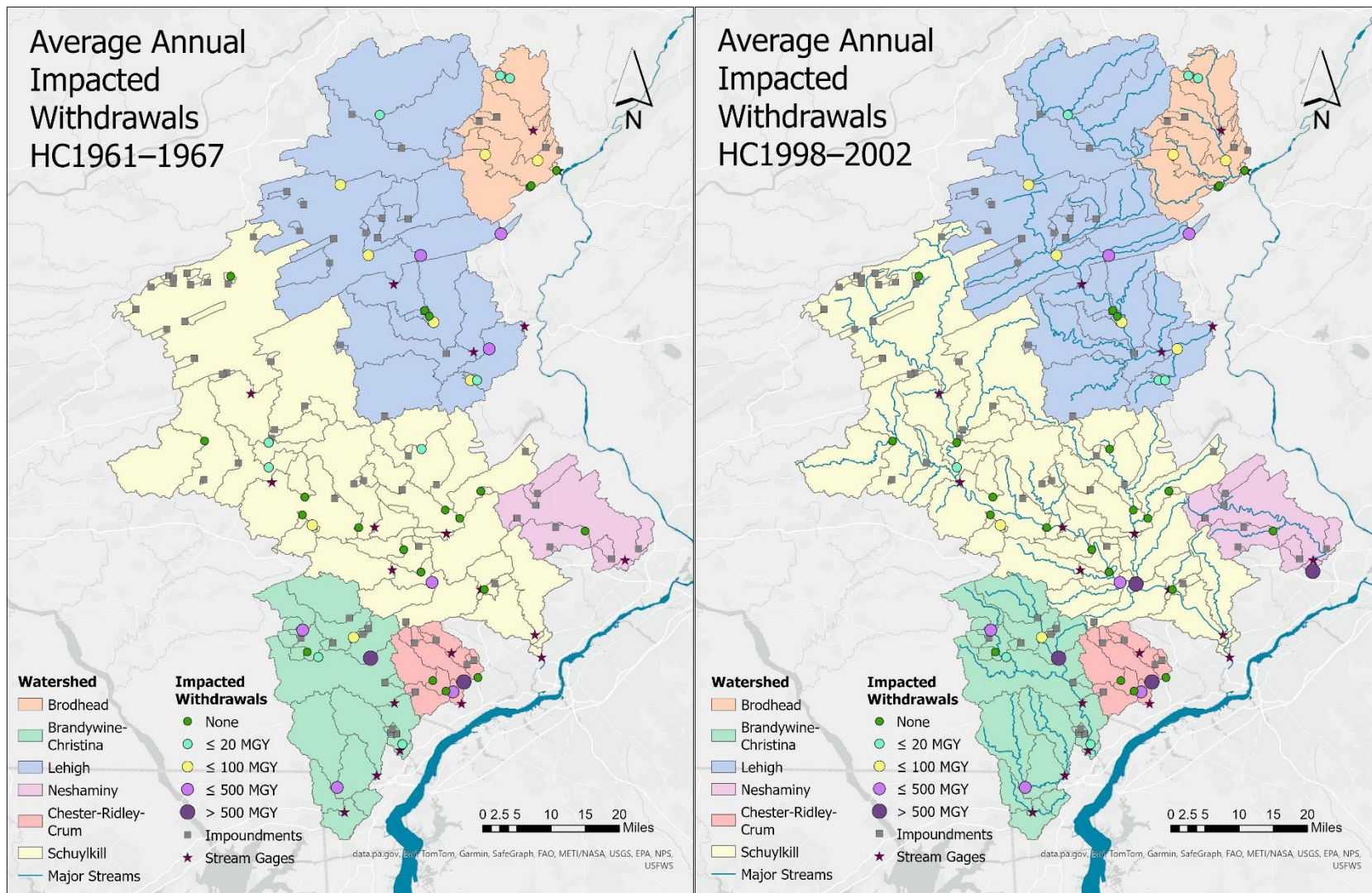
CDER average annual days not meeting pass by flow results mapped for HC1961-1967, left, and HC1998-2002, right.



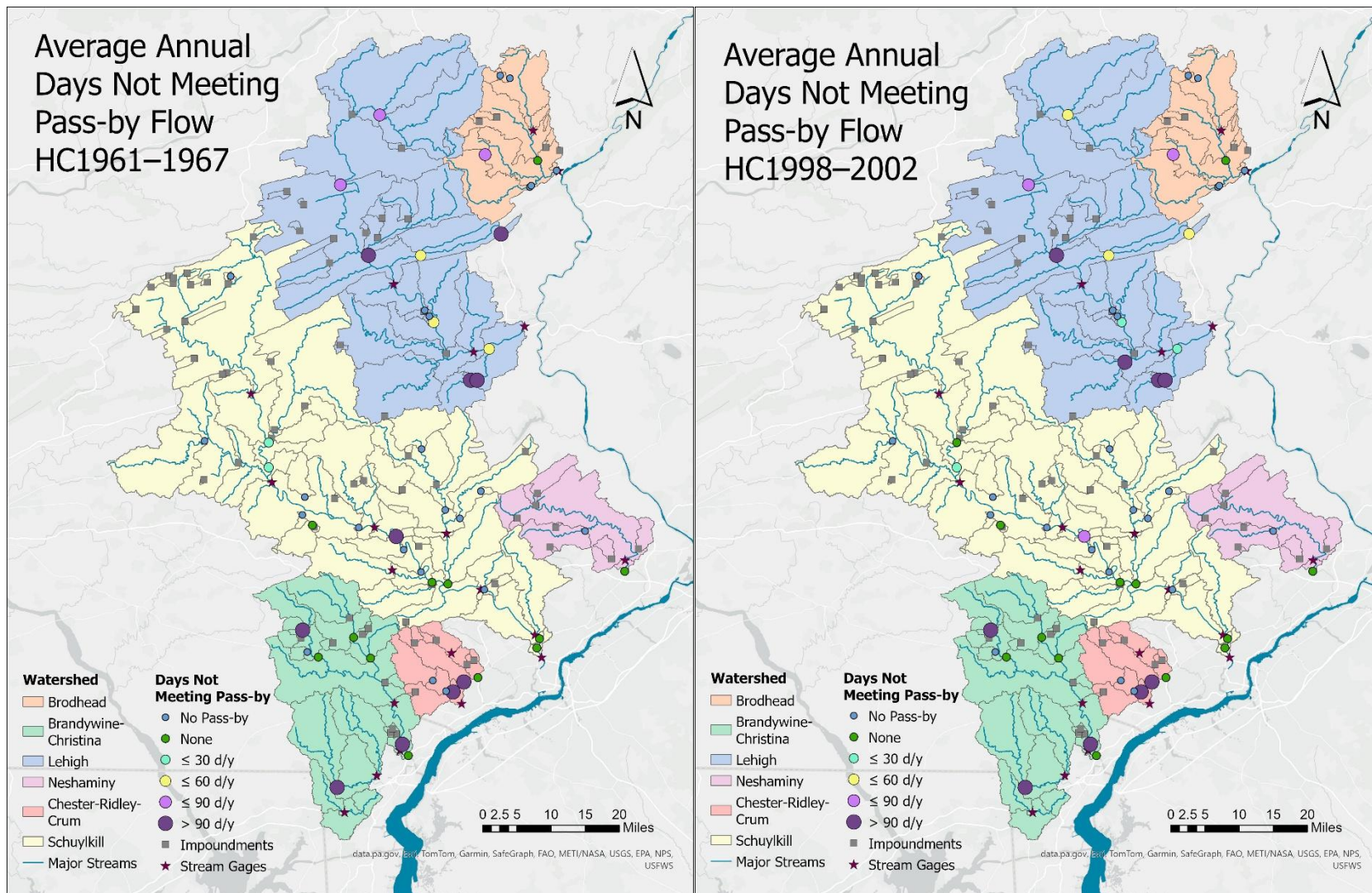
CNER impacted withdrawal, MGY, results mapped for HC1961-1967, left, and HC1998-2002, right.



