

Table 3SM.1: 3.4.2 Freshwater resources

Risk	Region	Metric (Unit)	Baseline Time Period against Which Change Measured	Socio-economic Scenario and Date	Baseline Global T above Pre-industrial	Climate Scenario Used	Transient (T) or Equilibrium (E)	Dynamic Model?	Projected Impact at 1.5°C above Pre-industrial	2°C	3°C	4°C	Projected Impact at Delta T (°C)	Delta T Relative to Pre-industrial	Delta T Relative to Baseline Temperature	Projected Impact (Reference Value)	Projected Impact (Unit)	Reference	GCM (e.g., MIROC5)	RCM	Future Period	Cited Part	
Water scarcity	Global	%	1980-2009	N/A	N/A	19GCM from the CMIP3 archive, MAGICC, SRES A1FI, RCP8.5, 2086-2115	N/A	Y	N/A	8	N/A	N/A	8	2	N/A	N/A	Million people	Gerten et al., 2013	19GCM from the CMIP3 archive	N/A	2086-2115	Table 1, Fig.4 (a)	
Water scarcity	Global	Million people (<1000m³ cap⁻¹ yr⁻¹)	1980-2009	N/A	N/A	19GCM from the CMIP3 archive, MAGICC, SRES A1FI, RCP8.5, 2086-2115	N/A	Y	N/A	1397	N/A	N/A	1397	2	N/A	Total 6012, affected 1267	Million people	Gerten et al., 2013	19GCM from the CMIP3 archive	N/A	2086-2115	Table 1	
Water scarcity	Europe	Million people (<1000m³ cap⁻¹ yr⁻¹)	1980-2009	N/A	N/A	19GCM from the CMIP3 archive, MAGICC, SRES A1FI, RCP8.5, 2086-2115	N/A	Y	N/A	118	N/A	N/A	118	2	N/A	Total 505, affected 110	Million people	Gerten et al., 2013	19GCM from the CMIP3 archive	N/A	2086-2115	Table 1	
Water scarcity	Asia	Million people (<1000m³ cap⁻¹ yr⁻¹)	1980-2009	N/A	N/A	19GCM from the CMIP3 archive, MAGICC, SRES A1FI, RCP8.5, 2086-2115	N/A	Y	N/A	Y	N/A	N/A	988	2	N/A	Total 3879, affected 870	Million people	Gerten et al., 2013	19GCM from the CMIP3 archive	N/A	2086-2115	Table 1	
Water scarcity	Africa	Million people (<1000m³ cap⁻¹ yr⁻¹)	1980-2009	N/A	N/A	19GCM from the CMIP3 archive, MAGICC, SRES A1FI, RCP8.5, 2086-2115	N/A	Y	N/A	115	N/A	N/A	115	2	N/A	Total 775, affected 115	Million people	Gerten et al., 2013	19GCM from the CMIP3 archive	N/A	2086-2115	Table 1	
Water scarcity	North America	Million people (<1000m³ cap⁻¹ yr⁻¹)	1980-2009	N/A	N/A	19GCM from the CMIP3 archive, MAGICC, SRES A1FI, RCP8.5, 2086-2115	N/A	Y	N/A	81	N/A	N/A	81	2	N/A	Total 479, affected 83	Million people	Gerten et al., 2013	19GCM from the CMIP3 archive	N/A	2086-2115	Table 1	
Water scarcity	South America	Million people (<1000m³ cap⁻¹ yr⁻¹)	1980-2009	N/A	N/A	19GCM from the CMIP3 archive, MAGICC, SRES A1FI, RCP8.5, 2086-2115	N/A	Y	N/A	82	N/A	N/A	82	2	N/A	Total 345, affected 77	Million people	Gerten et al., 2013	19GCM from the CMIP3 archive	N/A	2086-2115	Table 1	
Water scarcity	Oceania	Million people (<1000m³ cap⁻¹ yr⁻¹)	1980-2009	N/A	N/A	19GCM from the CMIP3 archive, MAGICC, SRES A1FI, RCP8.5, 2086-2115	N/A	Y	N/A	13	N/A	N/A	13	2	N/A	Total 29, affected 13	Million people	Gerten et al., 2013	19GCM from the CMIP3 archive	N/A	2086-2115	Table 1	
Water resources	Global	%	1980-2010	SSP2	0,7	Transition of RCP8.5, 2090-11 GHMs by 5 GCMs	T	Y	N/A	N/A	N/A	N/A	8	1,7	1	N/A	N/A	Schewe et al., 2014	HadGEM3-ES-IPSL-CM5A-LR-MIROC-ESM-CHEN-GFDL-ESM2M,NorESM1-M	N/A	2090	Table S1 (GCM) Table S2 (GHM)	
Water resources	Global	%	1980-2010	SSP2	0,7	Transition of RCP8.5, 2090-11 GHMs by 5 GCMs	T	Y	N/A	N/A	N/A	N/A	14	2,7	2	N/A	N/A	Schewe et al., 2014	HadISRM-ES-IPSL-CM5A-LR-MIROC-ESM-CHEN-GFDL-ESM2M,NorESM1-M	N/A	2090	Table S1 (GCM) Table S2 (GHM)	
Water scarcity, increased water resources stress	Global	Million people	1961-1990	SSP1	0,3	Transition of RCP2.6 in 2050s, 19 CMIP5 GCMs	E	N/A	1330	N/A	N/A	N/A	1330 (379-2997)	Around 1.6	Around 1.3	Population in 2050, total 8411, water stressed 3286	Million people	Arnell and Lloyd-Hughes, 2014	CSIRO-Mk3-6-0-FIO-ESM,GFDL-CM2,FGO-ESM2M,GISS-E2-H,GISS-E2-R,HadGEM2-A,MIROC3-2-T42,IPSL-CM4,UKMO-ESM1,UKMO-ESM2,MIROC3,MIROC5,MRI- CGCM3,NorESM1-M,NCAR-CCM3,ME,bcc-csm1-1,bcc-csm1-1-m	N/A	2070-2099	Table 2 Table 3 a) Fig.1 Supplementary Table 1	
Water scarcity, increased water resources stress	Global	Million people (<1000m³ cap⁻¹ yr⁻¹)	1961-1990	SSP1	0,3	Transition of RCP4.5 in 2050s, 19 CMIP5 GCMs	T	N/A	N/A	1514	N/A	N/A	N/A	1514 (\$810-2845)	Around 2	Around 1.7	Population in 2050, total 8411, water stressed 3286	Million people	Arnell and Lloyd-Hughes, 2014	CSIRO-Mk3-6-0-FIO-ESM,GFDL-CM2,FGO-ESM2M,GISS-E2-H,GISS-E2-R,HadGEM2-A,MIROC3-2-T42,IPSL-CM4,UKMO-ESM1,UKMO-ESM2,MIROC3,MIROC5,MRI- CGCM3,NorESM1-M,NCAR-CCM3,ME,bcc-csm1-1,bcc-csm1-1-m	N/A	2070-2099	Table 2 Table 3 a) Fig.1
Water scarcity, increased water resources stress	Global	Million people (<1000m³ cap⁻¹ yr⁻¹)	1961-1990	SSP2	0,3	Transition of RCP2.6 in 2050s, 19 CMIP5 GCMs	E	N/A	1575	N/A	N/A	N/A	1575 (473-3434)	Around 1.6	Around 1.3	Population in 2050, total 8245, water stressed 4079	Million people	Arnell and Lloyd-Hughes, 2014	CSIRO-Mk3-6-0-FIO-ESM,GFDL-CM2,FGO-ESM2M,GISS-E2-H,GISS-E2-R,HadGEM2-A,MIROC3-2-T42,IPSL-CM4,UKMO-ESM1,UKMO-ESM2,MIROC3,MIROC5,MRI- CGCM3,NorESM1-M,NCAR-CCM3,ME,bcc-csm1-1,bcc-csm1-1-m	N/A	2070-2099	Table 2 Table 3 a) Fig.1	
Water scarcity, increased water resources stress	Global	Million people (<1000m³ cap⁻¹ yr⁻¹)	1961-1990	SSP2	0,3	Transition of RCP4.5 in 2050s, 19 CMIP5 GCMs	T	N/A	N/A	1794	N/A	N/A	N/A	1794 (881-3239)	Around 2	Around 1.7	Population in 2050, total 8245, water stressed 4079	Million people	Arnell and Lloyd-Hughes, 2014	CSIRO-Mk3-6-0-FIO-ESM,GFDL-CM2,FGO-ESM2M,GISS-E2-H,GISS-E2-R,HadGEM2-A,MIROC3-2-T42,IPSL-CM4,UKMO-ESM1,UKMO-ESM2,MIROC3,MIROC5,MRI- CGCM3,NorESM1-M,NCAR-CCM3,ME,bcc-csm1-1,bcc-csm1-1-m	N/A	2070-2099	Table 2 Table 3 a) Fig.1

Risk	Region	Metric (Unit)	Baseline Time Period against Which Change Measured	Socio-economic Scenario and Date	Baseline Global T above Pre-industrial	Climate Scenario Used	Transient (T) or Equilibrium (E)	Dynamic Model?	Projected Impact at 1.5°C above Pre-Industrial	2°C	3°C	4°C	Projected Impact at Delta T(°C)	Delta T Relative to Pre-Industrial	Delta T Relative to Baseline Temperature	Projected Impact (Reference Value)	Projected Impact (Unit)	Reference	GCM (e.g., MIROC5)	RCM	Future Period	Cited Part
Water scarcity, increased water resources stress	Global	Million people (<1000m³cap-1yr-1)	1961-1990	SSP2	0,3	Transition of RCP2.6 in 2050s, 19 CMIP5 GCMs	E	N/A	1887	N/A	N/A	N/A	1887 (626-4088)	Around 1.6	Around 1.3	Population in 2050, total 10233, water stressed 4774	Million people	Arnell and Lloyd-Hughes, 2014	CSIRO-Mk3-3-0, FIO-ESM-GFDL-CM3, GFDL-ESM2, GFDL-ESM2M, GISS-E2-H, GISS-E2-R, HadGEM2-AD, HadGEM2-ES, IPSL-CM5A-LR, IPSL-CM5A-MR, MIROC-ESM, MIROC-ESM-CM, MIROC3, MIROC3.2, MIROC3.2-T, MIROC3.2-MR, CGCM3, NorESM1-M, NorESM1-ME, bcc-csm1-1, bcc-csm1-1-m	N/A	2070-2099	Table 2 Table 3 a) Fig.1
Water scarcity, increased water resources stress	Global	Million people (<1000m³cap-1yr-1)	1961-1990	SSP3	0,3	Transition of RCP4.5 in 2050s, 19 CMIP5 GCMs	T	N/A	N/A	2157	N/A	N/A	2157 (1037-3975)	Around 2	Around 1.7	Population in 2050, total 10233, water stressed 4774	Million people	Arnell and Lloyd-Hughes, 2014	CSIRO-Mk3-3-0, FIO-ESM-GFDL-CM3, GFDL-ESM2, GFDL-ESM2M, GISS-E2-H, GISS-E2-R, HadGEM2-AD, HadGEM2-ES, IPSL-CM5A-LR, IPSL-CM5A-MR, MIROC-ESM, MIROC-ESM-CM, MIROC3, MIROC3.2, MIROC3.2-T, MIROC3.2-MR, CGCM3, NorESM1-M, NorESM1-ME, bcc-csm1-1, bcc-csm1-1-m	N/A	2070-2099	Table 2 Table 3 a) Fig.1
Water scarcity, increased water resources stress	Global	Million people (<1000m³cap-1yr-1)	1961-1990	SSP4	0,3	Transition of RCP2.6 in 2050s, 19 CMIP5 GCMs	E	N/A	1656	N/A	N/A	N/A	1656 (508-3481)	Around 1.6	Around 1.3	Population in 2050, total 9368, water stressed 4236	Million people	Arnell and Lloyd-Hughes, 2014	CSIRO-Mk3-3-0, FIO-ESM-GFDL-CM3, GFDL-ESM2, GFDL-ESM2M, GISS-E2-H, GISS-E2-R, HadGEM2-AD, HadGEM2-ES, IPSL-CM5A-LR, IPSL-CM5A-MR, MIROC-ESM, MIROC-ESM-CM, MIROC3, MIROC3.2, MIROC3.2-T, MIROC3.2-MR, CGCM3, NorESM1-M, NorESM1-ME, bcc-csm1-1, bcc-csm1-1-m	N/A	2070-2099	Table 2 Table 3 a) Fig.1
