

Supporting Information

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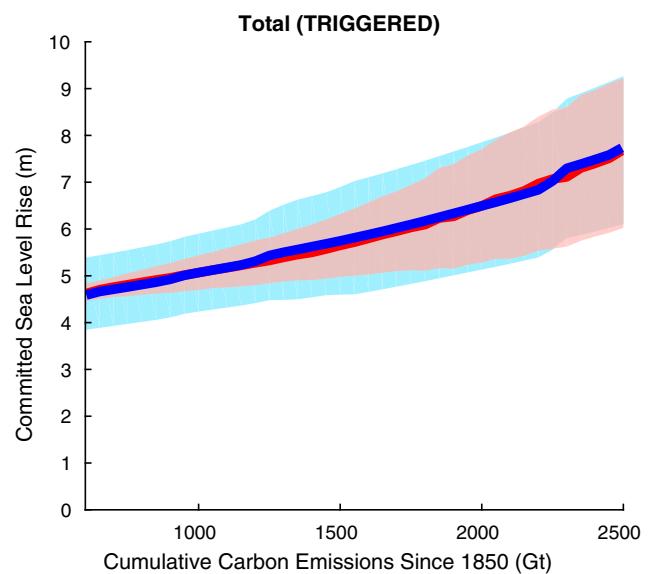
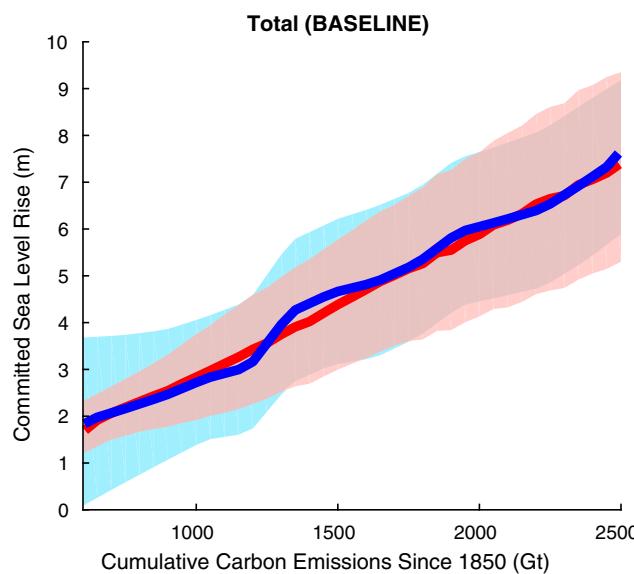
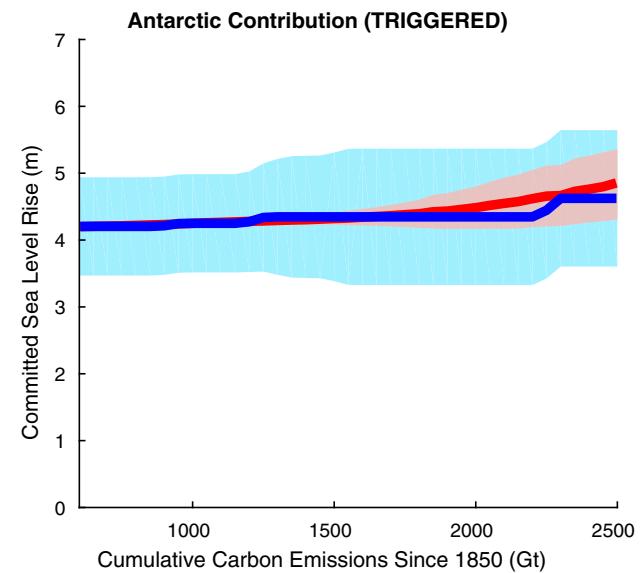
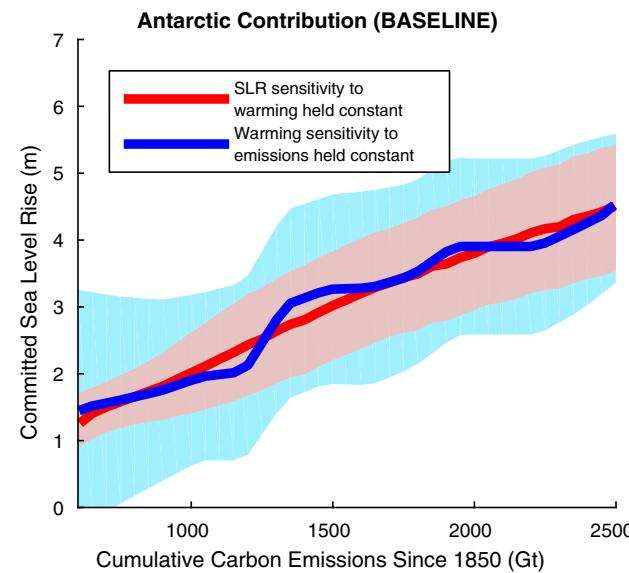


Fig. S1. Antarctic (*Upper Row*) and total (*Lower Row*) projections of committed SLR, given cumulative emissions and the baseline or triggered assumption regarding WAIS collapse. Blue lines and shading represent central and 66% CI estimates based on SLR sensitivity to warming, holding constant the transient climate response to emissions at its median value. Red lines and shading represent the central and 66% CI estimates based on warming sensitivity to the transient response, holding constant the sensitivity of SLR to warming at its median value.