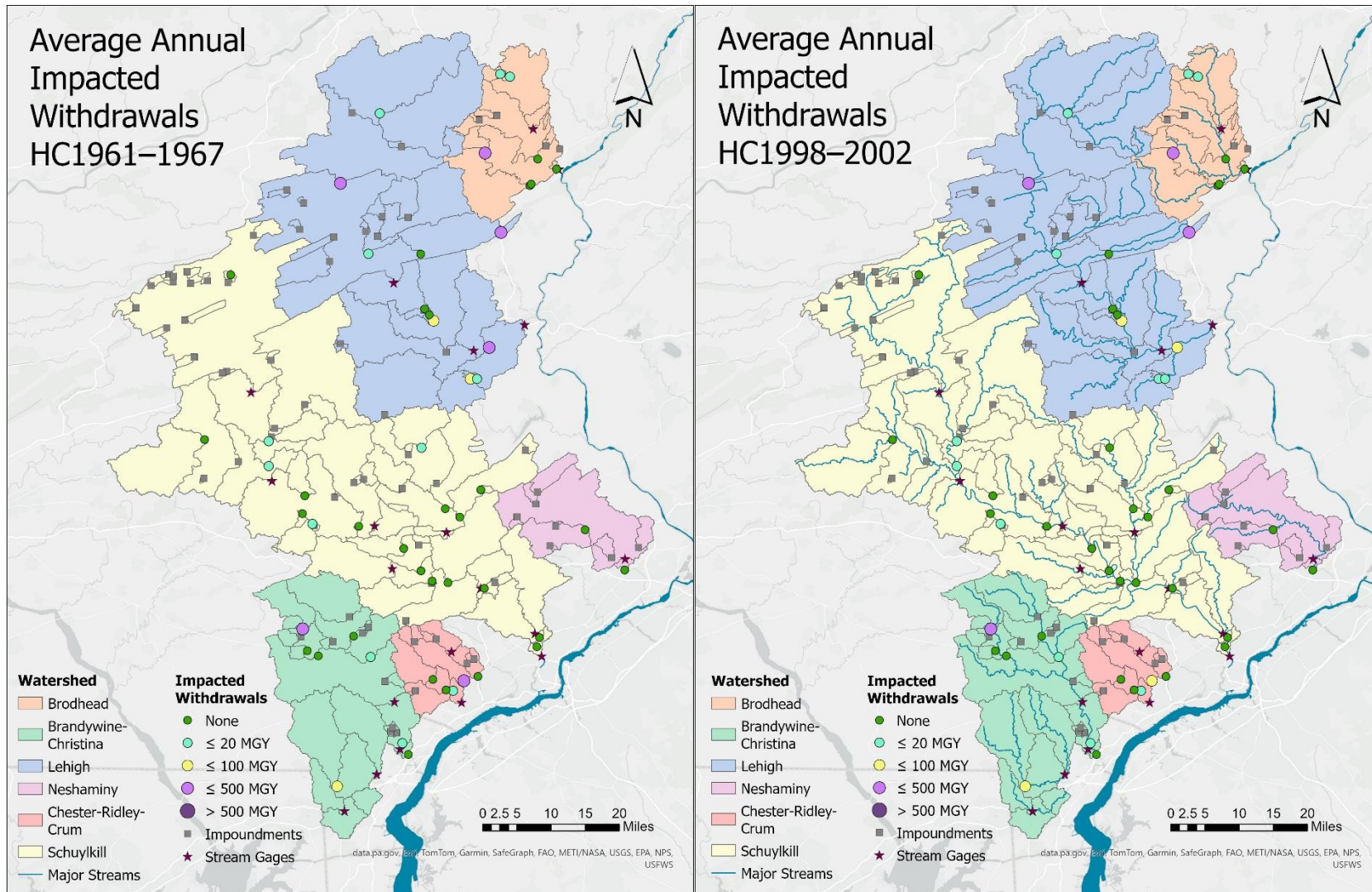
CNER average annual days not meeting pass by flow results mapped for HC1961-1967, left, and HC1998-2002, right.



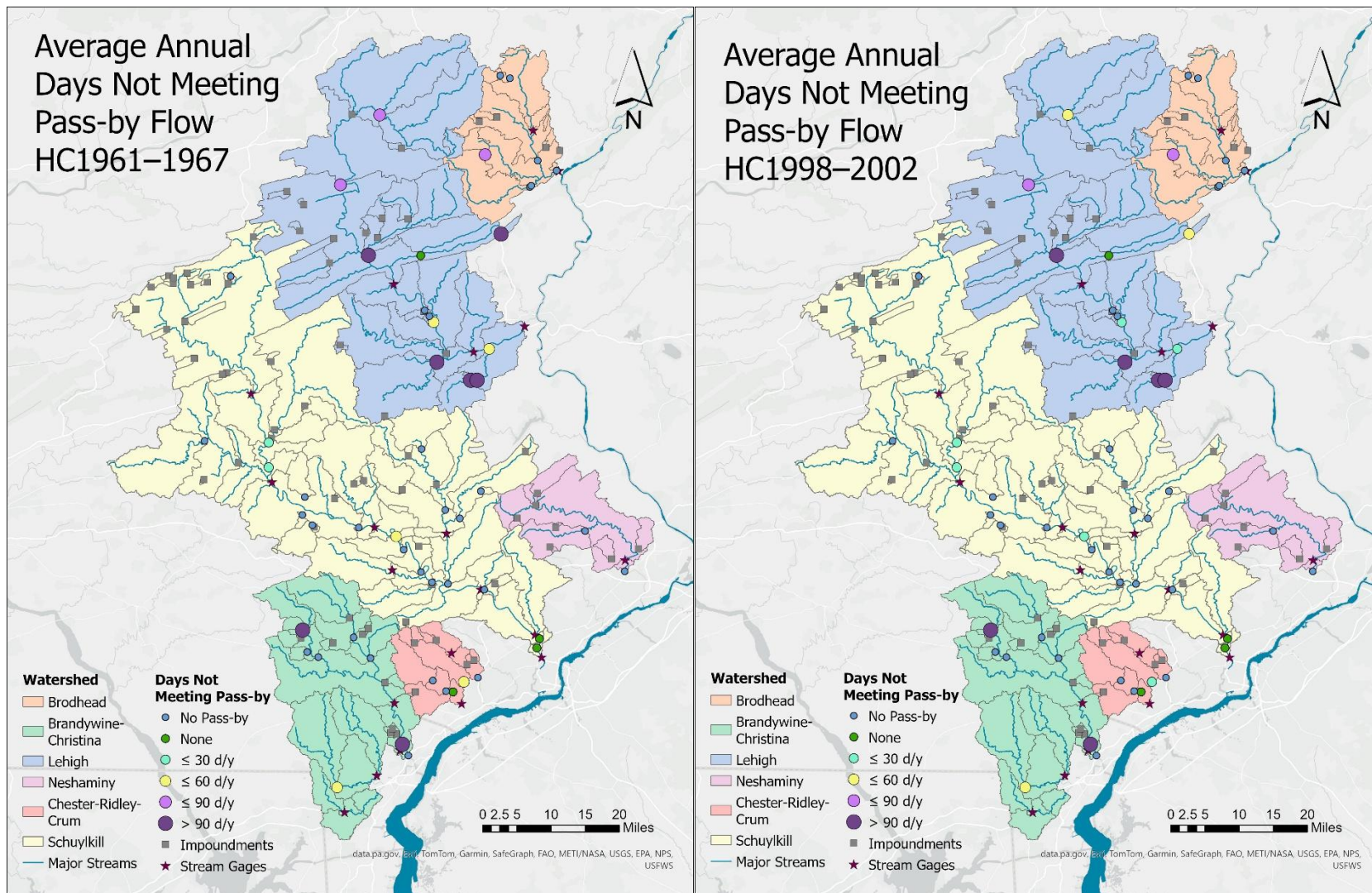
CNMR impacted withdrawal, MGY, results mapped for HC1961-1967, left, and HC1998-2002, right.



CNMR average annual days not meeting pass by flow results mapped for HC1961-1967, left, and HC1998-2002, right.