Water scarcity, increased water resources stress	Global	Million people (<1000m³cap-1yr-1)	1961-1990	SSP4	0,3	Transition of RCP4.5 in 2050s, 19 CMIP5 GCMs	T	N/A	N/A	1867	N/A	N/A	1867 (884-3444)	Around 2	Around 1.7	Population in 2050, total 9368, water stressed 4236	Million people	Arnell and Lloyd-Hughes, 2014	CSIRO-Mk3-3-0, FIO-ESM-GFDL-CM3, GFDL-ESM2, GFDL-ESM2M, GISS-E2-H, GISS-E2-R, HadGEM2-AD, HadGEM2-ES, IPSL-CM5A-LR, IPSL-CM5A-MR, MIROC-ESM, MIROC-ESM-CM, MIROC3, MIROC3.2, MIROC3.2-T, MIROC3.2-MR, CGCM3, NorESM1-M, NorESM1-ME, bcc-csm1-1, bcc-csm1-1-m	N/A	2070-2099	Table 2 Table 3 a) Fig.1
Water scarcity, increased water resources stress	Global	Million people (<1000m³cap-1yr-1)	1961-1990	SSP5	0,3	Transition of RCP2.6 in 2050s, 19 CMIP5 GCMs	T	N/A	1375	N/A	N/A	N/A	1375 (418-3032)	Around 1.6	Around 1.3	Population in 2050, total 8508, water stressed 3350	Million people	Arnell and Lloyd-Hughes, 2014	CSIRO-Mk3-3-0, FIO-ESM-GFDL-CM3, GFDL-ESM2, GFDL-ESM2M, GISS-E2-H, GISS-E2-R, HadGEM2-AD, HadGEM2-ES, IPSL-CM5A-LR, IPSL-CM5A-MR, MIROC-ESM, MIROC-ESM-CM, MIROC3, MIROC3.2, MIROC3.2-T, MIROC3.2-MR, CGCM3, NorESM1-M, NorESM1-ME, bcc-csm1-1, bcc-csm1-1-m	N/A	2070-2099	Table 2 Table 3 a) Fig.1
Water scarcity, increased water resources stress	Global	Million people (<1000m³cap-1yr-1)	1961-1990	SSP5	0,3	Transition of RCP4.5 in 2050s, 19 CMIP5 GCMs	T	N/A	N/A	1566	N/A	N/A	1566 (854-2879)	Around 2	Around 1.7	Population in 2050, total 8508, water stressed 3350	Million people	Arnell and Lloyd-Hughes, 2014	CSIRO-Mk3-3-0, FIO-ESM-GFDL-CM3, GFDL-ESM2, GFDL-ESM2M, GISS-E2-H, GISS-E2-R, HadGEM2-AD, HadGEM2-ES, IPSL-CM5A-LR, IPSL-CM5A-MR, MIROC-ESM, MIROC-ESM-CM, MIROC3, MIROC3.2, MIROC3.2-T, MIROC3.2-MR, CGCM3, NorESM1-M, NorESM1-ME, bcc-csm1-1, bcc-csm1-1-m	N/A	2070-2099	Table 2 Table 3 a) Fig.1
Freshwater stress	Bahamas	FSI (freshwater stress index = PDI (population change index) x ACI (aridity change index))	1986-2005 (climatology), 2010 (population)	SSP1-5	0,6	20GCM, CMIP5, 2030, RCP8.5, SSP2	T	Y	1,27	N/A	N/A	N/A	1,27	1,5	0,9	0,34	Million people (2010)	Karnauskas et al., 2018	access1-0,access1-1,bcc-csm1-1,cesm1-1,cesm1-1-canm,cmrm-csm,cesm1-cm3-k3-6-0,gfdl-cm3,gfdl-esm3,gfdl-esm3-2,cc,hadgem2-es,ipsl-cm5a-es,ipsl-cm5a-es,ipsl-cm5a-ipsl-esm,miroc-esm,miroc3,miro3,rgm3	N/A	2100	Table 1
Freshwater stress	Bahamas	FSI (freshwater stress index = PDI (population change index) x ACI (aridity change index))	1986-2005 (climatology), 2010 (population)	SSP1-5	0,6	20GCM, CMIP5, 2030, RCP8.5, SSP2	T	Y	N/A	1,27	N/A	N/A	1,27	2	1,4	0,34	Million people (2010)	Karnauskas et al., 2018	access1-0,access1-1,bcc-csm1-1,cesm1-1,cesm1-1-canm,cmrm-csm,cesm1-cm3-k3-6-0,gfdl-cm3,gfdl-esm3,gfdl-esm3-2,cc,hadgem2-es,ipsl-cm5a-es,ipsl-cm5a-es,ipsl-cm5a-ipsl-esm,miroc-esm,miroc3,miro3,rgm3	N/A	2100	Table 1

Risk	Region	Metric (Unit)	Baseline Time Period against Which Change Measured	Socio-economic Scenario and Date	Baseline Global T above Pre-industrial	Climate Scenario Used	Transient (T) or Equilibrium (E)	Dynamic Model?	Projected Impact at 1.5°C above Pre-Industrial	2°C	3°C	4°C	Projected Impact at Delta T (°C)	Delta T Relative to Pre-Industrial	Delta T Relative to Baseline Temperature	Projected Impact (Reference Value)	Projected Impact (Unit)	Reference	GCM (e.g., MIROC5)	RCM	Future Period	Cited Part
Freshwater stress	Belize	FSI (freshwater stress index) + PC (population change index) × AC (aridity change index)	1986–2005 (climatology), 2010 (population)	SSP1-5	0,6	20GCM, CMIP5, 2030, RCP4.5, SSP2	T	Y	1,4	N/A	N/A	N/A	1,4	1,5	0,9	0,31	Million people (2010)	Karnauskas et al., 2018	access1-0,access1-3,bcc-csm1-1,cm1-1,cm1-1-mm,cmem1-cam5,cmrm-cm5,ciro-mk3-6-0,gfdl-cm3,gfdl-esm2-gfdl-esm2,esm2,es-2,cc,hadgem2-es,inmcm3,ipsl-cm5a,lr,ipsl-cm5a-mm,miroc-esm,miroc-esm-,chem,miroc5,mri-cgcm3	N/A	2100	Table 1
Freshwater stress	Belize	FSI (freshwater stress index) + PC (population change index) × AC (aridity change index)	1986–2005 (climatology), 2010 (population)	SSP1-5	0,6	20GCM, CMIP5, 2030, RCP4.5, SSP2	T	Y	N/A	1,41	N/A	N/A	1,41	2	1,4	0,31	Million people (2010)	Karnauskas et al., 2018	access1-0,access1-3,bcc-csm1-1,cm1-1,cm1-1-mm,cmem1-cam5,cmrm-cm5,ciro-mk3-6-0,gfdl-esm2,gfdl-esm2-gfdl-esm2,esm2,es-2,cc,hadgem2-es,inmcm3,ipsl-cm5a,lr,ipsl-cm5a-mm,miroc-esm,miroc-esm-,chem,miroc5,mri-cgcm3	N/A	2100	Table 1
Freshwater stress	Cabo Verde	FSI (freshwater stress index) + PC (population change index) × AC (aridity change index)	1986–2005 (climatology), 2010 (population)	SSP1-5	0,6	20GCM, CMIP5, 2030, RCP4.5, SSP2	T	Y	1,18	N/A	N/A	N/A	1,18	1,5	0,9	0,5	Million people (2010)	Karnauskas et al., 2018	access1-0,access1-3,bcc-csm1-1,cm1-1,cm1-1-mm,cmem1-cam5,cmrm-cm5,ciro-mk3-6-0,gfdl-esm2,gfdl-esm2-gfdl-esm2,esm2,es-2,cc,hadgem2-es,inmcm3,ipsl-cm5a,lr,ipsl-cm5a-mm,miroc-esm,miroc-esm-,chem,miroc5,mri-cgcm3	N/A	2100	Table 1
Freshwater stress	Cabo Verde	FSI (freshwater stress index) + PC (population change index) × AC (aridity change index)	1986–2005 (climatology), 2010 (population)	SSP1-5	0,6	20GCM, CMIP5, 2030, RCP4.5, SSP2	T	Y	N/A	1,2	N/A	N/A	1,2	2	1,4	0,5	Million people (2010)	Karnauskas et al., 2018	access1-0,access1-3,bcc-csm1-1,cm1-1,cm1-1-mm,cmem1-cam5,cmrm-cm5,ciro-mk3-6-0,gfdl-esm2,gfdl-esm2-gfdl-esm2,esm2,es-2,cc,hadgem2-es,inmcm3,ipsl-cm5a,lr,ipsl-cm5a-mm,miroc-esm,miroc-esm-,chem,miroc5,mri-cgcm3	N/A	2100	Table 1
Freshwater stress	Comoros	FSI (freshwater stress index) + PC (population change index) × AC (aridity change index)	1986–2005 (climatology), 2010 (population)	SSP1-5	0,6	20GCM, CMIP5, 2030, RCP4.5, SSP2	T	Y	1,43	N/A	N/A	N/A	1,43	1,5	0,9	0,73	Million people (2010)	Karnauskas et al., 2018	access1-0,access1-3,bcc-csm1-1,cm1-1,cm1-1-mm,cmem1-cam5,cmrm-cm5,ciro-mk3-6-0,gfdl-esm2,gfdl-esm2-gfdl-esm2,esm2,es-2,cc,hadgem2-es,inmcm3,ipsl-cm5a,lr,ipsl-cm5a-mm,miroc-esm,miroc-esm-,chem,miroc5,mri-cgcm3	N/A	2100	Table 1
Freshwater stress	Comoros	FSI (freshwater stress index) + PC (population change index) × AC (aridity change index)	1986–2005 (climatology), 2010 (population)	SSP1-5	0,6	20GCM, CMIP5, 2030, RCP4.5, SSP2	T	Y	N/A	1,44	N/A	N/A	1,44	2	1,4	0,73	Million people (2010)	Karnauskas et al., 2018	access1-0,access1-3,bcc-csm1-1,cm1-1,cm1-1-mm,cmem1-cam5,cmrm-cm5,ciro-mk3-6-0,gfdl-esm2,gfdl-esm2-gfdl-esm2,esm2,es-2,cc,hadgem2-es,inmcm3,ipsl-cm5a,lr,ipsl-cm5a-mm,miroc-esm,miroc-esm-,chem,miroc5,mri-cgcm3	N/A	2100	Table 1
Freshwater stress	Cuba	FSI (freshwater stress index) + PC (population change index) × AC (aridity change index)	1986–2005 (climatology), 2010 (population)	SSP1-5	0,6	20GCM, CMIP5, 2030, RCP4.5, SSP2	T	Y	0,98	N/A	N/A	N/A	0,98	1,5	0,9	11,26	Million people (2010)	Karnauskas et al., 2018	access1-0,access1-3,bcc-csm1-1,cm1-1,cm1-1-mm,cmem1-cam5,cmrm-cm5,ciro-mk3-6-0,gfdl-esm2,gfdl-esm2-gfdl-esm2,esm2,es-2,cc,hadgem2-es,inmcm3,ipsl-cm5a,lr,ipsl-cm5a-mm,miroc-esm,miroc-esm-,chem,miroc5,mri-cgcm3	N/A	2100	Table 1
Freshwater stress	Cuba	FSI (freshwater stress index) + PC (population change index) × AC (aridity change index)	1986–2005 (climatology), 2010 (population)	SSP1-5	0,6	20GCM, CMIP5, 2030, RCP4.5, SSP2	T	Y	N/A	0,99	N/A	N/A	0,99	2	1,4	11,26	Million people (2010)	Karnauskas et al., 2018	access1-0,access1-3,bcc-csm1-1,cm1-1,cm1-1-mm,cmem1-cam5,cmrm-cm5,ciro-mk3-6-0,gfdl-esm2,gfdl-esm2-gfdl-esm2,esm2,es-2,cc,hadgem2-es,inmcm3,ipsl-cm5a,lr,ipsl-cm5a-mm,miroc-esm,miroc-esm-,chem,miroc5,mri-cgcm3	N/A	2100	Table 1

Risk	Region	Metric (Unit)	Baseline Time Period against Which Change Measured	Socio-economic Scenario and Date	Baseline Global T above Pre-industrial	Climate Scenario Used	Transient (T) or Equilibrium (E)	Dynamic Model?	Projected Impact at 1.5°C above Pre-Industrial	2°C	3°C	4°C	Projected Impact at Delta T(°C)	Delta T Relative to Pre-Industrial	Delta T Relative to Baseline Temperature	Projected Impact (Reference Value)	Projected Impact (Unit)	Reference	GCM (e.g., MIROC5)	RCM	Future Period	Cited Part