Table S1. Total US municipalities becoming locked in so that 25, 50, or 100% of their 2010 population-weighted area will fall below the future committed high tide line, making no assumption about WAIS collapse (baseline case)

Emissions end date	Emissions scenario	Cumulative emissions, GtC	Committed warming, °C (CI)	Committed US municipalities—baseline case for WAIS			
				With 25% threshold		With 50% threshold	
				All municipalities (CI)	>100,000 residents (CI)	All municipalities (CI)	>100,000 residents (CI)
2015	Historical	560	0.8 (0.5–1.0)	1.6 (0–3.7)	675 (0–1,261)	14 (0–25)	414 (0–942)
2015+	Historical + EIEI	800	1.0 (0.7–1.3)	2.2 (0.4–4.0)	846 (165–1,335)	17 (2–26)	604 (92–1,011)
2050	RCP 2.6	802	1.1 (0.8–1.4)	2.3 (0.6–4.1)	889 (227–1,347)	15 (2–26)	636 (119–1,028)
	RCP 4.5	940	1.3 (0.9–1.6)	2.7 (0.9–4.4)	989 (361–1,396)	19 (2–26)	699 (208–1,082)
	RCP 6.0	913	1.2 (0.9–1.6)	2.6 (0.8–4.3)	973 (341–1,387)	18 (2–26)	682 (190–1,071)
	RCP 8.5	1110	1.5 (1.1–1.9)	3.1 (1.3–5.0)	1,121 (528–1,999)	22 (7–27)	809 (335–1,175)
2100	RCP 2.6	840	1.1 (0.8–1.5)	2.4 (0.7–4.2)	919 (273–1,362)	15 (2–26)	655 (140–1,043)
	RCP 4.5	1,266	1.7 (1.2–2.2)	3.6 (1.7–5.6)	1,232 (713–1,575)	24 (15–28)	911 (460–1,272)
	RCP 6.0	1,678	2.3 (1.6–2.9)	5.0 (2.7–7.2)	1,490 (1,057–1,826)	27 (21–42)	1,176 (756–1,479)
	RCP 8.5	2,430	3.3 (2.3–4.2)	7.1 (4.3–9.9)	1,894 (1,504–2,176)	44 (27–53)	1,544 (1,185–1,812)
Not applicable	Fixed	Not applicable	1.5	2.9 (1.6–4.2)	1,042 (612–1,369)	21 (12–26)	744 (372–1,052)
	warming		2.0	4.7 (3.0–6.3)	1,441 (1,054–1,736)	27 (21–36)	1,119 (748–1,392)
			3.0	6.4 (4.7–8.2)	1,770 (1,460–2,024)	39 (27–46)	1,415 (1,127–1,677)
			4.0	8.9 (6.9–10.8)	2,101 (1,841–2,339)	49 (42–54)	1,748 (1,499–1,938)
							34 (25–37)
							943 (714–1,134)
							12 (7–14)

Projections assume zero additional emissions after emissions listed, except for the historical + EIEI scenario. EIEI is the expected future emissions implied by existing energy infrastructure, as estimated in ref. 23. The years shown relate to emissions and associated commitments, not to the timing of ensuing warming or SLR. CIs are shown spanning 17th–83rd percentiles, the 66% (“likely”) range. Committed warming is in reference to the preindustrial global mean temperature, and committed SLR is in reference to global mean sea level in 1992. Note: the relationship between committed warming and committed SLR is different for fixed warming vs. all other scenarios, because all other scenarios involve distributions of warming amounts, and warming translates nonlinearly into SLR.

Table S2. Total US municipalities becoming locked in so that 25, 50, or 100% of their 2010 population-weighted area will fall below the future committed high tide line, assuming inevitable collapse of the WAIS under any scenario (triggered case)

		Committed US municipalities-triggered case for WAIS								
Emissions end date	Emissions scenario	Cumulative emissions, GtC	Committed warming, °C (CI)	Committed SLR, m (CI)	With 25% threshold		With 50% threshold		With 100% threshold	
					All municipalities	>100,000 residents	All municipalities	>100,000 residents	All municipalities	>100,000 residents
2015	Historical	560	0.8 (0.5–1.0)	4.6 (3.5–5.8)	1,475 (1,261–1,690)	27 (25–33)	1,153 (931–1,343)	20 (17–23)	370 (199–553)	4 (2–6)
2015+	Historical + EIEI	800	1.0 (0.7–1.3)	4.8 (3.8–5.8)	1,516 (1,335–1,697)	27 (26–34)	1,202 (1,011–1,356)	22 (19–23)	426 (283–582)	4 (3–6)
2050	RCP 2.6	802	1.1 (0.8–1.4)	4.9 (3.9–5.8)	1,528 (1,348–1,704)	28 (26–34)	1,210 (1,025–1,357)	22 (19–23)	427 (283–583)	4 (3–6)
	RCP 4.5	940	1.3 (0.9–1.6)	5.0 (4.0–6.0)	1,549 (1,365–1,713)	28 (26–34)	1,234 (1,046–1,372)	22 (19–23)	427 (283–590)	4 (3–6)
	RCP 6.0	913	1.2 (0.9–1.6)	5.0 (4.0–6.0)	1,546 (1,363–1,712)	28 (26–34)	1,228 (1,046–1,371)	22 (19–23)	427 (283–590)	4 (3–6)
	RCP 8.5	1,110	1.5 (1.1–1.9)	5.2 (4.1–6.2)	1,569 (1,376–1,747)	28 (26–37)	1,251 (1,056–1,399)	22 (19–23)	445 (300–611)	5 (3–6)
2100	RCP 2.6	840	1.1 (0.8–1.5)	4.9 (4.0–5.9)	1,536 (1,354–1,707)	28 (26–34)	1,216 (1,035–1,361)	22 (19–23)	427 (283–585)	4 (3–6)
	RCP 4.5	1,266	1.7 (1.2–2.2)	5.3 (4.1–6.6)	1,581 (1,379–1,774)	28 (26–40)	1,271 (1,059–1,437)	22 (19–23)	472 (302–656)	5 (3–6)
	RCP 6.0	1,678	2.3 (1.6–2.9)	5.9 (4.3–7.5)	1,704 (1,437–1,915)	34 (27–44)	1,358 (1,115–1,563)	23 (20–26)	585 (353–774)	6 (4–8)
	RCP 8.5	2,430	3.3 (2.3–4.2)	7.4 (5.0–9.9)	1,957 (1,645–2,195)	46 (32–53)	1,596 (1,307–1,825)	27 (23–35)	796 (504–1024)	8 (5–13)
Not applicable	Fixed warming	Not applicable	1.5	5.2 (4.4–6.0)	1,560 (1,410–1,710)	28 (27–34)	1,249 (1,097–1,369)	22 (20–23)	443 (345–590)	5 (4–6)
			2.0	5.7 (4.5–7.0)	1,666 (1,445–1,864)	32 (27–42)	1,327 (1,123–1,516)	23 (20–25)	537 (353–735)	6 (4–7)
			3.0	6.9 (5.3–8.5)	1,839 (1,575–2,042)	42 (28–48)	1,499 (1,277–1,700)	25 (22–32)	709 (461–894)	7 (5–11)
			4.0	9.4 (7.5–11.3)	2,150 (1,927–2,374)	52 (44–54)	1,798 (1,575–1,978)	34 (26–37)	995 (794–1,160)	12 (8–14)