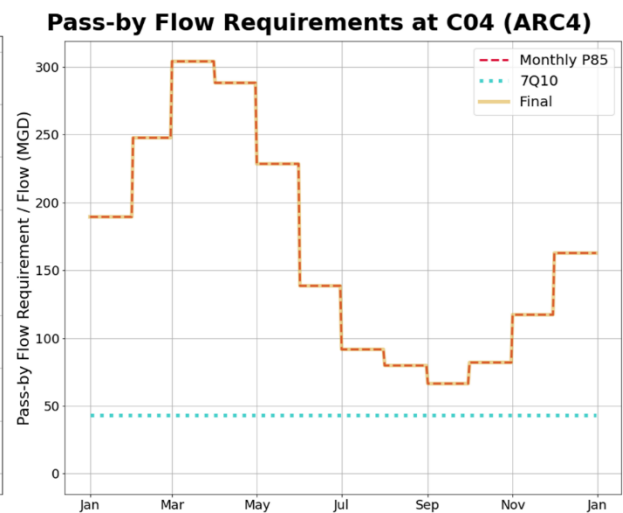
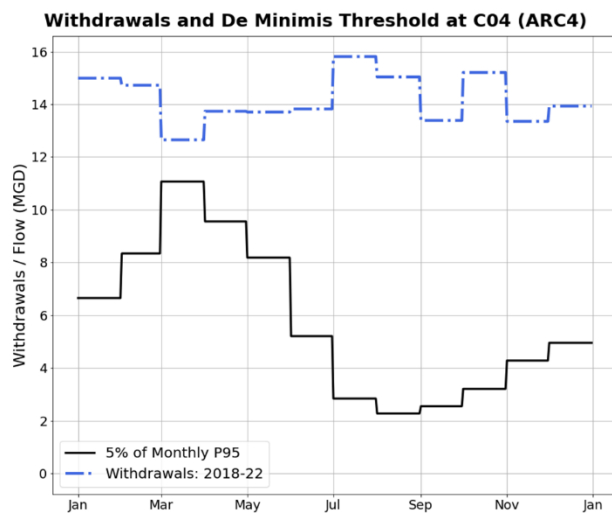
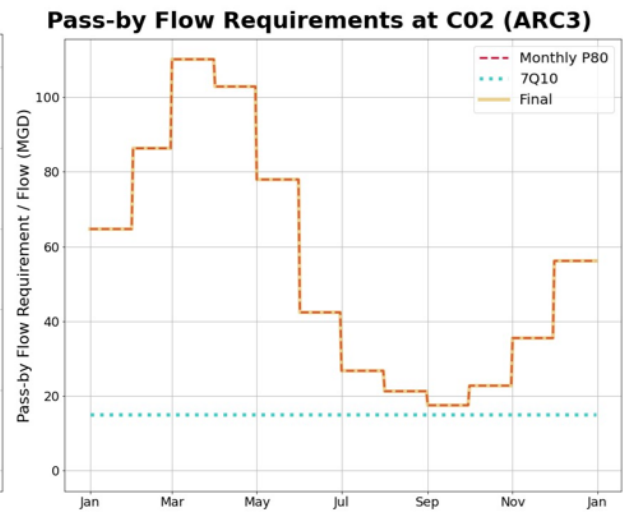
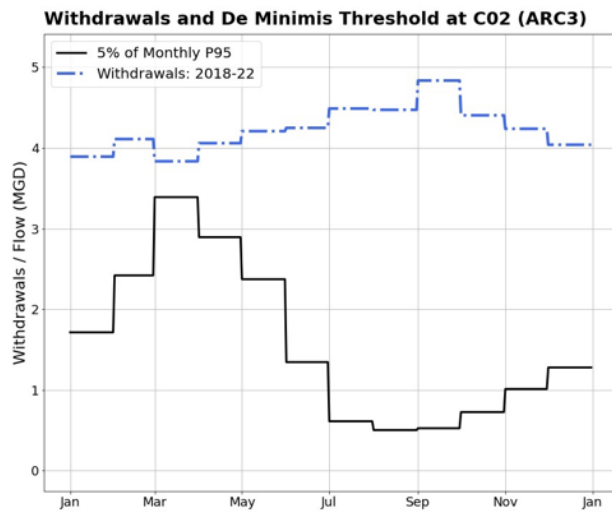
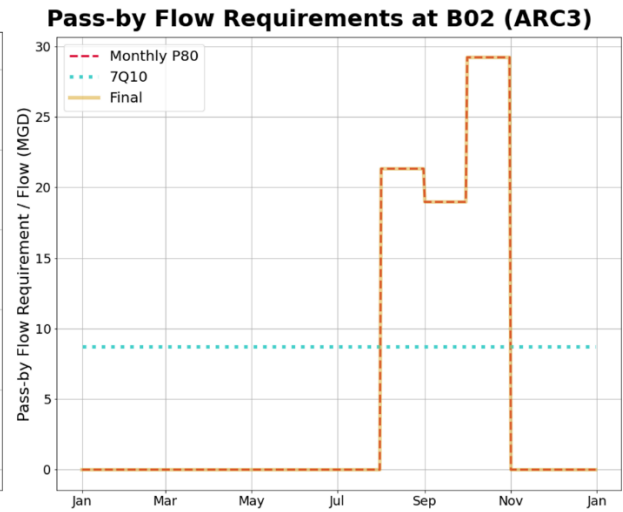
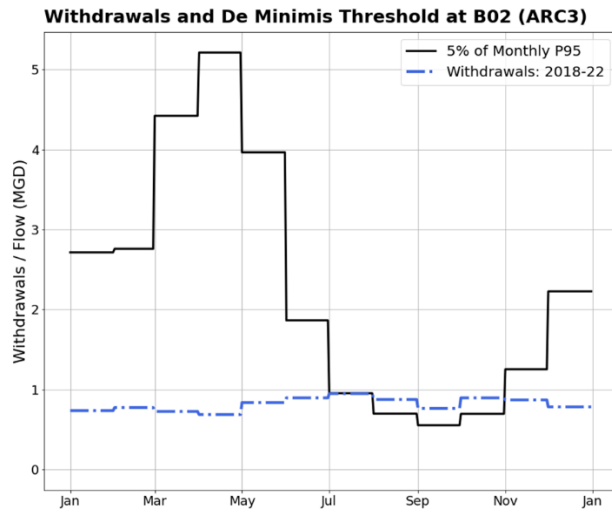