Freshwater stress	Dominican Republic	FSI (freshwater stress index) = PCI (population change index) + ACI (aridity change index)	1986–2005 (climatology), 2010 (population)	SSP1-5	0,6	20GCM, CMIP5, RCP8.5, SSP2	T	Y	1,28	N/A	N/A	N/A	1,28	1,5	0,9	9,93	Million people (2010)	Karnauskas et al., 2018	access1-0,access1-3,bcc-csm1-1-m,cesm1-cam3,cmrm-cms,ciro-mk3-6-gfdl-cm3,gfdl-esm2-gfdl-esm2m-giss-e2-r,hadgem2-cc,hadgem2-es,immrm4-ipsl-cm5a-lr,jp1-cm2-m,miroc-esm,miroc-esm,chem,miroc5,mri-rgm3	N/A	2100	Table 1
Freshwater stress	Dominican Republic	FSI (freshwater stress index) = PCI (population change index) + ACI (aridity change index)	1986–2005 (climatology), 2010 (population)	SSP1-5	0,6	20GCM, CMIP5, RCP8.5, SSP2	T	Y	N/A	1,36	N/A	N/A	1,36	2	1,4	9,93	Million people (2010)	Karnauskas et al., 2018	access1-0,access1-3,bcc-csm1-1,cm1-1-m,cesm1-cam3,cmrm-cms,ciro-mk3-6-gfdl-cm3,gfdl-esm2-gfdl-esm2m-giss-e2-r,hadgem2-cc,hadgem2-es,immrm4-ipsl-cm5a-lr,jp1-cm2-m,miroc-esm,miroc-esm,chem,miroc5,mri-rgm3	N/A	2100	Table 1
Freshwater stress	Fiji	FSI (freshwater stress index) = PCI (population change index) + ACI (aridity change index)	1986–2005 (climatology), 2010 (population)	SSP1-5	0,6	20GCM, CMIP5, RCP8.5, SSP2	T	Y	1,13	N/A	N/A	N/A	1,13	1,5	0,9	8,86	Million people (2010)	Karnauskas et al., 2018	access1-0,access1-3,bcc-csm1-1,cm1-1-m,cesm1-cam3,cmrm-cms,ciro-mk3-6-gfdl-cm3,gfdl-esm2-gfdl-esm2m-giss-e2-r,hadgem2-cc,hadgem2-es,immrm4-ipsl-cm5a-lr,jp1-cm2-m,miroc-esm,miroc-esm,chem,miroc5,mri-rgm3	N/A	2100	Table 1
Freshwater stress	Fiji	FSI (freshwater stress index) = PCI (population change index) + ACI (aridity change index)	1986–2005 (climatology), 2010 (population)	SSP1-5	0,6	20GCM, CMIP5, RCP8.5, SSP2	T	Y	N/A	1,16	N/A	N/A	1,16	2	1,4	8,86	Million people (2010)	Karnauskas et al., 2018	access1-0,access1-3,bcc-csm1-1,cm1-1-m,cesm1-cam3,cmrm-cms,ciro-mk3-6-gfdl-cm3,gfdl-esm2-gfdl-esm2m-giss-e2-r,hadgem2-cc,hadgem2-es,immrm4-ipsl-cm5a-lr,jp1-cm2-m,miroc-esm,miroc-esm,chem,miroc5,mri-rgm3	N/A	2100	Table 1
Freshwater stress	Grenada	FSI (freshwater stress index) = PCI (population change index) + ACI (aridity change index)	1986–2005 (climatology), 2010 (population)	SSP1-5	0,6	20GCM, CMIP5, RCP8.5, SSP2	T	Y	1,16	N/A	N/A	N/A	1,16	1,5	0,9	0,1	Million people (2010)	Karnauskas et al., 2018	access1-0,access1-3,bcc-csm1-1,cm1-1-m,cesm1-cam3,cmrm-cms,ciro-mk3-6-gfdl-cm3,gfdl-esm2-gfdl-esm2m-giss-e2-r,hadgem2-cc,hadgem2-es,immrm4-ipsl-cm5a-lr,jp1-cm2-m,miroc-esm,miroc-esm,chem,miroc5,mri-rgm3	N/A	2100	Table 1
Freshwater stress	Grenada	FSI (freshwater stress index) = PCI (population change index) + ACI (aridity change index)	1986–2005 (climatology), 2010 (population)	SSP1-5	0,6	20GCM, CMIP5, RCP8.5, SSP2	T	Y	N/A	1,21	N/A	N/A	1,21	2	1,4	0,1	Million people (2010)	Karnauskas et al., 2018	access1-0,access1-3,bcc-csm1-1,cm1-1-m,cesm1-cam3,cmrm-cms,ciro-mk3-6-gfdl-cm3,gfdl-esm2-gfdl-esm2m-giss-e2-r,hadgem2-cc,hadgem2-es,immrm4-ipsl-cm5a-lr,jp1-cm2-m,miroc-esm,miroc-esm,chem,miroc5,mri-rgm3	N/A	2100	Table 1
Freshwater stress	Guinea-Bissau	FSI (freshwater stress index) = PCI (population change index) + ACI (aridity change index)	1986–2005 (climatology), 2010 (population)	SSP1-5	0,6	20GCM, CMIP5, RCP8.5, SSP2	T	Y	1,51	N/A	N/A	N/A	1,51	1,5	0,9	1,52	Million people (2010)	Karnauskas et al., 2018	access1-0,access1-3,bcc-csm1-1,cm1-1-m,cesm1-cam3,cmrm-cms,ciro-mk3-6-gfdl-cm3,gfdl-esm2-gfdl-esm2m-giss-e2-r,hadgem2-cc,hadgem2-es,immrm4-ipsl-cm5a-lr,jp1-cm2-m,miroc-esm,miroc-esm,chem,miroc5,mri-rgm3	N/A	2100	Table 1
Freshwater stress	Guinea-Bissau	FSI (freshwater stress index) = PCI (population change index) + ACI (aridity change index)	1986–2005 (climatology), 2010 (population)	SSP1-5	0,6	20GCM, CMIP5, RCP8.5, SSP2	T	Y	N/A	1,5	N/A	N/A	1,5	2	1,4	1,52	Million people (2010)	Karnauskas et al., 2018	access1-0,access1-3,bcc-csm1-1,cm1-1-m,cesm1-cam3,cmrm-cms,ciro-mk3-6-gfdl-cm3,gfdl-esm2-gfdl-esm2m-giss-e2-r,hadgem2-cc,hadgem2-es,immrm4-ipsl-cm5a-lr,jp1-cm2-m,miroc-esm,miroc-esm,chem,miroc5,mri-rgm3	N/A	2100	Table 1

Risk	Region	Metric (Unit)	Baseline Time Period against Which Change Measured	Socio-economic Scenario and Date	Baseline Global T above Pre-industrial	Climate Scenario Used	Transient (T) or Equilibrium (E)	Dynamic Model?	Projected Impact at 1.5°C above Pre-Industrial	2°C	3°C	4°C	Projected Impact at Delta T(°C)	Delta T Relative to Pre-Industrial	Delta T Relative to Baseline Temperature	Projected Impact (Reference Value)	Projected Impact (Unit)	Reference	GCM (e.g., MIROC5)	RCM	Future Period	Cited Part
Freshwater stress	Guyana	FSI (freshwater stress index) = PCI (population change index) + AC (aridity change index)	1986–2005 (climatology), 2010 (population)	SSP1-5	0,6	20GCM, CMIP5, RCP8.5, SSP2	T	Y	1,11	N/A	N/A	N/A	1,11	1,5	0,9	0,75	Million people (2010)	Karnauskas et al., 2018	access1-0,access1-3,bcc-csm1-1-m,cesm1-cam1-cmrm-cms,csiro-mk3-6-gfdl-cm3,gfdl-cm3-2,gfdl-esm2m,gfdl-esm2m-giss-e2-r,hadgem2-cc,hadgem2-es,immcm4-ipsl-cm5a-lr,jp1-cm2-m,miroc-esm,miroc-esm,chem,miroc5,mri-cgcm3	N/A	2100	Table 1
Freshwater stress	Guyana	FSI (freshwater stress index) = PCI (population change index) + AC (aridity change index)	1986–2005 (climatology), 2010 (population)	SSP1-5	0,6	20GCM, CMIP5, RCP8.5, SSP2	T	Y	N/A	1,12	N/A	N/A	1,12	2	1,4	0,75	Million people (2010)	Karnauskas et al., 2018	access1-0,access1-3,bcc-csm1-1,cesm1-cam1-cmrm-cms,csiro-mk3-6-gfdl-cm3,gfdl-cm3-2,gfdl-esm2m,gfdl-esm2m-giss-e2-r,hadgem2-cc,hadgem2-es,immcm4-ipsl-cm5a-lr,jp1-cm2-m,miroc-esm,miroc-esm,chem,miroc5,mri-cgcm3	N/A	2100	Table 1
Freshwater stress	Haiti	FSI (freshwater stress index) = PCI (population change index) + AC (aridity change index)	1986–2005 (climatology), 2010 (population)	SSP1-5	0,6	20GCM, CMIP5, RCP8.5, SSP2	T	Y	1,25	N/A	N/A	N/A	1,25	1,5	0,9	9,99	Million people (2010)	Karnauskas et al., 2018	access1-0,access1-3,bcc-csm1-1,cesm1-cam1-cmrm-cms,csiro-mk3-6-gfdl-cm3,gfdl-cm3-2,gfdl-esm2m,gfdl-esm2m-giss-e2-r,hadgem2-cc,hadgem2-es,immcm4-ipsl-cm5a-lr,jp1-cm2-m,miroc-esm,miroc-esm,chem,miroc5,mri-cgcm3	N/A	2100	Table 1
Freshwater stress	Haiti	FSI (freshwater stress index) = PCI (population change index) + AC (aridity change index)	1986–2005 (climatology), 2010 (population)	SSP1-5	0,6	20GCM, CMIP5, RCP8.5, SSP2	T	Y	N/A	1,31	N/A	N/A	1,31	2	1,4	9,99	Million people (2010)	Karnauskas et al., 2018	access1-0,access1-3,bcc-csm1-1,cesm1-cam1-cmrm-cms,csiro-mk3-6-gfdl-cm3,gfdl-cm3-2,gfdl-esm2m,gfdl-esm2m-giss-e2-r,hadgem2-cc,hadgem2-es,immcm4-ipsl-cm5a-lr,jp1-cm2-m,miroc-esm,miroc-esm,chem,miroc5,mri-cgcm3	N/A	2100	Table 1
Freshwater stress	Jamaica	FSI (freshwater stress index) = PCI (population change index) + AC (aridity change index)	1986–2005 (climatology), 2010 (population)	SSP1-5	0,6	20GCM, CMIP5, RCP8.5, SSP2	T	Y	1,09	N/A	N/A	N/A	1,09	1,5	0,9	2,74	Million people (2010)	Karnauskas et al., 2018	access1-0,access1-3,bcc-csm1-1,cesm1-cam1-cmrm-cms,csiro-mk3-6-gfdl-cm3,gfdl-cm3-2,gfdl-esm2m,gfdl-esm2m-giss-e2-r,hadgem2-cc,hadgem2-es,immcm4-ipsl-cm5a-lr,jp1-cm2-m,miroc-esm,miroc-esm,chem,miroc5,mri-cgcm3	N/A	2100	Table 1
Freshwater stress	Jamaica	FSI (freshwater stress index) = PCI (population change index) + AC (aridity change index)	1986–2005 (climatology), 2010 (population)	SSP1-5	0,6	20GCM, CMIP5, RCP8.5, SSP2	T	Y	N/A	1,13	N/A	N/A	1,13	2	1,4	2,74	Million people (2010)	Karnauskas et al., 2018	access1-0,access1-3,bcc-csm1-1,cesm1-cam1-cmrm-cms,csiro-mk3-6-gfdl-cm3,gfdl-cm3-2,gfdl-esm2m,gfdl-esm2m-giss-e2-r,hadgem2-cc,hadgem2-es,immcm4-ipsl-cm5a-lr,jp1-cm2-m,miroc-esm,miroc-esm,chem,miroc5,mri-cgcm3	N/A	2100	Table 1
Freshwater stress	Maldives	FSI (freshwater stress index) = PCI (population change index) + AC (aridity change index)	1986–2005 (climatology), 2010 (population)	SSP1-5	0,6	20GCM, CMIP5, RCP8.5, SSP2	T	Y	1,25	N/A	N/A	N/A	1,25	1,5	0,9	0,32	Million people (2010)	Karnauskas et al., 2018	access1-0,access1-3,bcc-csm1-1,cesm1-cam1-cmrm-cms,csiro-mk3-6-gfdl-cm3,gfdl-cm3-2,gfdl-esm2m,gfdl-esm2m-giss-e2-r,hadgem2-cc,hadgem2-es,immcm4-ipsl-cm5a-lr,jp1-cm2-m,miroc-esm,miroc-esm,chem,miroc5,mri-cgcm3	N/A	2100	Table 1