EIEI is the expected future emissions implied by existing energy infrastructure, as estimated in ref. 23. The years shown relate to emissions and associated commitments, not to the timing of the ensuing warming or SLR. See the legend of Table S1 for further documentation.

Table S3. Cities exceeding 100,000 residents where 25% of the 2010 population-weighted area will fall below the future committed high tide line, making no assumption about WAIS collapse (baseline case)

City	State	Total population	Population rank	Critical cumulative emissions, GtC	Committed SLR, m	Commitment year			
						RCP 8.5	RCP 6.0	RCP 4.5	RCP 2.6
Beaumont	TX	118,286	37	1,840	5.4	2080			
Boston	MA	617,594	3	930	2.8	2045	2055	2050	
Bridgeport	CT	144,229	26	2,070	6.2	2090			
Brownsville	TX	175,023	21	2,260	6.9	2095			
Cambridge	MA	105,162	42	AE	1.5	AE	AE	AE	AE
Cape Coral	FL	153,809	24	590	1.9	2020	2020	2020	2020
Charleston	SC	119,875	36	AE	1.6	AE	AE	AE	AE
Chesapeake	VA	221,576	17	980	2.9	2045	2060	2055	
Clearwater	FL	107,685	38	1,970	6.0	2085			
Coral Springs	FL	121,062	35	900	2.8	2040	2050	2050	
Corpus Christi	TX	305,184	11	1,870	5.6	2085			
Elizabeth	NJ	124,969	33	1,910	5.7	2085			
Elk Grove	CA	152,772	25	1,860	5.5	2080			
Fort Lauderdale	FL	165,521	22	AE	1.2	AE	AE	AE	AE
Hampton	VA	137,373	30	910	2.7	2040	2050	2050	
Hayward	CA	142,760	27	2,140	6.5	2090			
Hialeah	FL	224,634	16	AE	1.5	AE	AE	AE	AE
Hollywood	FL	139,946	28	AE	1.5	AE	AE	AE	AE
Honolulu (Urban)	HI	337,248	9	1,210	3.9	2055	2075	2090	
Huntington Beach	CA	189,992	19	AE	1.1	AE	AE	AE	AE
Jacksonville	FL	819,050	2	1,720	5.1	2075			
Jersey City	NJ	247,597	13	1,270	3.7	2060	2075		
Long Beach	CA	458,815	5	2,010	6.1	2090			
Metairie	LA	138,481	29	AE	0.1	AE	AE	AE	AE
Miami	FL	399,457	7	AE	1.7	AE	AE	AE	AE
Miami Gardens	FL	107,167	40	AE	1.6	AE	AE	AE	AE
Miramar	FL	107,278	39	AE	1.2	AE	AE	AE	AE
New Haven	CT	129,779	32	2,400	7.2	2100			
New Orleans	LA	343,467	8	AE	0.2	AE	AE	AE	AE
New York	NY	8,175,083	1	2,160	6.5	2095			
Newport News	VA	180,659	20	2,070	6.3	2090			
Norfolk	VA	242,751	15	900	2.7	2040	2050	2050	
Oxnard	CA	197,820	18	2,190	6.7	2095			
Palm Bay	FL	103,190	44	2,220	6.8	2095			
Pembroke Pines	FL	123,802	34	AE	1.3	AE	AE	AE	AE
Port St. Lucie	FL	164,438	23	1,550	4.6	2070	2095		
Richmond	CA	103,668	43	2,410	7.4	2100			
Sacramento	CA	466,486	4	1,100	3.2	2050	2065	2070	
Savannah	GA	136,286	31	1,220	3.5	2060	2075	2090	
St. Petersburg	FL	244,767	14	AE	1.7	AE	AE	AE	AE
Stockton	CA	277,588	12	AE	1.4	AE	AE	AE	AE
Tampa	FL	335,654	10	1,380	4.0	2065	2085		
Virginia Beach	VA	436,497	6	950	2.9	2045	2055	2055	
Wilmington	NC	106,476	41	2,120	6.4	2090			

The alphabetical list includes the SLR increment required for each city to commit at 25%, together with the corresponding central estimate of critical cumulative emissions. Committed SLR in turn corresponds to these emissions. AE indicates that historical emissions already have exceeded the critical level. Where applicable, RCP columns indicate future 21st century years (rounded to the nearest multiple of 5) when different RCPs will exceed each city's critical emissions level. The years shown relate to emissions and associated commitments, not to the timing of the ensuing warming or SLR. Rows for the 10 largest cities are shaded.