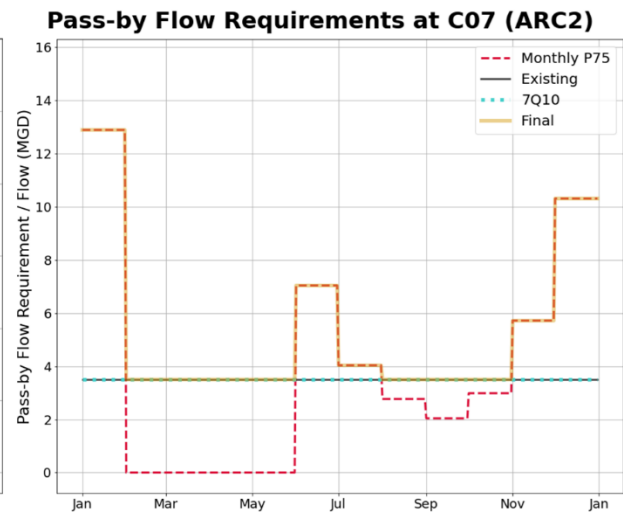
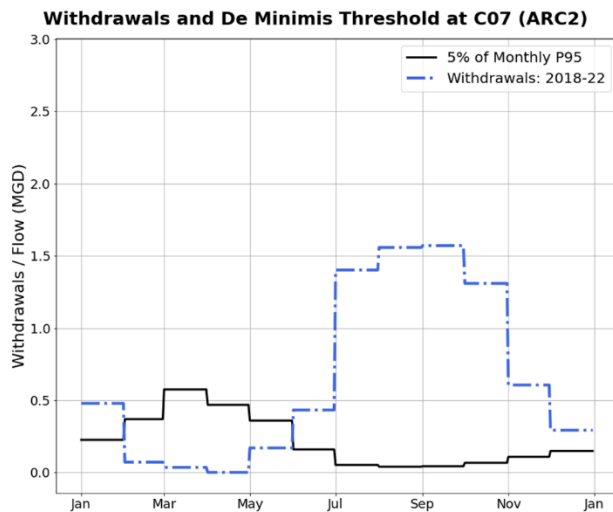
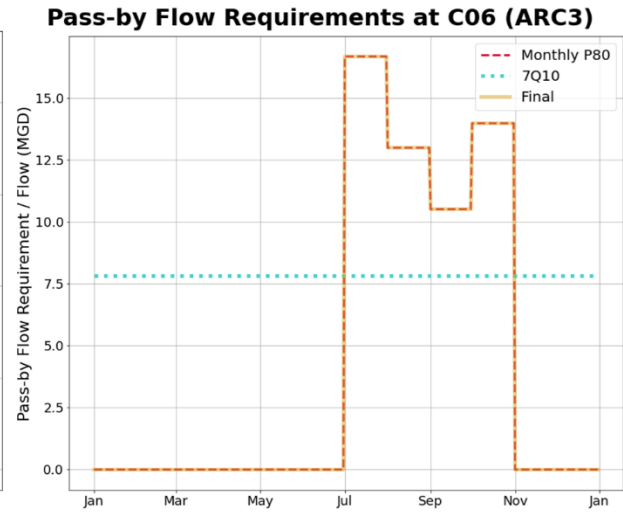
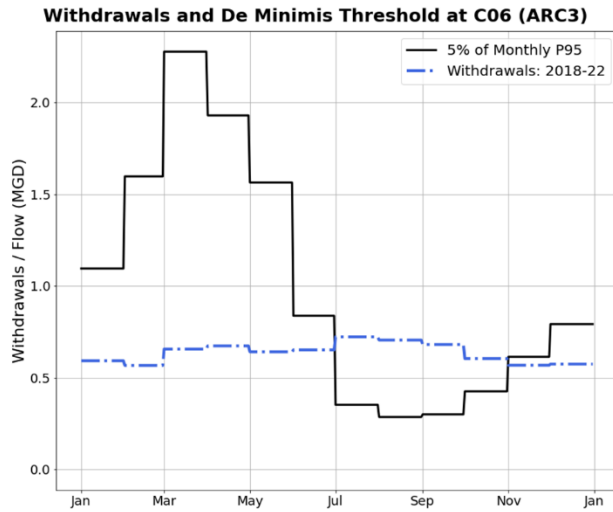
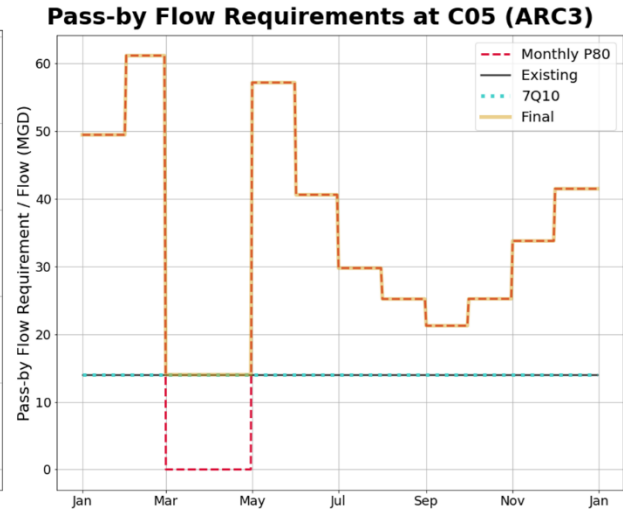
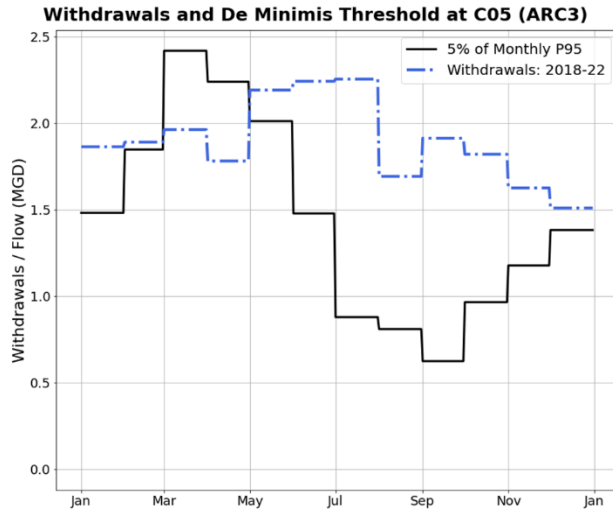
FNER impacted withdrawal, MGY, results mapped for HC1961-1967, left, and HC1998-2002, right.



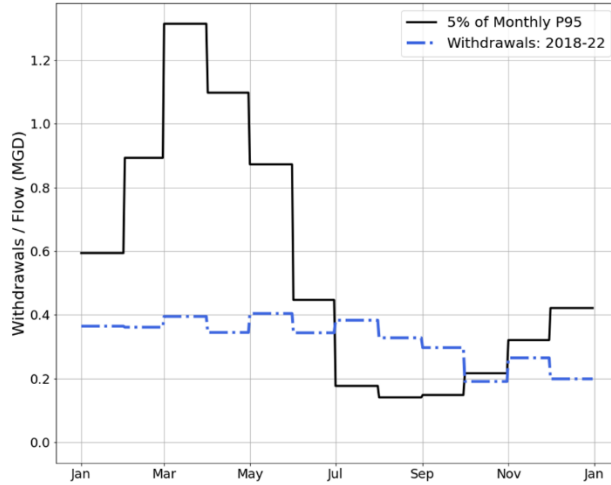
FNER average annual days not meeting pass by flow results mapped for HC1961-1967, left, and HC1998-2002, right.

APPENDIX G. PASS-BY FLOW CALCULATIONS FOR EACH SW POINT THAT RECEIVED AN ECOLOGICAL PASS-BY FLOW

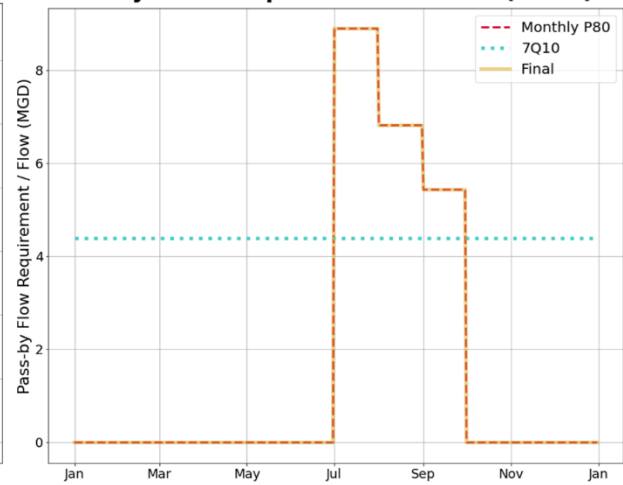




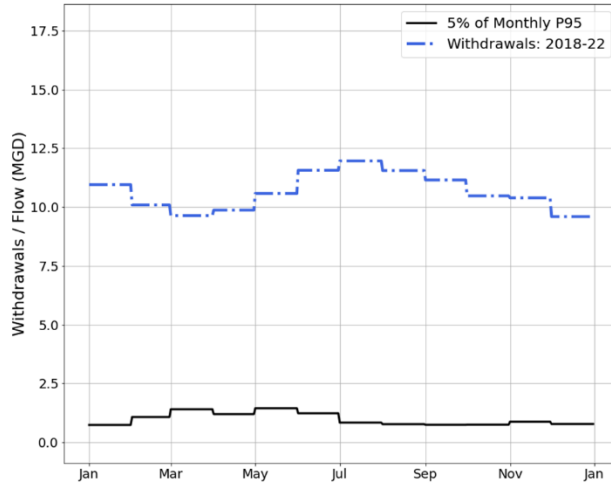
Withdrawals and De Minimis Threshold at C08 (ARC3)



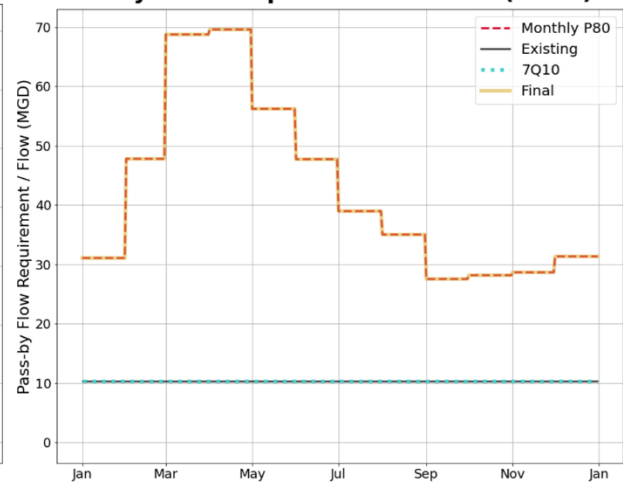
Pass-by Flow Requirements at C08 (ARC3)