Freshwater stress	Maldives	FSI (freshwater stress index) = PCI (population change index) + AC (aridity change index)	1986–2005 (climatology), 2010 (population)	SSP1-5	0,6	20GCM, CMIP5, RCP8.5, SSP2	T	Y	N/A	1,22	N/A	N/A	1,22	2	1,4	0,32	Million people (2010)	Karnauskas et al., 2018	access1-0,access1-3,bcc-csm1-1,cesm1-cam1-cmrm-cms,csiro-mk3-6-gfdl-cm3,gfdl-cm3-2,gfdl-esm2m,gfdl-esm2m-giss-e2-r,hadgem2-cc,hadgem2-es,immcm4-ipsl-cm5a-lr,jp1-cm2-m,miroc-esm,miroc-esm,chem,miroc5,mri-cgcm3	N/A	2100	Table 1

Risk	Region	Metric (Unit)	Baseline Time Period against Which Change Measured	Socio-economic Scenario and Date	Baseline Global T above Pre-industrial	Climate Scenario Used	Transient (T) or Equilibrium (E)	Dynamic Model?	Projected Impact at 1.5°C above Pre-Industrial	2°C	3°C	4°C	Projected Impact at Delta T (°C)	Delta T Relative to Pre-Industrial	Delta T Relative to Baseline Temperature	Projected Impact (Reference Value)	Projected Impact (Unit)	Reference	GCM (e.g., MIROC5)	RCM	Future Period	Cited Part
Freshwater stress	Mauritius	FSI (freshwater stress index) + PC (population change index) + AC (aridity change index)	1986–2005 (climatology), 2010 (population)	SSP1-5	0.6	20GCM, CMIP5, 2030, RCP4.5, SSP2	T	Y	1.13	N/A	N/A	N/A	1.13	1.5	0.9	1.3	Million people (2010)	Karnauskas et al., 2018	access1-0,access1-3,bcc- cm1-1,cm1-1- m,cesm1-cam5,cmr- cm5,ciso-mk3-6-0,gfdl- cm3,gfdl-esm2-gfdl- esm2m,gfdl-e2- r,hadgem2-cc,hadgem2- es,inmcm3,ipsl-cm5a- lr,ipsl-cm5a-mr,miroc- esm,miroc-esm-, chen,miroc5,mri-cgcm3	N/A	2100	Table 1
Freshwater stress	Mauritius	FSI (freshwater stress index) + PC (population change index) + AC (aridity change index)	1986–2005 (climatology), 2010 (population)	SSP1-5	0.6	20GCM, CMIP5, 2030, RCP4.5, SSP2	T	Y	N/A	1.17	N/A	N/A	1.17	2	1.4	1.3	Million people (2010)	Karnauskas et al., 2018	access1-0,access1-3,bcc- cm1-1,cm1-1- m,cesm1-cam5,cmr- cm5,ciso-mk3-6-0,gfdl- cm3,gfdl-esm2-gfdl- esm2m,gfdl-e2- r,hadgem2-cc,hadgem2- es,inmcm3,ipsl-cm5a- lr,ipsl-cm5a-mr,miroc- esm,miroc-esm-, chen,miroc5,mri-cgcm3	N/A	2100	Table 1
Freshwater stress	Micronesia	FSI (freshwater stress index) + PC (population change index) + AC (aridity change index)	1986–2005 (climatology), 2010 (population)	SSP1-5	0.6	20GCM, CMIP5, 2030, RCP4.5, SSP2	T	Y	1.03	N/A	N/A	N/A	1.03	1.5	0.9	0.11	Million people (2010)	Karnauskas et al., 2018	access1-0,access1-3,bcc- cm1-1,cm1-1- m,cesm1-cam5,cmr- cm5,ciso-mk3-6-0,gfdl- cm3,gfdl-esm2-gfdl- esm2m,gfdl-e2- r,hadgem2-cc,hadgem2- es,inmcm3,ipsl-cm5a- lr,ipsl-cm5a-mr,miroc- esm,miroc-esm-, chen,miroc5,mri-cgcm3	N/A	2100	Table 1
Freshwater stress	Micronesia	FSI (freshwater stress index) + PC (population change index) + AC (aridity change index)	1986–2005 (climatology), 2010 (population)	SSP1-5	0.6	20GCM, CMIP5, 2030, RCP4.5, SSP2	T	Y	N/A	1.03	N/A	N/A	1.03	2	1.4	0.11	Million people (2010)	Karnauskas et al., 2018	access1-0,access1-3,bcc- cm1-1,cm1-1- m,cesm1-cam5,cmr- cm5,ciso-mk3-6-0,gfdl- cm3,gfdl-esm2-gfdl- esm2m,gfdl-e2- r,hadgem2-cc,hadgem2- es,inmcm3,ipsl-cm5a- lr,ipsl-cm5a-mr,miroc- esm,miroc-esm-, chen,miroc5,mri-cgcm3	N/A	2100	Table 1
Freshwater stress	Papua New Guinea	FSI (freshwater stress index) + PC (population change index) + AC (aridity change index)	1986–2005 (climatology), 2010 (population)	SSP1-5	0.6	20GCM, CMIP5, 2030, RCP4.5, SSP2	T	Y	1.37	N/A	N/A	N/A	1.37	1.5	0.9	6.86	Million people (2010)	Karnauskas et al., 2018	access1-0,access1-3,bcc- cm1-1,cm1-1- m,cesm1-cam5,cmr- cm5,ciso-mk3-6-0,gfdl- cm3,gfdl-esm2-gfdl- esm2m,gfdl-e2- r,hadgem2-cc,hadgem2- es,inmcm3,ipsl-cm5a- lr,ipsl-cm5a-mr,miroc- esm,miroc-esm-, chen,miroc5,mri-cgcm3	N/A	2100	Table 1
Freshwater stress	Papua New Guinea	FSI (freshwater stress index) + PC (population change index) + AC (aridity change index)	1986–2005 (climatology), 2010 (population)	SSP1-5	0.6	20GCM, CMIP5, 2030, RCP4.5, SSP2	T	Y	N/A	1.37	N/A	N/A	1.37	2	1.4	6.86	Million people (2010)	Karnauskas et al., 2018	access1-0,access1-3,bcc- cm1-1,cm1-1- m,cesm1-cam5,cmr- cm5,ciso-mk3-6-0,gfdl- cm3,gfdl-esm2-gfdl- esm2m,gfdl-e2- r,hadgem2-cc,hadgem2- es,inmcm3,ipsl-cm5a- lr,ipsl-cm5a-mr,miroc- esm,miroc-esm-, chen,miroc5,mri-cgcm3	N/A	2100	Table 1
Freshwater stress	St. Lucia	FSI (freshwater stress index) + PC (population change index) + AC (aridity change index)	1986–2005 (climatology), 2010 (population)	SSP1-5	0.6	20GCM, CMIP5, 2030, RCP4.5, SSP2	T	Y	1.23	N/A	N/A	N/A	1.23	1.5	0.9	0.17	Million people (2010)	Karnauskas et al., 2018	access1-0,access1-3,bcc- cm1-1,cm1-1- m,cesm1-cam5,cmr- cm5,ciso-mk3-6-0,gfdl- cm3,gfdl-esm2-gfdl- esm2m,gfdl-e2- r,hadgem2-cc,hadgem2- es,inmcm3,ipsl-cm5a- lr,ipsl-cm5a-mr,miroc- esm,miroc-esm-, chen,miroc5,mri-cgcm3	N/A	2100	Table 1
Freshwater stress	St. Lucia	FSI (freshwater stress index) + PC (population change index) + AC (aridity change index)	1986–2005 (climatology), 2010 (population)	SSP1-5	0.6	20GCM, CMIP5, 2030, RCP4.5, SSP2	T	Y	N/A	1.27	N/A	N/A	1.27	2	1.4	0.17	Million people (2010)	Karnauskas et al., 2018	access1-0,access1-3,bcc- cm1-1,cm1-1- m,cesm1-cam5,cmr- cm5,ciso-mk3-6-0,gfdl- cm3,gfdl-esm2-gfdl- esm2m,gfdl-e2- r,hadgem2-cc,hadgem2- es,inmcm3,ipsl-cm5a- lr,ipsl-cm5a-mr,miroc- esm,miroc-esm-, chen,miroc5,mri-cgcm3	N/A	2100	Table 1

Risk	Region	Metric (Unit)	Baseline Time Period against Which Change Measured	Socio-economic Scenario and Date	Baseline Global T above Pre-industrial	Climate Scenario Used	Transient (T) or Equilibrium (E)	Dynamic Model?	Projected Impact at 1.5°C above Pre-Industrial	2°C	3°C	4°C	Projected Impact at Delta T (°C)	Delta T Relative to Pre-Industrial	Delta T Relative to Baseline Temperature	Projected Impact (Reference Value)	Projected Impact (Unit)	Reference	GCM (e.g., MIROC5)	RCM	Future Period	Cited Part
Freshwater stress	St. Vincent & Grenadines	FSI (freshwater stress index) + PG (population change index) + AO (aridity change index)	1986–2005 (climatology), 2010 (population)	SSP1-5	0.6	20GCM, CMIP5, 2030, RCP4.5, SSP2	T	Y	1.06	N/A	N/A	N/A	1.06	1.5	0.9	0.11	Million people (2010)	Karnauskas et al., 2018	access1-0,access1-3,bcc- cm1-1,cm1-1- m,cesm1-cam5,cmr- cm5,ciso-mk3-6-0,gfdl- cm3,gfdl-esm2-gfdl- esm2m,gfdl-e2- r,hadgem2-cc,hadgem2- es,inmcm3,ipsl-cm5a- lr,ipsl-cm5a-mr,miroc- esm,miroc-esm-, chen,miroc5,mri-gcm3	N/A	2100	Table 1
Freshwater stress	St. Vincent & Grenadines	FSI (freshwater stress index) + PG (population change index) + AO (aridity change index)	1986–2005 (climatology), 2010 (population)	SSP1-5	0.6	20GCM, CMIP5, 2030, RCP4.5, SSP2	T	Y	N/A	1.14	N/A	N/A	1.11	2	1.4	0.11	Million people (2010)	Karnauskas et al., 2018	access1-0,access1-3,bcc- cm1-1,cm1-1- m,cesm1-cam5,cmr- cm5,ciso-mk3-6-0,gfdl- cm3,gfdl-esm2-gfdl- esm2m,gfdl-e2- r,hadgem2-cc,hadgem2- es,inmcm3,ipsl-cm5a- lr,ipsl-cm5a-mr,miroc- esm,miroc-esm-, chen,miroc5,mri-gcm3	N/A	2100	Table 1
Freshwater stress	Samoa	FSI (freshwater stress index) + PG (population change index) + AO (aridity change index)	1986–2005 (climatology), 2010 (population)	SSP1-5	0.6	20GCM, CMIP5, 2030, RCP4.5, SSP2	T	Y	1.02	N/A	N/A	N/A	1.02	1.5	0.9	0.18	Million people (2010)	Karnauskas et al., 2018	access1-0,access1-3,bcc- cm1-1,cm1-1- m,cesm1-cam5,cmr- cm5,ciso-mk3-6-0,gfdl- cm3,gfdl-esm2-gfdl- esm2m,gfdl-e2- r,hadgem2-cc,hadgem2- es,inmcm3,ipsl-cm5a- lr,ipsl-cm5a-mr,miroc- esm,miroc-esm-, chen,miroc5,mri-gcm3	N/A	2100	Table 1
Freshwater stress	Samoa	FSI (freshwater stress index) + PG (population change index) + AO (aridity change index)	1986–2005 (climatology), 2010 (population)	SSP1-5	0.6	20GCM, CMIP5, 2030, RCP4.5, SSP2	T	Y	N/A	1.06	N/A	N/A	1.06	2	1.4	0.18	Million people (2010)	Karnauskas et al., 2018	access1-0,access1-3,bcc- cm1-1,cm1-1- m,cesm1-cam5,cmr- cm5,ciso-mk3-6-0,gfdl- cm3,gfdl-esm2-gfdl- esm2m,gfdl-e2- r,hadgem2-cc,hadgem2- es,inmcm3,ipsl-cm5a- lr,ipsl-cm5a-mr,miroc- esm,miroc-esm-, chen,miroc5,mri-gcm3	N/A	2100	Table 1