Table S4. Cities exceeding 100,000 residents where 50 or 100% of the 2010 population-weighted area will fall below the future committed high tide line, making no assumption about WAIS collapse (baseline case)

City	State	Total population	Population rank	Critical cumulative emissions, GtC	Committed SLR, m	Commitment year			
						RCP 8.5	RCP 6.0	RCP 4.5	RCP 2.6
Commitment threshold: 50%									
Beaumont	TX	118,286	22	2,210	6.6	2095			
Cambridge	MA	105,162	25	940	2.8	2045	2055	2055	
Cape Coral	FL	153,809	14	820	2.5	2035	2045	2040	2060
Charleston	SC	119,875	21	790	2.4	2035	2040	2040	2050
Chesapeake	VA	221,576	10	1,360	4.0	2065	2080		
Coral Springs	FL	121,062	20	1040	3.1	2050	2060	2060	
Fort Lauderdale	FL	165,521	12	AE	1.6	AE	AE	AE	AE
Hampton	VA	137,373	17	1,000	2.9	2045	2060	2060	
Hialeah	FL	224,634	9	AE	1.7	AE	AE	AE	AE
Hollywood	FL	139,946	15	630	2.1	2025	2025	2025	2025
Huntington Beach	CA	189,992	11	1,160	3.4	2055	2070	2080	
Jacksonville	FL	819,050	1	2,320	7.0	2100			
Metairie	LA	138,481	16	AE	0.3	AE	AE	AE	AE
Miami	FL	399,457	4	820	2.5	2035	2045	2040	2060
Miami Gardens	FL	107,167	24	570	1.8	2020	2020	2020	2020
Miramar	FL	107,278	23	AE	1.6	AE	AE	AE	AE
New Orleans	LA	343,467	5	AE	0.3	AE	AE	AE	AE
Norfolk	VA	242,751	8	980	2.9	2045	2060	2055	
Pembroke Pines	FL	123,802	19	AE	1.6	AE	AE	AE	AE
Port St. Lucie	FL	164,438	13	1,880	5.8	2085			
Sacramento	CA	466,486	2	1,700	5.0	2075			
Savannah	GA	136,286	18	1,650	4.9	2075	2100		
St. Petersburg	FL	244,767	7	1,550	4.6	2070	2095		
Stockton	CA	277,588	6	950	2.8	2045	2055	2055	
Virginia Beach	VA	436,497	3	1,320	3.9	2060	2080		
Commitment threshold: 100%									
Cape Coral	FL	153,809	3	1,950	6.0	2085			
Hialeah	FL	224,634	2	1,160	3.5	2055	2070	2080	
Hollywood	FL	139,946	4	2,240	7.0	2095			
Metairie	LA	138,481	5	1,210	3.5	2055	2075	2090	
Miami Gardens	FL	107,167	8	1,790	5.5	2080			
Miramar	FL	107,278	7	2,420	7.5	2100			
New Orleans	LA	343,467	1	1,540	4.5	2070	2095		
Pembroke Pines	FL	123,802	6	1,340	4.0	2065	2080		

The years shown relate to emissions and associated commitments, not to the timing of ensuing warming or SLR. Rows for the 10 largest cities are shaded underneath each commitment threshold level. See the legend of Table S3 for further documentation.

Table S5. Cities exceeding 100,000 residents where 25% of the 2010 population-weighted area will fall below the future committed high tide line, assuming inevitable collapse of the WAIS under any emissions scenario (triggered case)

City	State	Total population	Population rank	Critical cumulative emissions, GtC	Committed SLR, m	Commitment year			
						RCP 8.5	RCP 6.0	RCP 4.5	RCP 2.6
Beaumont	TX	118,286	39	1,310	5.4	2060	2080		
Boston	MA	617,594	3	AE	2.8	AE	AE	AE	AE
Bridgeport	CT	144,229	28	1,770	6.2	2080			
Brownsville	TX	175,023	22	2,050	6.9	2090			
Cambridge	MA	105,162	44	AE	1.5	AE	AE	AE	AE
Cape Coral	FL	153,809	25	AE	1.9	AE	AE	AE	AE
Charleston	SC	119,875	38	AE	1.6	AE	AE	AE	AE
Chesapeake	VA	221,576	17	AE	2.9	AE	AE	AE	AE
Clearwater	FL	107,685	40	1,600	6.0	2075	2095		
Coral Springs	FL	121,062	37	AE	2.8	AE	AE	AE	AE
Corpus Christi	TX	305,184	11	1,420	5.6	2065	2085		
Elizabeth	NJ	124,969	35	1,520	5.7	2070	2090		
Elk Grove	CA	152,772	26	1,380	5.5	2065	2085		
Fort Lauderdale	FL	165,521	23	AE	1.2	AE	AE	AE	AE
Hampton	VA	137,373	32	AE	2.7	AE	AE	AE	AE
Hayward	CA	142,760	29	1,860	6.5	2080			
Hialeah	FL	224,634	16	AE	1.5	AE	AE	AE	AE
Hollywood	FL	139,946	30	AE	1.5	AE	AE	AE	AE
Honolulu (urban)	HI	337,248	9	AE	3.9	AE	AE	AE	AE
Huntington Beach	CA	189,992	20	AE	1.1	AE	AE	AE	AE
Jacksonville	FL	819,050	2	770	5.1	2035	2040	2040	2045
Jersey City	NJ	247,597	13	AE	3.7	AE	AE	AE	AE
Long Beach	CA	458,815	5	1,660	6.1	2075	2100		
Metairie	LA	138,481	31	AE	0.1	AE	AE	AE	AE
Miami	FL	399,457	7	AE	1.7	AE	AE	AE	AE
Miami Gardens	FL	107,167	42	AE	1.6	AE	AE	AE	AE
Miramar	FL	107,278	41	AE	1.2	AE	AE	AE	AE
Mobile	AL	195,111	19	2,400	7.6	2100			
New Haven	CT	129,779	34	2,210	7.2	2095			
New Orleans	LA	343,467	8	AE	0.2	AE	AE	AE	AE
New York	NY	8,175,083	1	1,890	6.5	2085			
Newport News	VA	180,659	21	1,770	6.3	2080			
Norfolk	VA	242,751	15	AE	2.7	AE	AE	AE	AE
Oxnard	CA	197,820	18	1,950	6.7	2085			
Palm Bay	FL	103,190	46	1,990	6.8	2085			
Pasadena	TX	149,043	27	2,420	7.7	2100			
Pembroke Pines	FL	123,802	36	AE	1.3	AE	AE	AE	AE
Port St. Lucie	FL	164,438	24	AE	4.6	AE	AE	AE	AE
Richmond	CA	103,668	45	2,220	7.4	2095			
Sacramento	CA	466,486	4	AE	3.2	AE	AE	AE	AE
Savannah	GA	136,286	33	AE	3.5	AE	AE	AE	AE
St. Petersburg	FL	244,767	14	AE	1.7	AE	AE	AE	AE
Stockton	CA	277,588	12	AE	1.4	AE	AE	AE	AE
Tampa	FL	335,654	10	AE	4.0	AE	AE	AE	AE
Virginia Beach	VA	436,497	6	AE	2.9	AE	AE	AE	AE
Wilmington	NC	106,476	43	1,830	6.4	2080			