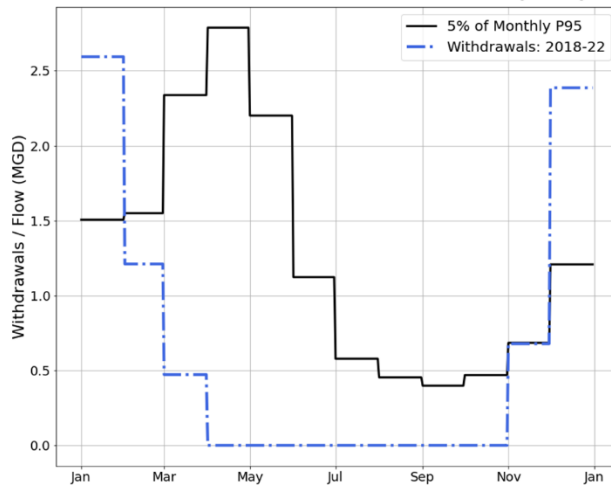
Withdrawals and De Minimis Threshold at L02 (ARC3)



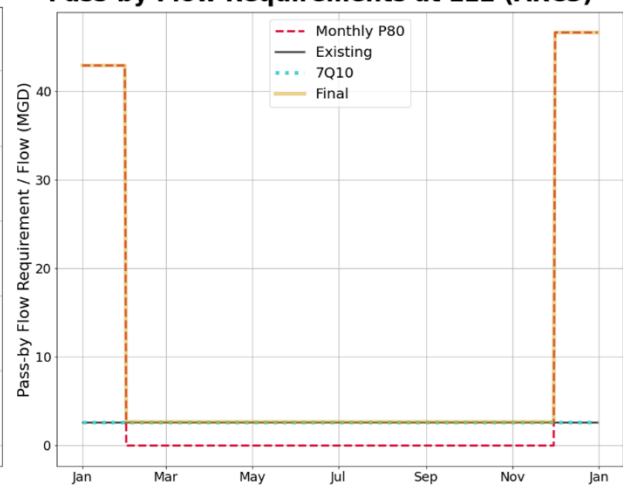
Pass-by Flow Requirements at L02 (ARC3)

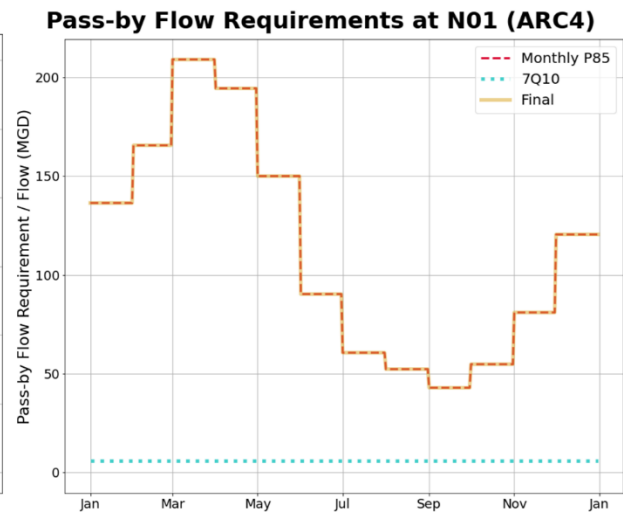
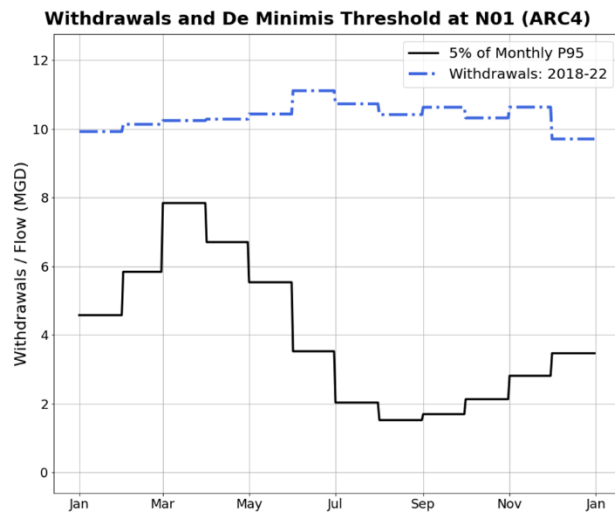
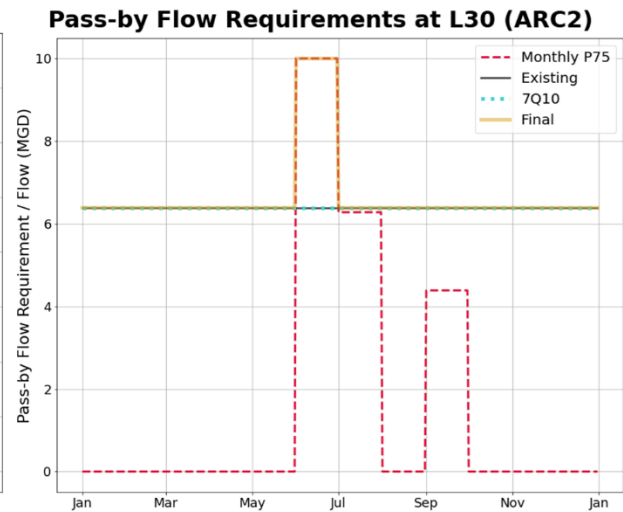
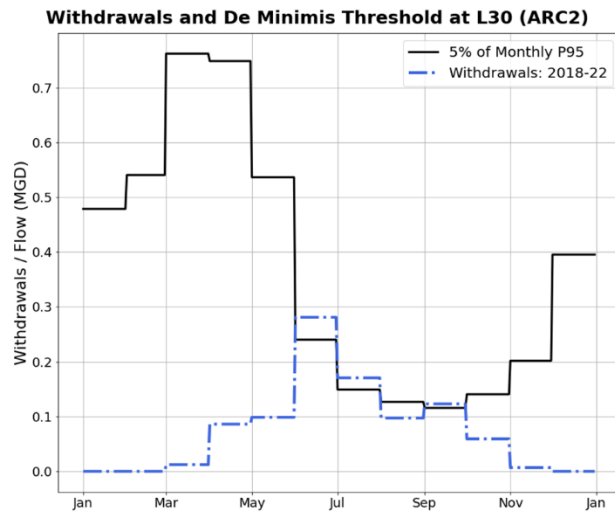
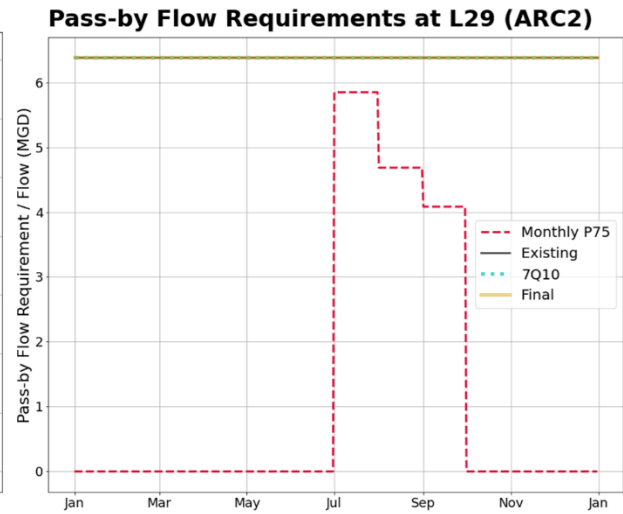
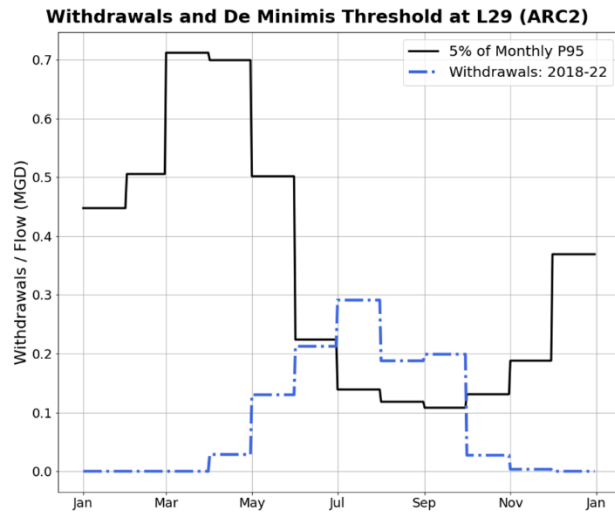