Freshwater stress	Sao Tome & Principe	FSI (freshwater stress index) + PG (population change index) + AO (aridity change index)	1986–2005 (climatology), 2010 (population)	SSP1-5	0.6	20GCM, CMIP5, 2030, RCP4.5, SSP2	T	Y	1.17	N/A	N/A	N/A	1.17	1.5	0.9	0.17	Million people (2010)	Karnauskas et al., 2018	access1-0,access1-3,bcc- cm1-1,cm1-1- m,cesm1-cam5,cmr- cm5,ciso-mk3-6-0,gfdl- cm3,gfdl-esm2-gfdl- esm2m,gfdl-e2- r,hadgem2-cc,hadgem2- es,inmcm3,ipsl-cm5a- lr,ipsl-cm5a-mr,miroc- esm,miroc-esm-, chen,miroc5,mri-gcm3	N/A	2100	Table 1
Freshwater stress	Sao Tome & Principe	FSI (freshwater stress index) + PG (population change index) + AO (aridity change index)	1986–2005 (climatology), 2010 (population)	SSP1-5	0.6	20GCM, CMIP5, 2030, RCP4.5, SSP2	T	Y	N/A	1.17	N/A	N/A	1.17	2	1.4	0.17	Million people (2010)	Karnauskas et al., 2018	access1-0,access1-3,bcc- cm1-1,cm1-1- m,cesm1-cam5,cmr- cm5,ciso-mk3-6-0,gfdl- cm3,gfdl-esm2-gfdl- esm2m,gfdl-e2- r,hadgem2-cc,hadgem2- es,inmcm3,ipsl-cm5a- lr,ipsl-cm5a-mr,miroc- esm,miroc-esm-, chen,miroc5,mri-gcm3	N/A	2100	Table 1
Freshwater stress	Singapore	FSI (freshwater stress index) + PG (population change index) + AO (aridity change index)	1986–2005 (climatology), 2010 (population)	SSP1-5	0.6	20GCM, CMIP5, 2030, RCP4.5, SSP2	T	Y	1.25	N/A	N/A	N/A	1.25	1.5	0.9	5.09	Million people (2010)	Karnauskas et al., 2018	access1-0,access1-3,bcc- cm1-1,cm1-1- m,cesm1-cam5,cmr- cm5,ciso-mk3-6-0,gfdl- cm3,gfdl-esm2-gfdl- esm2m,gfdl-e2- r,hadgem2-cc,hadgem2- es,inmcm3,ipsl-cm5a- lr,ipsl-cm5a-mr,miroc- esm,miroc-esm-, chen,miroc5,mri-gcm3	N/A	2100	Table 1
Freshwater stress	Singapore	FSI (freshwater stress index) + PG (population change index) + AO (aridity change index)	1986–2005 (climatology), 2010 (population)	SSP1-5	0.6	20GCM, CMIP5, 2030, RCP4.5, SSP2	T	Y	N/A	1.26	N/A	N/A	1.26	2	1.4	5.09	Million people (2010)	Karnauskas et al., 2018	access1-0,access1-3,bcc- cm1-1,cm1-1- m,cesm1-cam5,cmr- cm5,ciso-mk3-6-0,gfdl- cm3,gfdl-esm2-gfdl- esm2m,gfdl-e2- r,hadgem2-cc,hadgem2- es,inmcm3,ipsl-cm5a- lr,ipsl-cm5a-mr,miroc- esm,miroc-esm-, chen,miroc5,mri-gcm3	N/A	2100	Table 1

Risk	Region	Metric (Unit)	Baseline Time Period against Which Change Measured	Socio-economic Scenario and Date	Baseline Global T above Pre-industrial	Climate Scenario Used	Transient (T) or Equilibrium (E)	Dynamic Model?	Projected Impact at 1.5°C above Pre-Industrial	2°C	3°C	4°C	Projected Impact at Delta T (°C)	Delta T Relative to Pre-Industrial	Delta T Relative to Baseline Temperature	Projected Impact (Reference Value)	Projected Impact (Unit)	Reference	GCM (e.g., MIROC5)	RCM	Future Period	Cited Part
Freshwater stress	Solomon Islands	FSI (freshwater stress index) + PG (population change index) + AO (aridity change index)	1986–2005 (climatology), 2010 (population)	SSP1-5	0.6	20GCM, CMIP5, 2030, RCP4.5, SSP2	T	Y	1.45	N/A	N/A	N/A	1.45	1.5	0.9	0.54	Million people (2010)	Karnauskas et al., 2018	access1-0,access1-3,bcc- cm1-1,cm1-1- m,cesm1-cam5,cmr- cm5,ciso-mk3-6-0,gfdl- cm3,gfdl-esm2-gfdl- esm2m,gfdl-e2- r,hadgem2-cc,hadgem2- es,inmcm3,ipsl-cm5a- lr,ipsl-cm5a-m,miroc- esm,miroc-esm-, chen,miroc5,mri-cgcm3	N/A	2100	Table 1
Freshwater stress	Solomon Islands	PG (population change index) + AO (aridity change index)	1986–2005 (climatology), 2010 (population)	SSP1-5	0.6	20GCM, CMIP5, 2030, RCP4.5, SSP2	T	Y	N/A	1.47	N/A	N/A	1.47	2	1.4	0.54	Million people (2010)	Karnauskas et al., 2018	access1-0,access1-3,bcc- cm1-1,cm1-1- m,cesm1-cam5,cmr- cm5,ciso-mk3-6-0,gfdl- cm3,gfdl-esm2-gfdl- esm2m,gfdl-e2- r,hadgem2-cc,hadgem2- es,inmcm3,ipsl-cm5a- lr,ipsl-cm5a-m,miroc- esm,miroc-esm-, chen,miroc5,mri-cgcm3	N/A	2100	Table 1
Freshwater stress	Suriname	FSI (freshwater stress index) + PG (population change index) + AO (aridity change index)	1986–2005 (climatology), 2010 (population)	SSP1-5	0.6	20GCM, CMIP5, 2030, RCP4.5, SSP2	T	Y	1.25	N/A	N/A	N/A	1.25	1.5	0.9	0.52	Million people (2010)	Karnauskas et al., 2018	access1-0,access1-3,bcc- cm1-1,cm1-1- m,cesm1-cam5,cmr- cm5,ciso-mk3-6-0,gfdl- cm3,gfdl-esm2-gfdl- esm2m,gfdl-e2- r,hadgem2-cc,hadgem2- es,inmcm3,ipsl-cm5a- lr,ipsl-cm5a-m,miroc- esm,miroc-esm-, chen,miroc5,mri-cgcm3	N/A	2100	Table 1
Freshwater stress	Suriname	PG (population change index) + AO (aridity change index)	1986–2005 (climatology), 2010 (population)	SSP1-5	0.6	20GCM, CMIP5, 2030, RCP4.5, SSP2	T	Y	N/A	1.25	N/A	N/A	1.25	2	1.4	0.52	Million people (2010)	Karnauskas et al., 2018	access1-0,access1-3,bcc- cm1-1,cm1-1- m,cesm1-cam5,cmr- cm5,ciso-mk3-6-0,gfdl- cm3,gfdl-esm2-gfdl- esm2m,gfdl-e2- r,hadgem2-cc,hadgem2- es,inmcm3,ipsl-cm5a- lr,ipsl-cm5a-m,miroc- esm,miroc-esm-, chen,miroc5,mri-cgcm3	N/A	2100	Table 1
Freshwater stress	Timor-Leste	FSI (freshwater stress index) + PG (population change index) + AO (aridity change index)	1986–2005 (climatology), 2010 (population)	SSP1-5	0.6	20GCM, CMIP5, 2030, RCP4.5, SSP2	T	Y	1.52	N/A	N/A	N/A	1.52	1.5	0.9	1.12	Million people (2010)	Karnauskas et al., 2018	access1-0,access1-3,bcc- cm1-1,cm1-1- m,cesm1-cam5,cmr- cm5,ciso-mk3-6-0,gfdl- cm3,gfdl-esm2-gfdl- esm2m,gfdl-e2- r,hadgem2-cc,hadgem2- es,inmcm3,ipsl-cm5a- lr,ipsl-cm5a-m,miroc- esm,miroc-esm-, chen,miroc5,mri-cgcm3	N/A	2100	Table 1
Freshwater stress	Timor-Leste	FSI (freshwater stress index) + PG (population change index) + AO (aridity change index)	1986–2005 (climatology), 2010 (population)	SSP1-5	0.6	20GCM, CMIP5, 2030, RCP4.5, SSP2	T	Y	N/A	1.52	N/A	N/A	1.52	1.5	0.9	1.12	Million people (2010)	Karnauskas et al., 2018	access1-0,access1-3,bcc- cm1-1,cm1-1- m,cesm1-cam5,cmr- cm5,ciso-mk3-6-0,gfdl- cm3,gfdl-esm2-gfdl- esm2m,gfdl-e2- r,hadgem2-cc,hadgem2- es,inmcm3,ipsl-cm5a- lr,ipsl-cm5a-m,miroc- esm,miroc-esm-, chen,miroc5,mri-cgcm3	N/A	2100	Table 1
Freshwater stress	Tonga	FSI (freshwater stress index) + PG (population change index) + AO (aridity change index)	1986–2005 (climatology), 2010 (population)	SSP1-5	0.6	20GCM, CMIP5, 2030, RCP4.5, SSP2	T	Y	1.07	N/A	N/A	N/A	1.07	2	1.4	0.1	Million people (2010)	Karnauskas et al., 2018	access1-0,access1-3,bcc- cm1-1,cm1-1- m,cesm1-cam5,cmr- cm5,ciso-mk3-6-0,gfdl- cm3,gfdl-esm2-gfdl- esm2m,gfdl-e2- r,hadgem2-cc,hadgem2- es,inmcm3,ipsl-cm5a- lr,ipsl-cm5a-m,miroc- esm,miroc-esm-, chen,miroc5,mri-cgcm3	N/A	2100	Table 1
Freshwater stress	Tonga	FSI (freshwater stress index) + PG (population change index) + AO (aridity change index)	1986–2005 (climatology), 2010 (population)	SSP1-5	0.6	20GCM, CMIP5, 2030, RCP4.5, SSP2	T	Y	N/A	1.07	N/A	N/A	1.07	1.5	0.9	0.1	Million people (2010)	Karnauskas et al., 2018	access1-0,access1-3,bcc- cm1-1,cm1-1- m,cesm1-cam5,cmr- cm5,ciso-mk3-6-0,gfdl- cm3,gfdl-esm2-gfdl- esm2m,gfdl-e2- r,hadgem2-cc,hadgem2- es,inmcm3,ipsl-cm5a- lr,ipsl-cm5a-m,miroc- esm,miroc-esm-, chen,miroc5,mri-cgcm3	N/A	2100	Table 1

Risk	Region	Metric (Unit)	Baseline Time Period against Which Change Measured	Socio-economic Scenario and Date	Baseline Global T above Pre-industrial	Climate Scenario Used	Transient (T) or Equilibrium (E)	Dynamic Model?	Projected Impact at 1.5°C above Pre-Industrial	2°C	3°C	4°C	Projected Impact at Delta T(°C)	Delta T Relative to Pre-Industrial	Delta T Relative to Baseline Temperature	Projected Impact (Reference Value)	Projected Impact (Unit)	Reference	GCM (e.g., MIROC5)	RCM	Future Period	Cited Part
Freshwater stress	Trinidad & Tobago	FSI (freshwater stress index) + PG (population change index) + AQ (aridity change index)	1986–2005 (climatology), 2010 (population)	SSP1-5	0,6	20GCM, CMIP5, 2030, RCP4.5, SSP2	T	Y	1,1	N/A	N/A	N/A	1,1	1,5	0,9	1,34	Million people (2010)	Karnauskas et al., 2018	access1-0,access1-3,bcc-csm1-1,cm1-1,cm1-1-m,cesm1-cam5,cmrcm5,ciro-mk3-6-0,gfdl-cm3,gfdl-esm2-gfdl-esm2-1,cc,hadgem2-es,inmcm3,ipsl-cm5a,lr,ipsl-cm5a-mr,miroc-esm,miroc-esm-,chem,miroc5,mri-cgcm3	N/A	2100	Table 1
Freshwater stress	Trinidad & Tobago	FSI (freshwater stress index) + PG (population change index) + AQ (aridity change index)	1986–2005 (climatology), 2010 (population)	SSP1-5	0,6	20GCM, CMIP5, 2030, RCP4.5, SSP2	T	Y	N/A	1,14	N/A	N/A	1,14	2	1,4	1,34	Million people (2010)	Karnauskas et al., 2018	access1-0,access1-3,bcc-csm1-1,cm1-1,cm1-1-m,cesm1-cam5,cmrcm5,ciro-mk3-6-0,gfdl-esm2-gfdl-esm2-1,cc,hadgem2-es,inmcm3,ipsl-cm5a,lr,ipsl-cm5a-mr,miroc-esm,miroc-esm-,chem,miroc5,mri-cgcm3	N/A	2100	Table 1