The years shown relate to emissions and associated commitments, not to the timing of ensuing warming or SLR. See the legend of Table S3 for further documentation.

Table S6. Cities exceeding 100,000 residents where 50 or 100% of the 2010 population-weighted area will fall below the future committed high tide line, assuming inevitable collapse of the WAIS under any emissions scenario (triggered case)

City	State	Total population	Population rank	Critical cumulative emissions, GtC	Committed SLR, m	Commitment year			
						RCP 8.5	RCP 6.0	RCP 4.5	RCP 2.6
Commitment threshold: 50%									
Beaumont	TX	118,286	23	1,990	6.6	2085			
Cambridge	MA	105,162	26	AE	2.8	AE	AE	AE	AE
Cape Coral	FL	153,809	14	AE	2.5	AE	AE	AE	AE
Charleston	SC	119,875	22	AE	2.4	AE	AE	AE	AE
Chesapeake	VA	221,576	10	AE	4.0	AE	AE	AE	AE
Coral Springs	FL	121,062	21	AE	3.1	AE	AE	AE	AE
Elk Grove	CA	152,772	15	2,410	7.6	2100			
Fort Lauderdale	FL	165,521	12	AE	1.6	AE	AE	AE	AE
Hampton	VA	137,373	18	AE	2.9	AE	AE	AE	AE
Hialeah	FL	224,634	9	AE	1.7	AE	AE	AE	AE
Hollywood	FL	139,946	16	AE	2.1	AE	AE	AE	AE
Huntington Beach	CA	189,992	11	AE	3.4	AE	AE	AE	AE
Jacksonville	FL	819,050	1	2,130	7.0	2090			
Metairie	LA	138,481	17	AE	0.3	AE	AE	AE	AE
Miami	FL	399,457	4	AE	2.5	AE	AE	AE	AE
Miami Gardens	FL	107,167	25	AE	1.8	AE	AE	AE	AE
Miramar	FL	107,278	24	AE	1.6	AE	AE	AE	AE
New Orleans	LA	343,467	5	AE	0.3	AE	AE	AE	AE
Norfolk	VA	242,751	8	AE	2.9	AE	AE	AE	AE
Palm Bay	FL	103,190	27	2,270	7.5	2095			
Pembroke Pines	FL	123,802	20	AE	1.6	AE	AE	AE	AE
Port St. Lucie	FL	164,438	13	1,410	5.8	2065	2085		
Sacramento	CA	466,486	2	730	5.0	2030	2035	2035	2035
Savannah	GA	136,286	19	590	4.9	2020	2020	2020	2020
St. Petersburg	FL	244,767	7	AE	4.6	AE	AE	AE	AE
Stockton	CA	277,588	6	AE	2.8	AE	AE	AE	AE
Virginia Beach	VA	436,497	3	AE	3.9	AE	AE	AE	AE
Commitment threshold: 100%									
Cape Coral	FL	153,809	3	1,570	6.0	2070	2095		
Hialeah	FL	224,634	2	AE	3.5	AE	AE	AE	AE
Hollywood	FL	139,946	4	2,020	7.0	2090			
Metairie	LA	138,481	5	AE	3.5	AE	AE	AE	AE
Miami Gardens	FL	107,167	8	1,030	5.5	2050	2060	2060	
Miramar	FL	107,278	7	2,230	7.5	2095			
New Orleans	LA	343,467	1	AE	4.5	AE	AE	AE	AE
Pembroke Pines	FL	123,802	6	AE	4.0	AE	AE	AE	AE

The years shown relate to emissions and associated commitments, not to the timing of ensuing warming or SLR. Rows for the 10 largest cities are shaded underneath each commitment threshold level. See the legend of Table S3 for further documentation.