Withdrawals and De Minimis Threshold at L12 (ARC3)

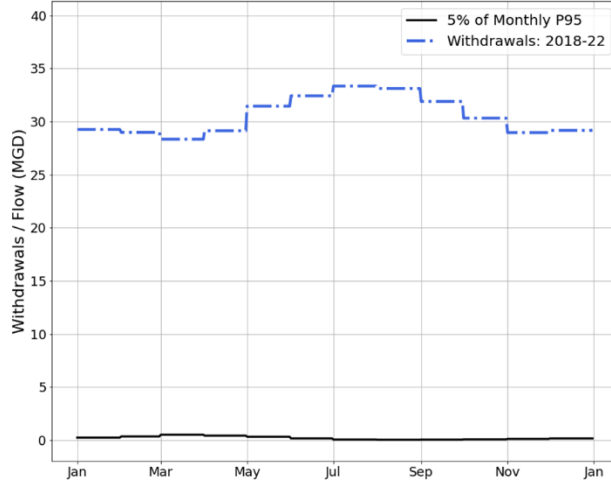


Pass-by Flow Requirements at L12 (ARC3)

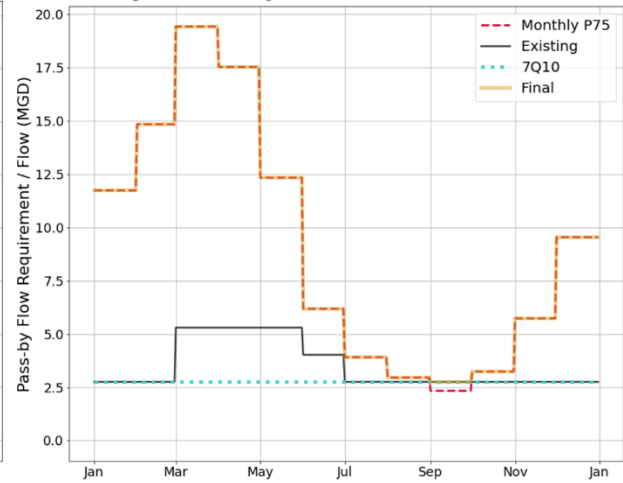




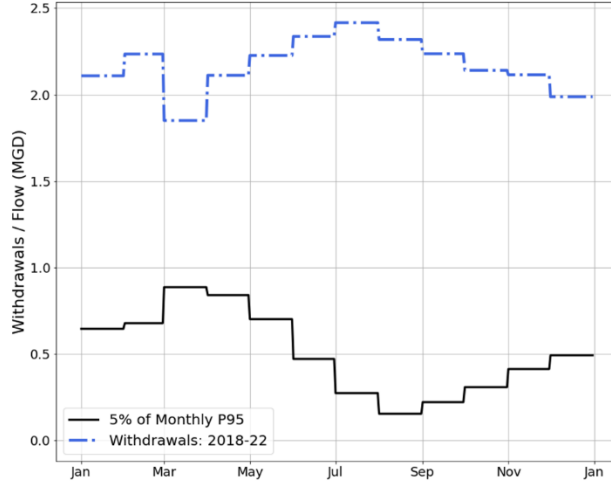
Withdrawals and De Minimis Threshold at N05 (ARC2)



Pass-by Flow Requirements at N05 (ARC2)



Withdrawals and De Minimis Threshold at R01 (ARC2)



Pass-by Flow Requirements at R01 (ARC2)

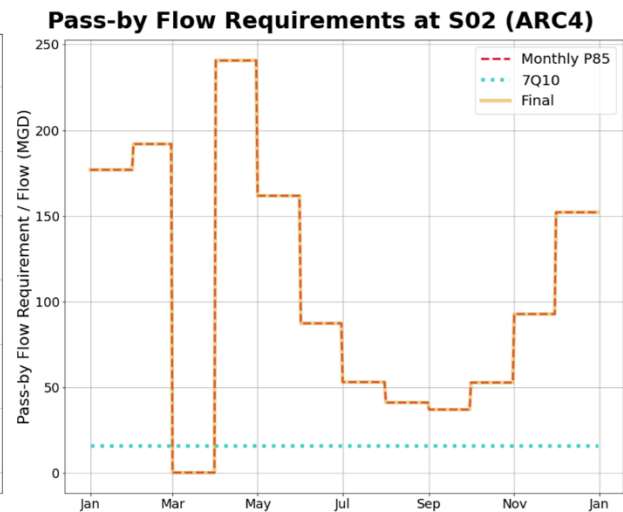
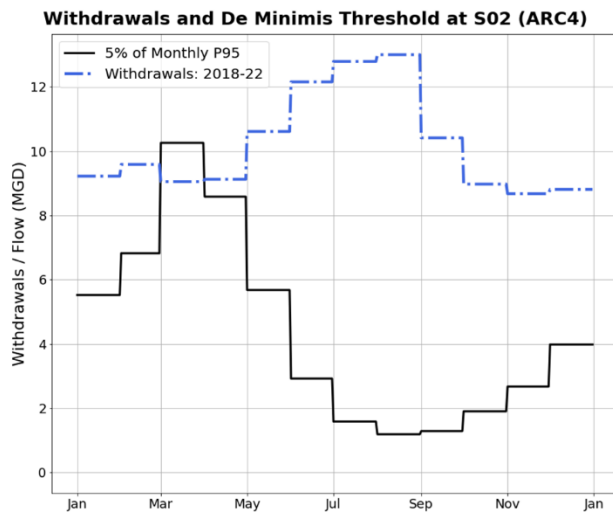
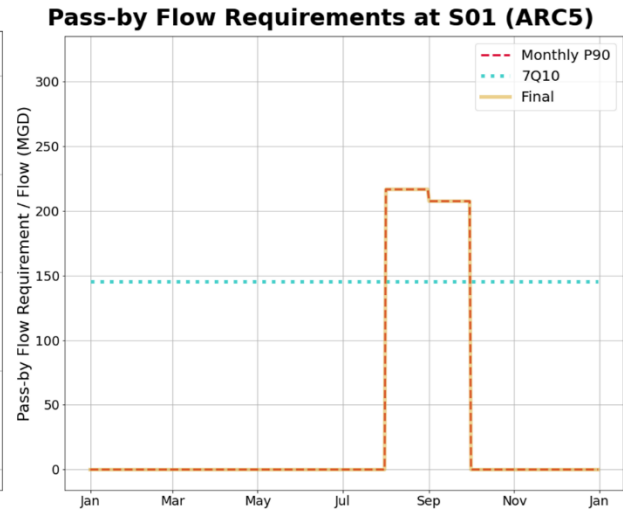
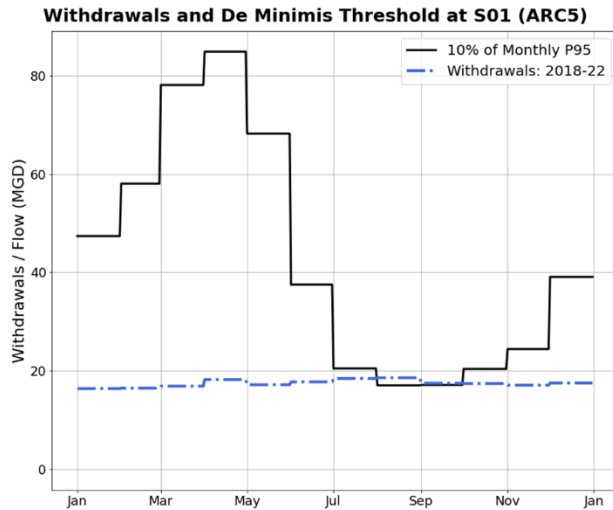
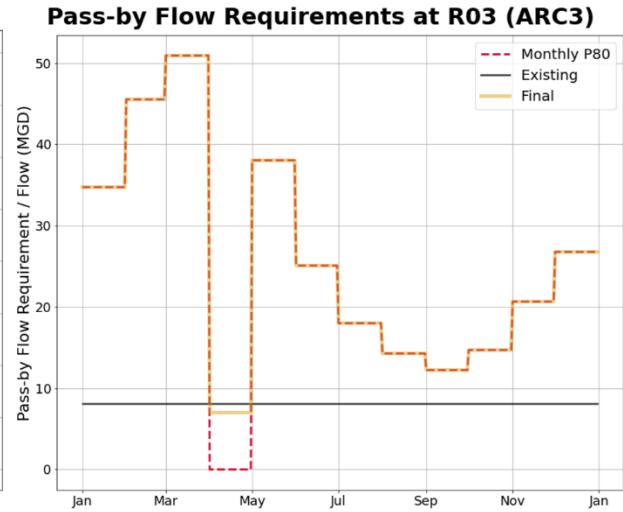
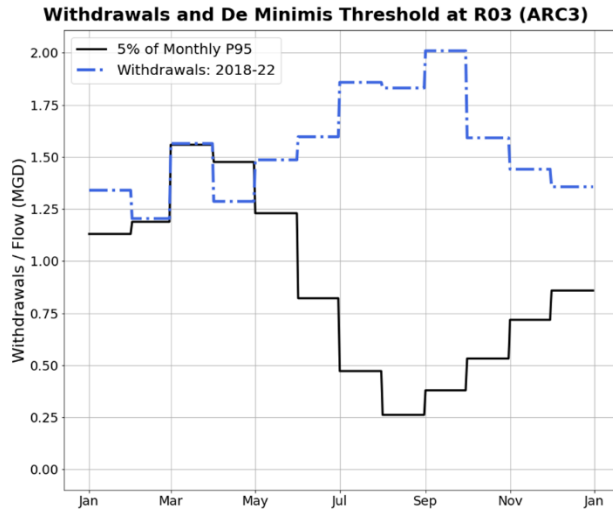