Freshwater stress	Vanuatu	FSI (freshwater stress index) + PG (population change index) + AQ (aridity change index)	1986–2005 (climatology), 2010 (population)	SSP1-5	0,6	20GCM, CMIP5, 2030, RCP4.5, SSP2	T	Y	1,5	N/A	N/A	N/A	1,5	1,5	0,9	0,24	Million people (2010)	Karnauskas et al., 2018	access1-0,access1-3,bcc-csm1-1,cm1-1,cm1-1-m,cesm1-cam5,cmrcm5,ciro-mk3-6-0,gfdl-esm2-gfdl-esm2-1,cc,hadgem2-es,inmcm3,ipsl-cm5a,lr,ipsl-cm5a-mr,miroc-esm,miroc-esm-,chem,miroc5,mri-cgcm3	N/A	2100	Table 1
Freshwater stress	Vanuatu	FSI (freshwater stress index) + PG (population change index) + AQ (aridity change index)	1986–2005 (climatology), 2010 (population)	SSP1-5	0,6	20GCM, CMIP5, 2030, RCP4.5, SSP2	T	Y	N/A	1,52	N/A	N/A	1,52	2	1,4	0,24	Million people (2010)	Karnauskas et al., 2018	access1-0,access1-3,bcc-csm1-1,cm1-1,cm1-1-m,cesm1-cam5,cmrcm5,ciro-mk3-6-0,gfdl-esm2-gfdl-esm2-1,cc,hadgem2-es,inmcm3,ipsl-cm5a,lr,ipsl-cm5a-mr,miroc-esm,miroc-esm-,chem,miroc5,mri-cgcm3	N/A	2100	Table 1
Water scarcity, water withdrawal	Global	%	1971–2000	SSP1-5	0,4	RCP4.5, 2011–2040, MIROC-ESM-CHEM, H08	T	Y	N/A	1,4	N/A	N/A	1,4	2,1	1,7	3214	km <sup>3</sup> yr <sup>-1</sup>	Hanasaki et al., 2013	MIROC-ESM-CHEM	N/A	2011–2040	Table 6, Table 9
Water scarcity, water withdrawal	Global	%	1971–2000	SSP1-5	0,4	RCP2.6, 2011–2070, MIROC-ESM-CHEM, H08	E	Y	N/A	N/A	N/A	N/A	0,8	2,8	2,4	3214	km <sup>3</sup> yr <sup>-1</sup>	Hanasaki et al., 2013	MIROC-ESM-CHEM	N/A	2041–2070	Table 6, Table 9
Water scarcity, water withdrawal	Global	%	1971–2000	SSP1-5	0,4	RCP2.6, 2011–2100, MIROC-ESM-CHEM, H08	E	Y	N/A	N/A	N/A	N/A	1,6	2,8	2,4	3214	km <sup>3</sup> yr <sup>-1</sup>	Hanasaki et al., 2013	MIROC-ESM-CHEM	N/A	2071–2100	Table 6, Table 9
Water scarcity, water withdrawal	Global	%	1971–2000	SSP1-5	0,4	RCP2.6, 2011–2040, HadGEM2-ES, H08	T	Y	N/A	N/A	N/A	N/A	0,9	2,2	1,8	3214	km <sup>3</sup> yr <sup>-1</sup>	Hanasaki et al., 2013	HadGEM2-ES	N/A	2011–2040	Table 6, Table 9
Water scarcity, water withdrawal	Global	%	1971–2000	SSP1-5	0,4	RCP2.6, 2011–2070, HadGEM2-ES, H08	E	Y	N/A	N/A	N/A	N/A	-0,0	2,8	2,4	3214	km <sup>3</sup> yr <sup>-1</sup>	Hanasaki et al., 2013	HadGEM2-ES	N/A	2041–2070	Table 6, Table 9
Water scarcity, water withdrawal	Global	%	1971–2000	SSP1-5	0,4	RCP2.6, 2011–2100, HadGEM2-ES, H08	E	Y	N/A	N/A	N/A	N/A	-0,2	2,7	2,3	3214	km <sup>3</sup> yr <sup>-1</sup>	Hanasaki et al., 2013	HadGEM2-ES	N/A	2071–2100	Table 6, Table 9
Water scarcity, water withdrawal	Global	%	1971–2000	SSP1-5	0,4	RCP2.6, 2011–2040, GFDL-ESM2M, H08	T	Y	N/A	N/A	N/A	N/A	1,8	1,5	1,1	3214	km <sup>3</sup> yr <sup>-1</sup>	Hanasaki et al., 2013	GFDL-ESM2M	N/A	2011–2040	Table 6, Table 9
Water scarcity, water withdrawal	Global	%	1971–2000	SSP1-5	0,4	RCP2.6, 2041–2070, GFDL-ESM2M, H08	F	Y	N/A	N/A	N/A	N/A	2	1,7	1,3	3214	km <sup>3</sup> yr <sup>-1</sup>	Hanasaki et al., 2013	GFDL-ESM2M	N/A	2041–2070	Table 6, Table 9
Water scarcity, water withdrawal	Global	%	1971–2000	SSP1-5	0,4	RCP2.6, 2071–2100, GFDL-ESM2M, H08	E	Y	N/A	N/A	N/A	N/A	1,1	1,6	1,2	3214	km <sup>3</sup> yr <sup>-1</sup>	Hanasaki et al., 2013	GFDL-ESM2M	N/A	2071–2100	Table 6, Table 9
Water scarcity, water withdrawal	Global	%	1971–2000	SSP1-5	0,4	RCP4.5, 2011–2040, MIROC-ESM-CHEM, H08	T	Y	N/A	1,4	N/A	N/A	1,4	1,9	1,5	3214	km <sup>3</sup> yr <sup>-1</sup>	Hanasaki et al., 2013	MIROC-ESM-CHEM	N/A	2011–2040	Table 6, Table 9
Water scarcity, water withdrawal	Global	%	1971–2000	SSP1-5	0,4	RCP4.5, 2041–2070, MIROC-ESM-CHEM, H08	T	Y	N/A	N/A	N/A	N/A	2,4	3,3	2,9	3214	km <sup>3</sup> yr <sup>-1</sup>	Hanasaki et al., 2013	MIROC-ESM-CHEM	N/A	2041–2070	Table 6, Table 9
Water scarcity, water withdrawal	Global	%	1971–2000	SSP1-5	0,4	RCP4.5, 2041–2100, MIROC-ESM-CHEM, H08	T	Y	N/A	N/A	N/A	N/A	2,8	2,8	4	3214	km <sup>3</sup> yr <sup>-1</sup>	Hanasaki et al., 2013	MIROC-ESM-CHEM	N/A	2071–2100	Table 6, Table 9
Water scarcity, water withdrawal	Global	%	1971–2000	SSP1-5	0,4	RCP4.5, 2011–2040, MIROC-ESM-CHEM, H08	T	Y	N/A	N/A	N/A	N/A	0,6	2,1	1,7	3214	km <sup>3</sup> yr <sup>-1</sup>	Hanasaki et al., 2013	HadGEM2-ES	N/A	2011–2040	Table 6, Table 9
Water scarcity, water withdrawal	Global	%	1971–2000	SSP1-5	0,4	RCP4.5, 2041–2070, MIROC-ESM-CHEM, H08	T	Y	N/A	N/A	N/A	N/A	1,7	3,5	3,1	3214	km <sup>3</sup> yr <sup>-1</sup>	Hanasaki et al., 2013	HadGEM2-ES	N/A	2041–2070	Table 6, Table 9
Water scarcity, water withdrawal	Global	%	1971–2000	SSP1-5	0,4	RCP4.5, 2071–2100, MIROC-ESM-CHEM, H08	T	Y	N/A	N/A	N/A	N/A	1,9	4,3	3,9	3214	km <sup>3</sup> yr <sup>-1</sup>	Hanasaki et al., 2013	HadGEM2-ES	N/A	2071–2100	Table 6, Table 9
Water scarcity, water withdrawal	Global	%	1971–2000	SSP1-5	0,4	RCP4.5, 2011–2040, GFDL-ESM2M, H08	T	Y	2,3	N/A	N/A	N/A	2,3	1,6	1,2	3214	km <sup>3</sup> yr <sup>-1</sup>	Hanasaki et al., 2013	GFDL-ESM2M	N/A	2011–2040	Table 6, Table 9
Water scarcity, water withdrawal	Global	%	1971–2000	SSP1-5	0,4	RCP4.5, 2041–2070, GFDL-ESM2M, H08	T	Y	N/A	N/A	N/A	N/A	2,3	2,2	1,8	3214	km <sup>3</sup> yr <sup>-1</sup>	Hanasaki et al., 2013	GFDL-ESM2M	N/A	2041–2070	Table 6, Table 9
Water scarcity, water withdrawal	Global	%	1971–2000	SSP1-5	0,4	RCP4.5, 2071–2100, GFDL-ESM2M, H08	T	Y	N/A	N/A	N/A	N/A	2,4	2,4	2	3214	km <sup>3</sup> yr <sup>-1</sup>	Hanasaki et al., 2013	GFDL-ESM2M	N/A	2071–2100	Table 6, Table 9
Water scarcity, water withdrawal	Global	%	1971–2000	SSP1-5	0,4	RCP5.6, 2011–2040, MIROC-ESM-CHEM, H08	T	Y	N/A	N/A	N/A	N/A	2	2,1	1,7	3214	km <sup>3</sup> yr <sup>-1</sup>	Hanasaki et al., 2013	MIROC-ESM-CHEM	N/A	2011–2040	Table 6, Table 9
Water scarcity, water withdrawal	Global	%	1971–2000	SSP1-5	0,4	RCP5.6, 2041–2070, MIROC-ESM-CHEM, H08	T	Y	N/A	N/A	N/A	N/A	4,8	4,2	3,8	3214	km <sup>3</sup> yr <sup>-1</sup>	Hanasaki et al., 2013	MIROC-ESM-CHEM	N/A	2041–2070	Table 6, Table 9
Water scarcity, water withdrawal	Global	%	1971–2000	SSP1-5	0,4	RCP5.6, 2071–2100, MIROC-ESM-CHEM, H08	T	Y	N/A	N/A	N/A	N/A	10	6,7	6,3	3214	km <sup>3</sup> yr <sup>-1</sup>	Hanasaki et al., 2013	MIROC-ESM-CHEM	N/A	2071–2100	Table 6, Table 9
Water scarcity, water withdrawal	Global	%	1971–2000	SSP1-5	0,4	RCP6.0, 2011–2040, MIROC-ESM-CHEM, H08	T	Y	N/A	N/A	N/A	N/A	0,9	2,3	1,9	3214	km <sup>3</sup> yr <sup>-1</sup>	Hanasaki et al., 2013	HadGEM2-ES	N/A	2011–2040	Table 6, Table 9
Water scarcity, water withdrawal	Global	%	1971–2000	SSP1-5	0,4	RCP6.0, 2041–2070, MIROC-ESM-CHEM, H08	T	Y	N/A	N/A	N/A	N/A	2,9	4,4	4	3214	km <sup>3</sup> yr <sup>-1</sup>	Hanasaki et al., 2013	HadGEM2-ES	N/A	2041–2070	Table 6, Table 9
Water scarcity, water withdrawal	Global	%	1971–2000	SSP1-5	0,4	RCP6.0, 2071–2100, MIROC-ESM-CHEM, H08	T	Y	N/A	N/A	N/A	N/A	6,7	6,8	6,4	3214	km <sup>3</sup> yr <sup>-1</sup>	Hanasaki et al., 2013	HadGEM2-ES	N/A	2071–2100	Table 6, Table 9
Water scarcity, water withdrawal	Global	%	1971–2000	SSP1-5	0,4	RCP8.5, 2011–2040, GFDL-ESM2M, H08	T	Y	1,7	N/A	N/A	N/A	1,7	1,6	1,2	3214	km <sup>3</sup> yr <sup>-1</sup>	Hanasaki et al., 2013	GFDL-ESM2M	N/A	2011–2040	Table 6, Table 9

Risk	Region	Metric (Unit)	Baseline Time Period against Which Change Measured	Socio-economic Scenario and Date	Baseline Global T above Pre-industrial	Climate Scenario Used	Transient (T) or Equilibrium (E)	Dynamic Model?	Projected Impact at 1.5°C above Pre-industrial	2°C	3°C	4°C	Projected Impact at Delta T(°C)	Delta T Relative to Pre-Industrial	Delta T Relative to Baseline Temperature	Projected Impact (Reference Value)	Projected Impact (Unit)	Reference	GCM (e.g., MIROC5)	RCM	Future Period	Cited Part
Water scarcity, water withdrawal	Global	%	1971-2000	SSP1-5	0.4	RCP8.5, 2041-2070; GFDL-ESM2M, RCP8.5	T	Y	N/A	N/A	N/A	N/A	3.8	2.8	2.4	km <sup>3</sup> yr <sup>-1</sup>	Hanasaki et al., 2013	GFDL-ESM2M	N/A	2041-2070	Table 6, Table 9	
Water scarcity, water withdrawal	Global	%	1971-2000	SSP1-5	0.4	RCP8.5, 2071-2100; GFDL-ESM2M, RCP8.5	T	Y	N/A	N/A	N/A	N/A	7.1	4.2	3.8	km <sup>3</sup> yr <sup>-1</sup>	Hanasaki et al., 2013	GFDL-ESM2M	N/A	2071-2100	Table 6, Table 9	