Table S7. Coastal state and US total 2010 census populations living on land falling below future committed high tide lines under different emissions scenarios through 2050, making no assumptions about the inevitability of WAIS collapse (baseline case)

State	Population (in thousands of persons) living below committed sea levels by scenario: median (white) and 17th–83rd percentile estimates (shaded)										
	Historical emissions		Historical + EIEI		RCP 2.6 through 2050		RCP 4.5 through 2050		RCP 6.0 through 2050		RCP 8.5 through 2050
Alaska	29	0–40	33	1–44	33	22–45	35	25–48	35	24–48	37
Alabama	12	0–42	20	0–51	21	1–52	27	4–57	26	3–56	35
California	587	0–1,377	836	0–1,608	876	242–1,644	1,013	321–1,765	981	303–1,736	1,208
Connecticut	47	0–125	72	0–151	76	0–156	89	16–171	86	14–167	108
District of Columbia	1	0–8	3	0–12	3	0–12	5	1–14	4	1–14	7
Delaware	23	0–58	34	0–71	36	1–73	42	8–81	41	7–79	50
Florida	2,465	0–6,556	4,268	0–7,360	4,535	220–7,492	5,177	497–7,965	5,029	433–7,854	5,978
Georgia	65	0–216	107	0–266	114	10–274	138	22–300	132	20–294	177
Hawaii	100	0–219	153	4–243	159	6–246	180	17–260	176	12–257	204
Louisiana	1,098	0–1,507	1,242	0–1,628	1,264	741–1,647	1,331	849–1,709	1,316	825–1,696	1,422
Massachusetts	223	0–496	330	0–558	344	3–568	389	67–600	379	60–593	446
Maryland	67	0–182	103	0–219	109	4–225	130	24–244	125	21–240	157
Maine	7	0–22	11	0–27	12	0–28	15	2–31	14	2–30	18
Mississippi	14	0–65	23	0–84	25	2–87	34	5–98	32	4–95	50
North Carolina	126	0–284	180	0–325	189	28–331	216	52–353	210	47–348	253
New Hampshire	6	0–12	8	0–14	8	0–14	9	2–15	9	2–15	11
New Jersey	338	0–742	482	0–846	504	8–863	573	108–918	558	92–905	662
New York	411	0–1,320	710	0–1,616	758	2–1,662	909	82–1,815	876	68–1,782	1,116
Oregon	13	0–29	18	0–35	19	5–36	22	7–38	21	6–38	26
Pennsylvania	10	0–54	17	0–78	19	0–83	27	3–97	25	3–93	40
Rhode Island	10	0–34	17	0–42	18	0–44	22	3–48	21	3–47	28
South Carolina	134	0–363	205	0–431	216	18–442	257	45–479	247	40–471	313
Texas	155	0–419	236	0–512	250	35–529	296	60–586	285	55–572	360
Virginia	168	0–847	333	0–1,021	366	20–1,042	494	46–1,109	464	41–1,095	685
Washington	74	0–130	92	0–146	95	32–149	105	48–157	103	46–155	118
US total	6,181	0–15,148	9,533	4–17,388	10,052	1,400–17,743	11,535	2,314–18,959	11,194	2,132–18,678	13,508

Projections assume zero additional emissions after emissions end dates listed, except for the historical + EIEI scenario. EIEI is the expected future emissions implied by existing energy infrastructure, as estimated in ref. 23. The years shown relate to emissions and associated commitments, not to the timing of ensuing warming or SLR. Levels of committed warming and SLR associated with each scenario are shown in Table S1. US totals include only the listed states and the District of Columbia.

Table S8. Coastal state and US total 2010 census populations living on land falling below future committed high tide lines under different emissions scenarios through 2100, making no assumptions about the inevitability of WAIS collapse (baseline case)

Population (in thousands of persons) living below committed sea levels by scenario: median (white) and 17th–83rd percentile estimates (shaded)

State	RCP 2.6 through 2100	RCP 4.5 through 2100	RCP 6.0 through 2100	RCP 8.5 through 2100
Alaska	34	23–46	40	30–54
Alabama	23	2–53	42	12–70
California	911	263–1,675	1,384	596–2,106
Connecticut	80	10–160	125	47–211
District of Columbia	4	1–13	8	1–20
Delaware	38	5–75	58	23–102
Florida	4,704	294–7,611	6,595	2,590–9,082
Georgia	120	16–281	216	65–355
Hawaii	165	8–250	223	110–292
Louisiana	1,283	773–1,664	1,507	1,100–1,860
Massachusetts	357	44–576	495	219–683
Maryland	115	15–230	181	66–299
Maine	13	2–28	21	7–39
Mississippi	27	3–90	65	14–133
North Carolina	196	35–337	285	127–415
New Hampshire	9	1–15	12	6–18
New Jersey	524	56–877	739	334–1,068
New York	801	38–1,703	1,312	404–2,203
Oregon	20	6–36	30	13–45
Pennsylvania	21	2–86	54	10–133
Rhode Island	19	2–45	34	10–60
South Carolina	227	28–452	363	134–576
Texas	262	43–543	420	156–770
Virginia	395	29–1,061	849	169–1,258
Washington	98	41–151	130	74–176
US total	10,443	1,739–18,060	15,189	6,316–22,031
			19,813	12,560–25,650
				26,255
				20,625–31,295

Projections assume zero additional emissions after emissions end dates listed. The years shown relate to emissions and associated commitments, not to the timing of ensuing warming or SLR. Levels of committed warming and SLR associated with each scenario are shown in Table S1. US totals include only the listed states and the District of Columbia.