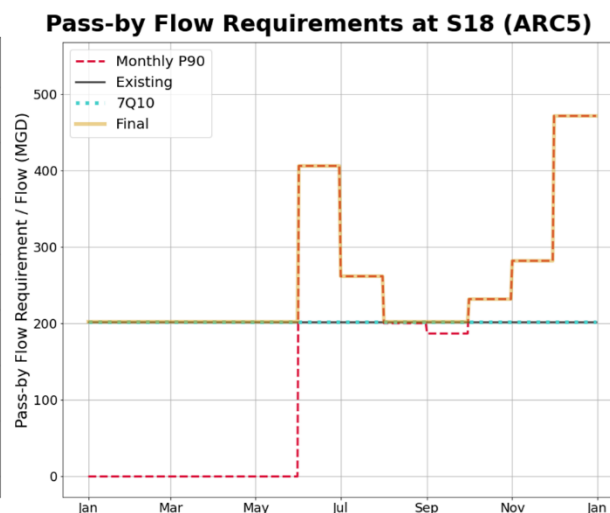
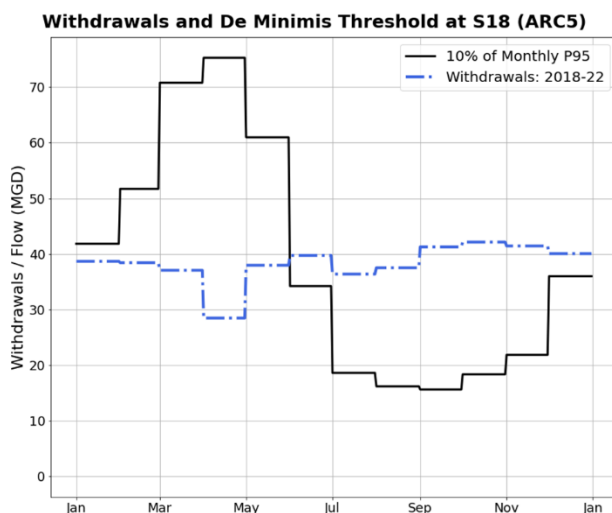
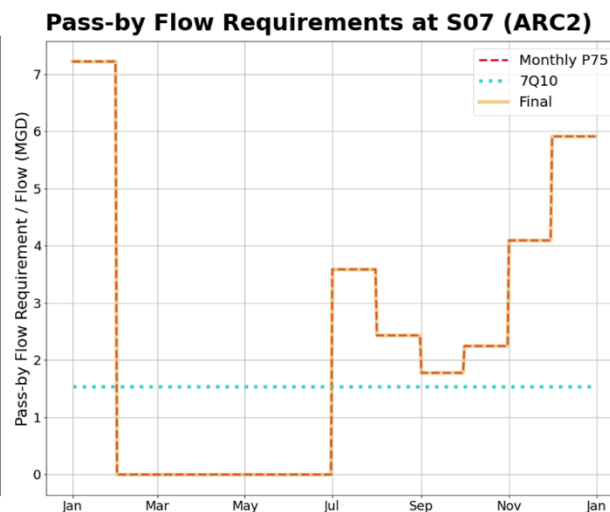
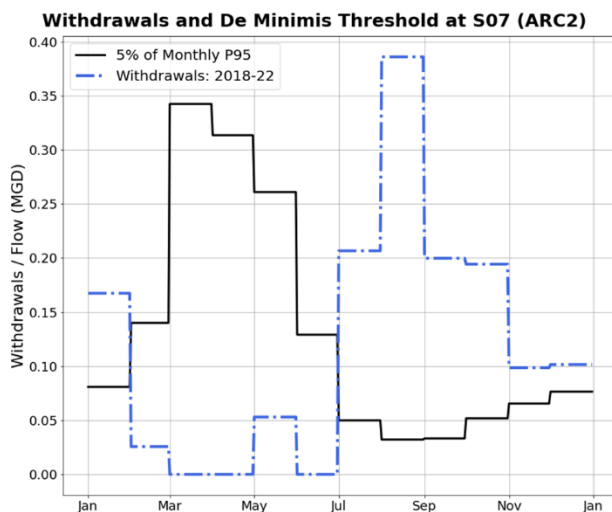
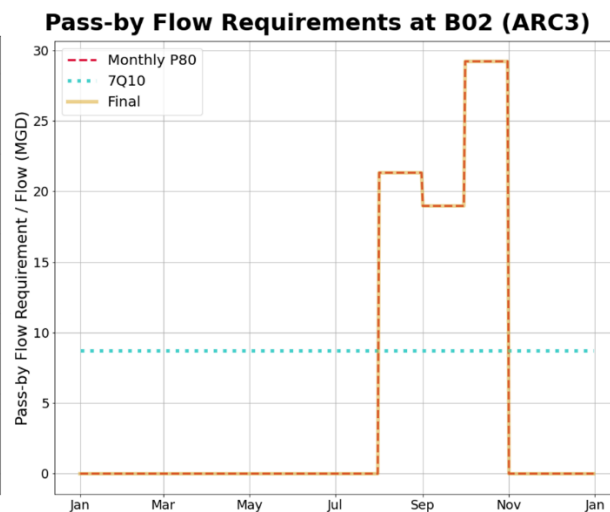
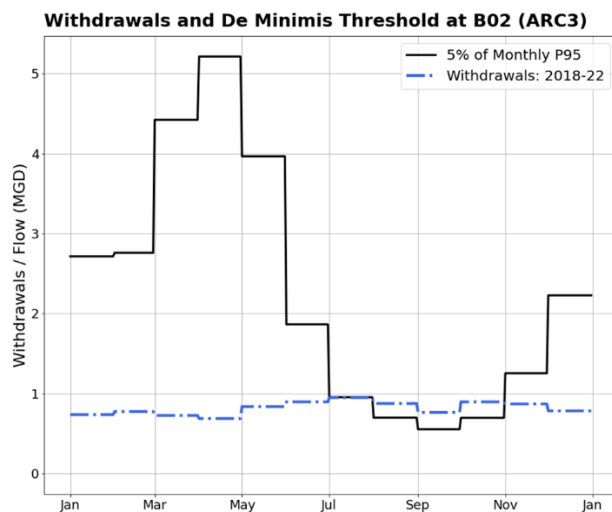
Withdrawals and De Minimis Threshold at R02 (ARC2)