Impacts on hydropower production	Greece, Portugal, Spain	% (power change)	1971-2000	N/A	N/A	3 GCMs and 3 RCMs; RCP4.5, RCP8.5, 2004-2043	N/A	N/A	Decrease 5% or less	N/A	N/A	N/A	Decrease 5% or less	1.5	N/A	N/A	N/A	Tobin et al., 2018	MPI-ESM-LR, R1-HadGEM2-ES-r1-EC-EARTH, R1-HadGEM2-ES-r1-EC-EARTH	RCA4, KNMI-RACMO22E	N/A	p5, Fig.1c
Impacts on hydropower production	Greece, Portugal, Spain	% (power change)	1971-2000	N/A	N/A	3 GCMs and 3 RCMs; RCP4.5, RCP8.5, 2016-2050	N/A	N/A	Decrease below 10%	N/A	N/A	N/A	Decrease below 10%	2	N/A	N/A	N/A	Tobin et al., 2018	MPI-ESM-LR, R1-HadGEM2-ES-r1-EC-EARTH, r1-12	RCA4, KNMI-RACMO22E	N/A	p5, Fig.1c
Impacts on hydropower production	Greece, Portugal, Spain	% (power change)	1971-2000	N/A	N/A	3 GCMs and 3 RCMs; RCP4.5, RCP8.5, 2037-2084	N/A	N/A	N/A	N/A	Decrease between 15-20%	N/A	Decrease between 15-20%	3	N/A	N/A	N/A	Tobin et al., 2018	MPI-ESM-LR, R1-HadGEM2-ES-r1-EC-EARTH, r1-12	RCA4, KNMI-RACMO22E	N/A	p5, Fig.1c
Impacts on thermoelectric power production	Europe	% (power change)	1971-2000	N/A	N/A	3 GCMs and 3 RCMs; RCP4.5, RCP8.5, 2004-2043	N/A	N/A	Decrease about 5%	N/A	N/A	N/A	Decrease about 5%	1.5	N/A	N/A	N/A	Tobin et al., 2018	MPI-ESM-LR, R1-HadGEM2-ES-r1-EC-EARTH, r1-12	RCA4, KNMI-RACMO22E	N/A	p5, Fig.1d
Impacts on thermoelectric power production	Europe	% (power change)	1971-2000	N/A	N/A	3 GCMs and 3 RCMs; RCP4.5, RCP8.5, 2016-2050	N/A	N/A	N/A	Decrease about 10%	N/A	N/A	Decrease about 10%	2	N/A	N/A	N/A	Tobin et al., 2018	MPI-ESM-LR, R1-HadGEM2-ES-r1-EC-EARTH, r1-12	RCA4, KNMI-RACMO22E	N/A	p5, Fig.1d
Impacts on thermoelectric power production	Europe	% (power change)	1971-2000	N/A	N/A	3 GCMs and 3 RCMs; RCP4.5, RCP8.5, 2037-2084	N/A	N/A	N/A	N/A	Decrease about 15% (Bulgaria, Greece, Spain; 15-20% decrease)	N/A	Decrease about 15% (Bulgaria, Greece, Spain; 15-20% decrease)	3	N/A	N/A	N/A	Tobin et al., 2018	MPI-ESM-LR, R1-HadGEM2-ES-r1-EC-EARTH, r1-12	RCA4, KNMI-RACMO22E	N/A	p5, Fig.1d
Increased flooding, population affected	Global	%	1976-2005	N/A	N/A	Transition, 7 GCMs, EC-EARTH3-HRv2L1, RCP8.5	T	N/A	100	N/A	N/A	N/A	100	1.5	N/A	N/A	Alfieri et al., 2017	IPSL-CM5A-MR, GFDL-ESM2M, EC-EARTH, GISS-E2-H, RCM3.2-CM2C	N/A	2100	p 176-179 Fig4, Fig6	
Increased flooding, population affected	Global	%	1976-2005	N/A	N/A	Transition, 7 GCMs, EC-EARTH3-HRv2L1, RCP8.5	T	N/A	N/A	170	N/A	N/A	170	2	N/A	N/A	Alfieri et al., 2017	IPSL-CM5A-MR, GFDL-ESM2M, EC-EARTH, GISS-E2-H, RCM3.2-CM2C	N/A	2100	p 176-179 Fig4, Fig6	
Increased flooding, population affected	Global	%	1976-2005	N/A	N/A	Transition, 7 GCMs, EC-EARTH3-HRv2L1, RCP8.5	T	N/A	N/A	N/A	N/A	580	580	4	N/A	N/A	Alfieri et al., 2017	IPSL-CM5A-MR, GFDL-ESM2M, EC-EARTH, GISS-E2-H, IPSL-CM5A-MR, HadGEM3-LC	N/A	2100	p 176-179 Fig4, Fig6	
River flood risk	38 European countries	Population affected (1000pp/year)	1976-2005	N/A	N/A	7 JRC-EU, 5 ISIMIP, 7 JRC-GI, RCP8.5, SWLs (specific warming levels)	N/A	N/A	650	N/A	N/A	N/A	650	1.5	N/A	350	Population affected (1000pp/year)	Alfieri et al., 2018	3 JRC-EU, EC-EARTH, HadGEM2-ES, MPI-ESM-LR, ISIMIP/GFDL-ESM2M, HadGEM2-ES, IPSL-CM5A-LR, HadGEM2-ES, EC-EARTH, GISS-E2-H, IPSL-CM5A-MR, HadGEM3-LC	4 JRC-EU, EC-EARTH, HadGEM2-ES, MPI-ESM-LR, ISIMIP/GFDL-ESM2M, HadGEM2-ES, IPSL-CM5A-LR, HadGEM2-ES, EC-EARTH, GISS-E2-H, IPSL-CM5A-MR, HadGEM3-LC	N/A	Table 3
River flood risk	38 European countries	Population affected (1000pp/year)	1976-2005	N/A	N/A	7 JRC-EU, 5 ISIMIP, 7 JRC-GI, RCP8.5, SWLs (specific warming levels)	N/A	N/A	N/A	674	N/A	N/A	674	2	N/A	350	Population affected (1000pp/year)	Alfieri et al., 2018	3 JRC-EU, EC-EARTH, HadGEM2-ES, MPI-ESM-LR, ISIMIP/GFDL-ESM2M, HadGEM2-ES, IPSL-CM5A-LR, HadGEM2-ES, EC-EARTH, GISS-E2-H, IPSL-CM5A-MR, HadGEM3-LC	4 JRC-EU, EC-EARTH, HadGEM2-ES, MPI-ESM-LR, ISIMIP/GFDL-ESM2M, HadGEM2-ES, IPSL-CM5A-LR, HadGEM2-ES, EC-EARTH, GISS-E2-H, IPSL-CM5A-MR, HadGEM3-LC	N/A	Table 3
River flood risk	38 European countries	Population affected (1000pp/year)	1976-2005	N/A	N/A	7 JRC-EU, 5 ISIMIP, 7 JRC-GI, RCP8.5, SWLs (specific warming levels)	N/A	N/A	N/A	N/A	781	N/A	781	3	N/A	350	Population affected (1000pp/year)	Alfieri et al., 2018	3 JRC-EU, EC-EARTH, HadGEM2-ES, MPI-ESM-LR, ISIMIP/GFDL-ESM2M, HadGEM2-ES, IPSL-CM5A-LR, HadGEM2-ES, EC-EARTH, GISS-E2-H, IPSL-CM5A-MR, HadGEM3-LC	4 JRC-EU, EC-EARTH, HadGEM2-ES, MPI-ESM-LR, ISIMIP/GFDL-ESM2M, HadGEM2-ES, IPSL-CM5A-LR, HadGEM2-ES, EC-EARTH, GISS-E2-H, IPSL-CM5A-MR, HadGEM3-LC	N/A	Table 3
River flood risk	38 European countries	Population affected, relative change (%)	1976-2005	N/A	N/A	7 JRC-EU, 5 ISIMIP, 7 JRC-GI, RCP8.5, SWLs (specific warming levels)	N/A	N/A	86	N/A	N/A	N/A	86	1.5	N/A	350	Population affected (1000pp/year)	Alfieri et al., 2018	3 JRC-EU, EC-EARTH, HadGEM2-ES, MPI-ESM-LR, ISIMIP/GFDL-ESM2M, HadGEM2-ES, IPSL-CM5A-LR, HadGEM2-ES, EC-EARTH, GISS-E2-H, IPSL-CM5A-MR, HadGEM3-LC	4 JRC-EU, EC-EARTH, HadGEM2-ES, MPI-ESM-LR, ISIMIP/GFDL-ESM2M, HadGEM2-ES, IPSL-CM5A-LR, HadGEM2-ES, EC-EARTH, GISS-E2-H, IPSL-CM5A-MR, HadGEM3-LC	N/A	Table 3
River flood risk	38 European countries	Population affected, relative change (%)	1976-2005	N/A	N/A	7 JRC-EU, 5 ISIMIP, 7 JRC-GI, RCP8.5, SWLs (specific warming levels)	N/A	N/A	N/A	93	N/A	N/A	93	2	N/A	350	Population affected (1000pp/year)	Alfieri et al., 2018	3 JRC-EU, EC-EARTH, HadGEM2-ES, MPI-ESM-LR, ISIMIP/GFDL-ESM2M, HadGEM2-ES, IPSL-CM5A-LR, HadGEM2-ES, EC-EARTH, GISS-E2-H, IPSL-CM5A-MR, HadGEM3-LC	4 JRC-EU, EC-EARTH, HadGEM2-ES, MPI-ESM-LR, ISIMIP/GFDL-ESM2M, HadGEM2-ES, IPSL-CM5A-LR, HadGEM2-ES, EC-EARTH, GISS-E2-H, IPSL-CM5A-MR, HadGEM3-LC	N/A	Table 3





Risk	Region	Metric (Unit)	Baseline Time Period against Which Change Measured	Socio-economic Scenario and Date	Baseline Global T above Pre-industrial	Climate Scenario Used	Transient (T) or Equilibrium (E)	Dynamic Model?	Projected Impact at 1.5°C above Pre-Industrial	2°C	3°C	4°C	Projected Impact at Delta T (°C)	Delta T Relative to Pre-Industrial	Delta T Relative to Baseline Temperature	Projected Impact (Reference Value)	Projected Impact (Unit)	Reference	GCM (e.g., MIROC5)	RCM	Future Period	Cited Part
Drought	Globally	Affected urban population (million)	1986–2005 (GMT), 2000 (population)	SSP1	0,6	11CMIP5, RCP4.5 (2027–2038), RCP8.5 (2029–2047), SSP1	T	Y	+350.2±158.8	N/A	N/A	N/A	+350.2±158.8	1.3-1.7	N/A	N/A	N/A	Liu et al., 2018	ACCESS1.0,BCC_CSM1.1_BNU-ESM,CanESM2,CNRM-CM3.0,CGFD_CM3,INM-CMA,IPSL-CM5B-LR,MRI-CGCM3,MIROC-ESM	N/A	2010–2100	p274
Drought	Globally	Affected total population (million)	1986–2005 (GMT), 2000 (population)	SSP1	0,6	11CMIP5, RCP4.5 (2023–2081), RCP8.5 (2042–2053), SSP1	T	Y	N/A	+410.7±213.5	N/A	N/A	+410.7±213.5	1.8-2.2	N/A	N/A	N/A	Liu et al., 2018	ACCESS1.0,BCC_CSM1.1_BNU-ESM,CanESM2,CNRM-CM3.0,CGFD_CM3,INM-CMA,IPSL-CM5B-LR,MRI-CGCM3,MIROC-ESM	N/A	2010–2100	p274
Drought	Globally	Affected rural population (million)	1986–2005 (GMT), 2000 (population)	SSP1	0,6	11CMIP5, RCP4.5 (2027–2038), RCP8.5 (2029–2047), SSP1	T	Y	-217.7±79.2	N/A	N/A	N/A	-217.7±79.2	1.3-1.7	N/A	N/A	N/A	Liu et al., 2018	ACCESS1.0,BCC_CSM1.1_BNU-ESM,CanESM2,CNRM-CM3.0,CGFD_CM3,INM-CMA,IPSL-CM5B-LR,MRI-CGCM3,MIROC-ESM	N/A	2100	p274
Drought	Globally	Affected rural population (million)	1986–2005 (GMT), 2000 (population)	SSP1	0,6	11CMIP5, RCP4.5 (2023–2081), RCP8.5 (2042–2053), SSP1	T	Y	N/A	-216.2±82.4	N/A	N/A	-216.2±82.4	1.8-2.2	N/A	N/A	N/A	Liu et al., 2018	ACCESS1.0,BCC_CSM1.1_BNU-ESM,CanESM2,CNRM-CM3.0,CGFD_CM3,INM-CMA,IPSL-CM5B-LR,MRI-CGCM3,MIROC-ESM	N/A	2100	p274
Drought	China, the Hailu River Basin (HRB)	Population exposed to drought (million)	1986–2005 (GMT), 2010 (population)	N/A	0,61	COSMO-CLM (CLIM) model, RCP2.6 (2020–2039)	N/A	N/A	236,4	N/A	N/A	N/A	236,4	1,5	N/A	339,65	Population exposure (million)	Sun et al., 2017	N/A	COSMO-CLM(CLIM)model	N/A	p79