Table S9. Coastal state and US total 2010 census populations living on land falling below future committed high tide lines under different fixed long-term warming scenarios, making no assumptions about the inevitability of WAIS collapse (baseline case)

Population (in thousands of persons) living below committed sea levels by scenario: median (white) and 17th–83rd percentile estimates (shaded)

State	1.5 °C warming	2 °C warming	3 °C warming	4 °C warming				
Alaska	36	26–50	48	35–60	58	46–70	72	60–82
Alabama	31	5–60	57	27–85	82	53–120	130	87–174
California	1,097	372–1,842	1,775	1,025–2,512	2,441	1,706–3,179	3,360	2,626–4,043
Connecticut	97	20–179	169	88–255	236	149–321	323	238–401
Dist. of Columbia	5	1–15	14	4–23	22	12–29	30	23–38
Delaware	45	11–85	80	42–130	118	71–183	188	122–257
Florida	5,540	761–8,250	8,010	5,244–9,926	9,755	7,679–10,996	11,168	10,019–11,827
Georgia	153	28–314	300	138–391	383	277–420	424	391–441
Hawaii	191	37–268	265	187–321	320	264–366	384	339–420
Louisiana	1,370	909–1,744	1,710	1,332–2,015	1,979	1,665–2,212	2,253	2,032–2,433
Massachusetts	412	84–618	596	384–774	732	550–912	912	732–1,091
Maryland	141	30–256	242	128–368	343	219–451	457	351–560
Maine	16	3–32	30	14–50	44	26–67	67	44–90
Mississippi	40	6–106	99	34–175	165	90–234	243	180–263
North Carolina	232	66–366	353	216–496	469	331–640	658	488–782
New Hampshire	10	3–16	15	9–22	20	14–28	28	20–35
New Jersey	609	147–950	912	566–1,229	1,164	842–1,466	1,480	1,177–1,798
New York	991	116–1,897	1,799	893–2,635	2,453	1,599–3,290	3,321	2,483–4,131
Oregon	24	8–40	38	22–52	51	36–70	74	53–88
Pennsylvania	32	4–104	95	25–184	161	77–280	285	165–390
Rhode Island	24	4–51	48	22–75	68	41–97	98	68–129
South Carolina	280	59–500	478	256–670	644	445–777	794	667–892
Texas	323	76–623	588	298–1,009	959	549–1,501	1,637	1,057–2,190
Virginia	571	61–1,145	1,108	491–1,373	1,342	1,035–1,463	1,473	1,359–1,620
Washington	111	54–161	157	105–198	192	150–243	254	200–312
US total	12,383	2,893–19,673	18,984	11,584–25,030	24,202	17,929–29,414	30,114	24,982–34,487

Pure warming scenarios assume long-term fixed warming levels, and make no predictions about the timing of ensuing SLR. Levels of committed SLR associated with each scenario are shown in Table S1. US totals include only the listed states and the District of Columbia.

Table S10. Coastal state and US total 2010 census populations living on land falling below future committed high tide lines under different emissions scenarios through 2050, assuming the inevitable collapse of the WAIS under any scenario (triggered case)

State	Population (in thousands) living below committed sea levels by scenario: median (white) and 17th–83rd percentile estimates (shaded)									
	Historical emissions		Historical + EIEE		RCP 2.6 through 2050		RCP 4.5 through 2050		RCP 6.0 through 2050	
Alaska	50	37–61	52	38–62	52	38–62	52	39–63	52	39–64
Alabama	59	32–87	62	36–90	63	36–90	64	38–92	64	40–94
California	1,835	1,126–2,539	1,922	1,221–2,627	1,936	1,237–2,641	1,975	1,281–2,682	1,967	1,336–2,732
Connecticut	182	102–263	191	111–272	193	112–274	197	116–278	196	115–277
Dist. of Columbia	15	6–24	17	7–25	17	7–25	18	7–25	18	8–25
Delaware	86	48–136	91	52–142	92	52–144	94	54–147	94	56–151
Florida	8,297	5,751–10,003	8,572	6,105–10,160	8,617	6,162–10,185	8,748	6,313–10,262	8,719	6,482–10,358
Georgia	314	159–393	329	180–397	331	184–398	337	194–400	336	206–402
Hawaii	272	201–323	280	211–329	281	212–330	285	217–332	284	222–336
Louisiana	1,740	1,383–2,025	1,779	1,427–2,056	1,785	1,434–2,061	1,802	1,455–2,075	1,798	1,450–2,072
Massachusetts	625	433–793	644	457–812	648	461–815	657	472–824	655	470–822
Maryland	257	148–377	269	160–390	272	162–392	278	168–397	276	166–396
Maine	33	17–53	35	19–55	35	19–56	36	20–57	36	20–57
Mississippi	106	43–179	114	51–188	116	52–189	120	56–194	119	55–193
North Carolina	368	242–508	383	259–529	386	261–532	393	269–542	391	267–540
New Hampshire	16	10–23	17	11–24	17	11–24	17	11–24	17	11–24
New Jersey	956	634–1,255	993	674–1,286	999	680–1,292	1,016	699–1,307	1,012	695–1,304
New York	1,917	1,051–2,711	2,010	1,148–2,800	2,025	1,164–2,815	2,069	1,211–2,858	2,059	1,201–2,849
Oregon	40	24–53	42	26–55	42	27–55	43	27–56	43	27–55
Pennsylvania	105	35–194	114	41–207	115	42–209	120	46–216	119	45–214
Rhode Island	52	27–78	54	29–81	55	30–81	56	31–83	56	31–83
South Carolina	501	292–678	525	318–694	529	323–696	540	335–704	538	332–702
Texas	618	332–1,027	661	363–1,080	669	368–1,089	692	382–1,115	687	379–1,109
Virginia	1,154	630–1,382	1,190	718–1,395	1,196	732–1,397	1,211	774–1,403	1,208	765–1,402
Washington	161	113–200	166	119–206	167	120–206	169	123–209	168	123–208
US total	19,758	12,876–25,363	20,512	13,779–25,961	20,634	13,927–26,058	20,989	14,339–26,344	20,912	14,252–26,281
										21,420

Projections assume zero additional emissions after emissions end dates listed, except for the historical + EIEE scenario. EIEE is the expected future emissions implied by existing energy infrastructure, as estimated in ref. 23. The years shown relate to emissions and associated commitments, not the timing of ensuing warming or SLR. Levels of committed warming and SLR associated with each scenario are shown in Table S2. US totals include only the listed states and the District of Columbia.