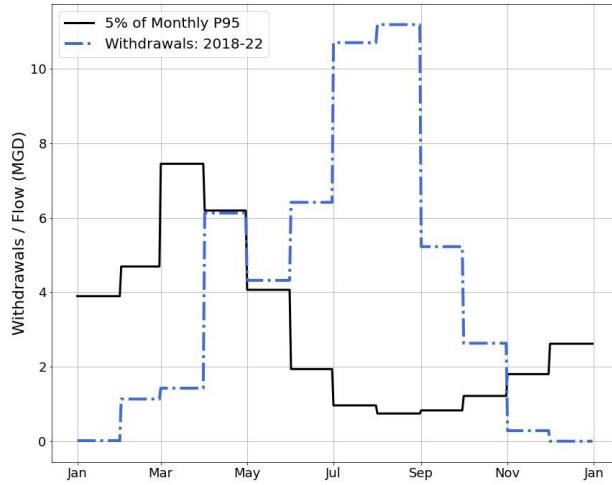
Pass-by Flow Requirements at R02 (ARC2)



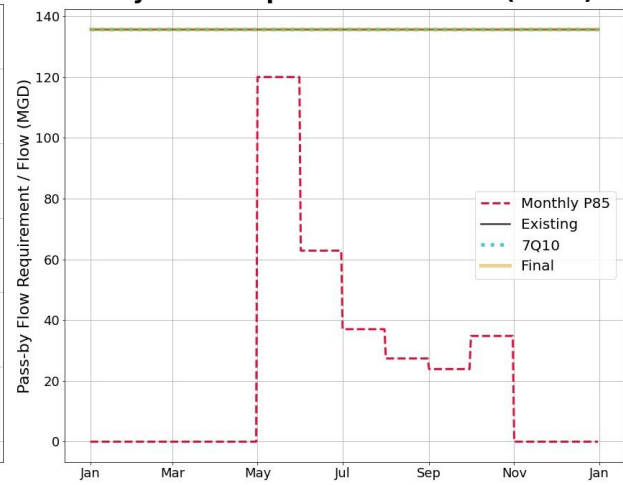




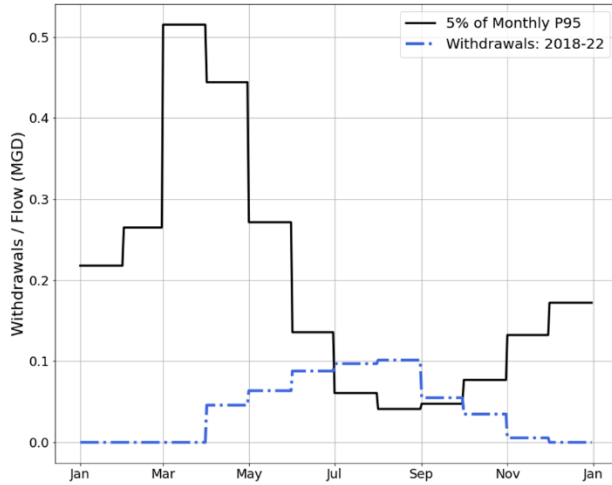
Withdrawals and De Minimis Threshold at S19 (ARC4)



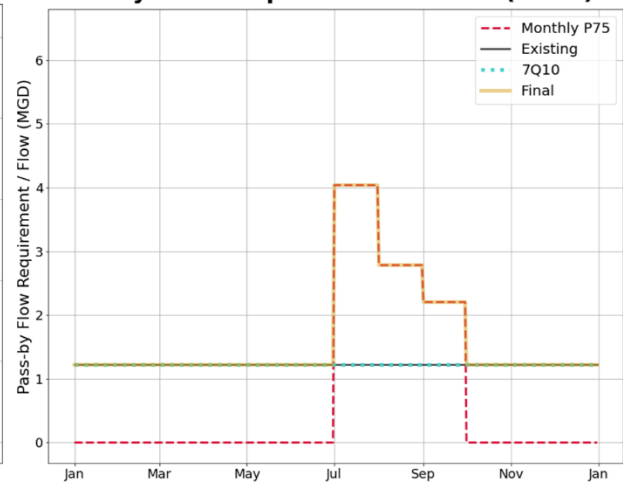
Pass-by Flow Requirements at S19 (ARC4)



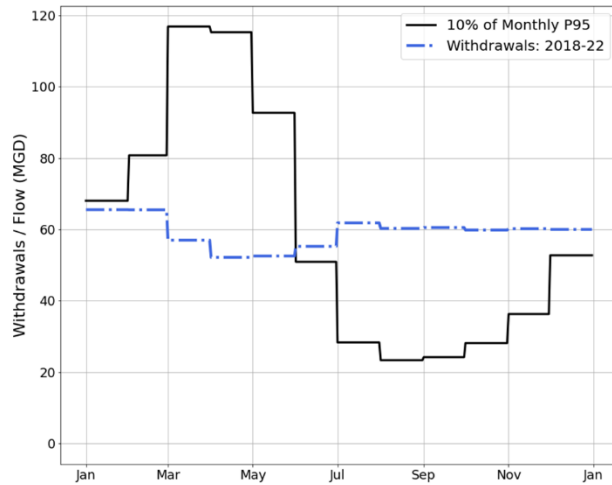
Withdrawals and De Minimis Threshold at S23 (ARC2)



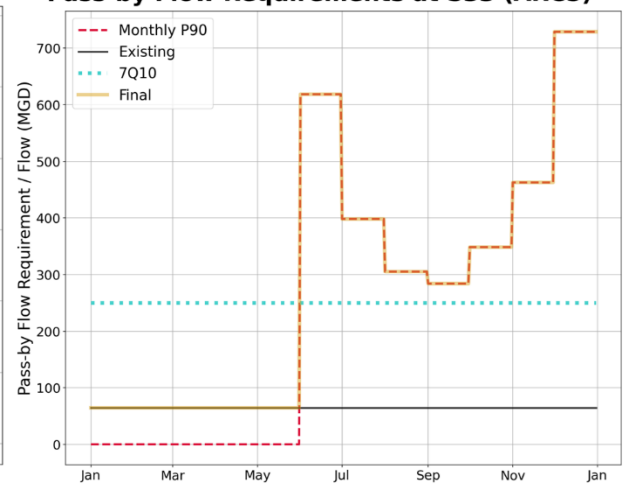
Pass-by Flow Requirements at S23 (ARC2)



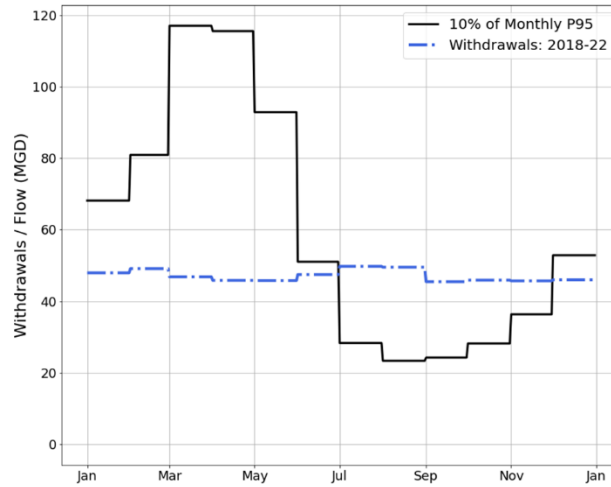
Withdrawals and De Minimis Threshold at S33 (ARC5)



Pass-by Flow Requirements at S33 (ARC5)



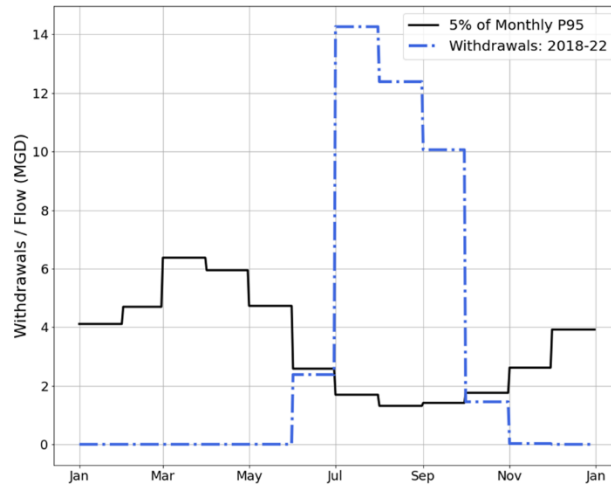
Withdrawals and De Minimis Threshold at S34 (ARC5)



Pass-by Flow Requirements at S34 (ARC5)



Withdrawals and De Minimis Threshold at S38 (ARC3)



Pass-by Flow Requirements at S38 (ARC3)