Table S11. Coastal state and US total 2010 census populations living on land falling below future committed high tide lines under different emissions scenarios through 2100, assuming the inevitable collapse of the WAIS under any scenario (triggered case)

Population (in thousands of persons) living below committed sea levels by scenario: median (white) and 17th–83rd percentile estimates (shaded)

State	RCP 2.6 through 2100	RCP 4.5 through 2100	RCP 6.0 through 2100	RCP 8.5 through 2100
Alaska	52	38–62	54	40–64
Alabama	63	37–91	68	41–96
California	1,947	1,249–2,652	2,070	1,382–2,776
Connecticut	194	113–275	208	125–289
District of Columbia	17	7–25	19	8–26
Delaware	92	53–145	100	59–155
Florida	8,654	6,209–10,206	9,014	6,633–10,443
Georgia	333	186–398	350	216–403
Hawaii	282	214–330	292	227–339
Louisiana	1,790	1,440–2,065	1,843	1,504–2,104
Massachusetts	650	464–818	677	497–846
Maryland	273	164–393	293	181–410
Maine	35	19–56	38	22–60
Mississippi	117	53–191	129	65–203
North Carolina	388	263–535	410	286–565
New Hampshire	17	11–24	18	12–25
New Jersey	1,003	685–1,296	1,054	741–1,342
New York	2,037	1,178–2,827	2,169	1,318–2,957
Oregon	42	27–55	45	30–58
Pennsylvania	117	43–211	129	53–231
Rhode Island	55	30–82	59	34–86
South Carolina	532	326–698	566	363–719
Texas	675	372–1,096	747	418–1,182
Virginia	1,200	744–1,399	1,248	858–1,416
Washington	167	121–207	174	130–215
US total	20,734	14,048–26,138	21,775	15,242–27,010
				23,338
				17,142–28,387
				27,379
				22,240–32,061

Projections assume zero additional emissions after emissions end dates listed. The years shown relate to emissions and associated commitments, not to the timing of ensuing warming or SLR. Levels of committed warming and SLR associated with each scenario are shown in Table S1. US totals include only the listed states and the District of Columbia.

Table S12. Coastal state and US total 2010 census populations living on land falling below future committed high tide lines under different fixed long-term warming scenarios, assuming the inevitable collapse of the WAIS under any scenario (triggered case)

Population (in thousands of persons) living below committed sea levels by scenario: median (white) and 17th–83rd percentile estimates (shaded)

State	1.5 °C warming	2 °C warming	3 °C warming	4 °C warming				
Alaska	53	40–64	56	43–67	61	50–72	74	63–84
Alabama	67	40–94	75	48–105	89	62–132	143	96–179
California	2,035	1,346–2,741	2,235	1,552–2,943	2,639	1,933–3,339	3,546	2,848–4,134
Connecticut	204	122–285	225	142–306	258	177–339	344	264–416
District of Columbia	19	8–26	21	11–27	24	15–32	33	24–39
Delaware	98	57–152	110	67–168	134	85–199	206	141–271
Florida	8,924	6,512–10,375	9,422	7,193–10,714	10,119	8,513–11,191	11,380	10,449–11,921
Georgia	345	208–402	368	250–410	395	322–426	430	402–444
Hawaii	290	223–336	305	244–350	334	286–376	396	353–426
Louisiana	1,828	1,485–2,094	1,909	1,591–2,152	2,050	1,772–2,257	2,304	2,106–2,461
Massachusetts	669	488–837	712	537–882	779	610–951	959	787–1,128
Maryland	287	176–405	320	205–431	375	254–472	483	387–583
Maine	37	21–59	42	25–64	50	31–72	73	51–96
Mississippi	126	62–199	146	78–218	186	112–244	252	203–265
North Carolina	403	279–556	439	313–602	514	372–671	693	544–805
New Hampshire	18	12–25	20	13–27	22	16–29	30	23–37
New Jersey	1,039	725–1,328	1,119	810–1,404	1,243	943–1,537	1,564	1,268–1,863
New York	2,130	1,276–2,918	2,338	1,514–3,130	2,671	1,876–3,481	3,550	2,735–4,285
Oregon	44	29–57	48	33–63	54	41–74	78	58–90
Pennsylvania	125	50–225	147	69–256	190	102–305	315	200–408
Rhode Island	58	33–85	65	39–92	76	50–104	106	77–135
South Carolina	556	353–713	608	410–746	684	511–803	825	709–908
Texas	726	404–1,156	847	482–1,309	1,078	659–1,640	1,795	1,208–2,231
Virginia	1,234	828–1,411	1,305	984–1,439	1,382	1,155–1,490	1,509	1,398–1,645
Washington	172	127–213	183	141–227	204	164–257	270	214–322
US total	21,487	14,903–26,756	23,064	16,796–28,132	25,611	20,112–30,496	31,358	26,608–35,175

Pure warming scenarios assume long-term fixed warming levels, and make no predictions about the timing of ensuing SLR. Levels of committed SLR associated with each scenario are shown in Table S1. US totals include only the listed states and the District of Columbia.