Drought	China, the Hailu River Basin (HRB)	Population exposed to drought (million)	1986–2005 (GMT), 2010 (population)	N/A	0,61	COSMO-CLM (CLIM) model, RCP4.5 (2040–2059)	N/A	N/A	593,6	N/A	N/A	N/A	593,6	2	N/A	339,65	Population exposure (million)	Sun et al., 2017	N/A	COSMO-CLM(CLIM)model	N/A	p79
River flood risk	28 European countries	Expected damage (B€/year)	1976–2005	N/A	N/A	7 JRC-EU, RCP8.5, SWLs (specific warning levels)	N/A	N/A	11	N/A	N/A	N/A	11	1,5	N/A	5	Expected damage (B€/year)	Alfieri et al., 2018	3 JRC-EU EC-EARTH,HadGEM2-ES,MPR-ESM-LR	EU/RACMO22E,REM020 [09,CLM4-B-17,RCA4]	N/A	Table 2
River flood risk	28 European countries	Expected damage (B€/year)	1976–2005	N/A	N/A	7 JRC-EU, RCP8.5, SWLs (specific warning levels)	N/A	N/A	13	N/A	N/A	N/A	13	2	N/A	5	Expected damage (B€/year)	Alfieri et al., 2018	3 JRC-EU EC-EARTH,HadGEM2-ES,MPR-ESM-LR	EU/RACMO22E,REM020 [09,CLM4-B-17,RCA4]	N/A	Table 2
River flood risk	28 European countries	Expected damage (B€/year)	1976–2005	N/A	N/A	7 JRC-EU, RCP8.5, SWLs (specific warning levels)	N/A	N/A	14	N/A	N/A	N/A	14	3	N/A	5	Expected damage (B€/year)	Alfieri et al., 2018	3 JRC-EU EC-EARTH,HadGEM2-ES,MPR-ESM-LR	EU/RACMO22E,REM020 [09,CLM4-B-17,RCA4]	N/A	Table 2
River flood risk	28 European countries	Expected damage, relative change (%)	1976–2005	N/A	N/A	7 JRC-EU, RCP8.5, SWLs (specific warning levels)	N/A	N/A	116	N/A	N/A	N/A	116	1,5	N/A	5	Expected damage (B€/year)	Alfieri et al., 2018	3 JRC-EU EC-EARTH,HadGEM2-ES,MPR-ESM-LR	EU/RACMO22E,REM020 [09,CLM4-B-17,RCA4]	N/A	Table 2
River flood risk	28 European countries	Expected damage, relative change (%)	1976–2005	N/A	N/A	7 JRC-EU, RCP8.5, SWLs (specific warning levels)	N/A	N/A	127	N/A	N/A	N/A	127	2	N/A	5	Expected damage (B€/year)	Alfieri et al., 2018	3 JRC-EU EC-EARTH,HadGEM2-ES,MPR-ESM-LR	EU/RACMO22E,REM020 [09,CLM4-B-17,RCA4]	N/A	Table 2
River flood risk	28 European countries	Expected damage, relative change (%)	1976–2005	N/A	N/A	7 JRC-EU, RCP8.5, SWLs (specific warning levels)	N/A	N/A	173	N/A	N/A	N/A	173	3	N/A	5	Expected damage (B€/year)	Alfieri et al., 2018	3 JRC-EU EC-EARTH,HadGEM2-ES,MPR-ESM-LR	EU/RACMO22E,REM020 [09,CLM4-B-17,RCA4]	N/A	Table 2
Groundwater resources	Global	%	1971–2000	N/A	0,4	5 GCMs, RCP8.5, 2070–2099	T	N/A	N/A	2 (1.1-2.6)	N/A	N/A	2 (1.1-2.6)	2	N/A	N/A	N/A	Portmann et al., 2013	HadGEM2-ES,IPSL-CM5A-LR,MRI-ESM-CHER,GEOFSM2M,NorESM1-M	N/A	2070–2099	Fig.5a,p7
Groundwater resources	Global	%	1971–2000	N/A	0,4	5 GCMs, RCP8.5, 2070–2099	T	N/A	N/A	N/A	3 (1.5-5.3)	N/A	3 (1.5-5.3)	3	N/A	N/A	N/A	Portmann et al., 2013	HadGEM2-ES,IPSL-CM5A-LR,MRI-ESM-CHER,GEOFSM2M,NorESM1-M	N/A	2070–2099	Fig.5a,p7
Groundwater resources	Global	%	1971–2000	N/A	0,4	3 GCMs, RCP8.5, 2070–2099	T	N/A	N/A	N/A	N/A	3.4 (1.9-4.8)	3.4 (1.9-4.8)	4	N/A	N/A	Portmann et al., 2013	HadGEM2-ES,IPSL-CM5A-LR,MRI-ESM-CHER	N/A	2070–2099	Fig.5a,p7	
Groundwater level	Northwest Bangladesh	m	1991–2009	N/A	N/A	MLR	N/A	Y	N/A	N/A	N/A	N/A	-0.15	N/A	1	N/A	N/A	Salem et al., 2017	N/A	N/A	N/A	Fig.5,p89
Groundwater level	Northwest Bangladesh	m	1991–2009	N/A	N/A	MLR	N/A	Y	N/A	N/A	N/A	N/A	-2.01	N/A	5	N/A	N/A	Salem et al., 2017	N/A	N/A	N/A	Fig.5,p89
Chloride concentration	Lake Ijselmeer, the Netherlands	mg/L	1997–2007 (climate change scenarios), 2007–2008 (reference scenarios), 1990 (temperature)	N/A	N/A	KNMI scenario G, 2050	N/A	Y	N/A	N/A	N/A	N/A	105 (79,177)	N/A	*1 (since 1990)	105 (81,158)	mg/L	Bonte and Zwolsman, 2010	N/A	N/A	2050	Table 4, p4416
Chloride concentration	Lake Ijselmeer, the Netherlands	mg/L	1997–2007 (climate change scenarios), 2007–2008 (reference scenarios), 1990 (temperature)	N/A	N/A	KNMI scenario Wn, 2050	N/A	Y	N/A	N/A	N/A	N/A	121 (77,267)	N/A	*2 (since 1990)	105 (81,158)	mg/L	Bonte and Zwolsman, 2010	N/A	N/A	2050	Table 4, p4416
The daily probability of exceeding the chloride standard for drinking water	Lake Ijselmeer, the Netherlands	%	1997–2007 (climate change scenarios), 2007–2008 (reference scenarios), 1990 (temperature)	N/A	N/A	KNMI scenario G, 2050	N/A	Y	N/A	N/A	N/A	N/A	3,1	N/A	*1 (since 1990)	2,5	%	Bonte and Zwolsman, 2010	N/A	N/A	2050	Table 5, p4422

Risk	Region	Metric (Unit)	Baseline Time Period against Which Change Measured	Socio-economic Scenario and Date	Baseline Global T above Pre-industrial	Climate Scenario Used	Transient (T) or Equilibrium (E)	Dynamic Model?	Projected Impact at 1.5°C above Pre-Industrial	2°C	3°C	4°C	Projected Impact at Delta T (°C)	Delta T Relative to Pre-Industrial	Delta T Relative to Baseline Temperature	Projected Impact (Reference Value)	Projected Impact (Unit)	Reference	GCM (e.g., MIROC5)	RCM	Future Period	Cited Part
The daily probability of exceeding the chloride standard for drinking water	Lake IJsselmeer, the Netherlands	%	1997–2007 (climate change scenarios), 2007–2008 (reference scenario), 1990 (temperature)	N/A	N/A	KNMI scenario W+, 2050	N/A	Y	N/A	N/A	N/A	N/A	14,3	N/A	+2 (since 1990)	2,5	%	Bonte and Zwolsman, 2010	N/A	N/A	2050	Table 5, p4422
The maximum duration of the exceedance	Lake IJsselmeer, the Netherlands	Days	1997–2007 (climate change scenarios), 2007–2008 (reference scenario), 1990 (temperature)	N/A	N/A	KNMI scenario G, 2050	N/A	Y	N/A	N/A	N/A	N/A	124	N/A	+1 (since 1990)	103	Days	Bonte and Zwolsman, 2010	N/A	N/A	2050	Table 5, p4422
The maximum duration of the exceedance	Lake IJsselmeer, the Netherlands	Days	1997–2007 (climate change scenarios), 2007–2008 (reference scenario), 1990 (temperature)	N/A	N/A	KNMI scenario W+, 2050	N/A	Y	N/A	N/A	N/A	N/A	178	N/A	+2 (since 1990)	103	Days	Bonte and Zwolsman, 2010	N/A	N/A	2050	Table 5, p4422
Water quality (nutrient yield)	Southeast Asia (Cambodia, Laos, Vietnam) 35 River Basin (Sekong, Srepok, Sesan)	Change in nitrogen (N) yield [%], annual	1981–2008 (air temperatures), 2004–2008 (water quality)	N/A	N/A	5 GCM, RCP4.5, 2015–2039 (2030s), SWAT	N/A	N/A	7,3	N/A	N/A	N/A	7,3	Around 1.5	0,89	1 249 564	Tons	Trang et al., 2017	HadGEM2-AO, CanESM2, IPSL-CM5A-LR, CNRM-CM5, and MPI-ESM-MR	N/A	2030s (2015–2039), 2060s (2045–2069), 2090s (2075–2099)	Table 11
Water quality (nutrient yield)	Southeast Asia (Cambodia, Laos, Vietnam) 35 River Basin (Sekong, Srepok, Sesan)	Change in nitrogen (N) yield [%], annual	1981–2008 (air temperatures), 2004–2008 (water quality)	N/A	N/A	5 GCM, RCP8.5, 2015–2039 (2030s), SWAT	N/A	N/A	N/A	-6,6	N/A	N/A	-6,6	Around 2	1,05	1 249 564	Tons	Trang et al., 2017	HadGEM2-AO, CanESM2, IPSL-CM5A-LR, CNRM-CM5, and MPI-ESM-MR	N/A	2030s (2015–2039), 2060s (2045–2069), 2090s (2075–2099)	Table 11
Water quality (nutrient yield)	Southeast Asia (Cambodia, Laos, Vietnam) 35 River Basin (Sekong, Srepok, Sesan)	Change in nitrogen (N) yield [%], annual	1981–2008 (air temperatures), 2004–2008 (water quality)	N/A	N/A	5 GCM, RCP4.5, 2015–2039 (2030s), SWAT, FG1	N/A	N/A	5,2	N/A	N/A	N/A	5,2	Around 1.5	0,89	1 249 564	Tons	Trang et al., 2017	HadGEM2-AO, CanESM2, IPSL-CM5A-LR, CNRM-CM5, and MPI-ESM-MR	N/A	2030s (2015–2039), 2060s (2045–2069), 2090s (2075–2099)	Table 11
Water quality (nutrient yield)	Southeast Asia (Cambodia, Laos, Vietnam) 35 River Basin (Sekong, Srepok, Sesan)	Change in nitrogen (N) yield [%], annual	1981–2008 (air temperatures), 2004–2008 (water quality)	N/A	N/A	5 GCM, RCP8.5, 2015–2039 (2030s), SWAT, FG1	N/A	N/A	N/A	8,8	N/A	N/A	8,8	Around 2	1,05	1 249 564	Tons	Trang et al., 2017	HadGEM2-AO, CanESM2, IPSL-CM5A-LR, CNRM-CM5, and MPI-ESM-MR	N/A	2030s (2015–2039), 2060s (2045–2069), 2090s (2075–2099)	Table 11
Water quality (nutrient yield)	Southeast Asia (Cambodia, Laos, Vietnam) 35 River Basin (Sekong, Srepok, Sesan)	Change in nitrogen (N) yield [%], annual	1981–2008 (air temperatures), 2004–2008 (water quality)	N/A	N/A	5 GCM, RCP4.5, 2015–2039 (2030s), SWAT, FA1	N/A	N/A	7,5	N/A	N/A	N/A	7,5	Around 1.5	0,89	1 249 564	Tons	Trang et al., 2017	HadGEM2-AO, CanESM2, IPSL-CM5A-LR, CNRM-CM5, and MPI-ESM-MR	N/A	2030s (2015–2039), 2060s (2045–2069), 2090s (2075–2099)	Table 11
Water quality (nutrient yield)	Southeast Asia (Cambodia, Laos, Vietnam) 35 River Basin (Sekong, Srepok, Sesan)	Change in nitrogen (N) yield [%], annual	1981–2008 (air temperatures), 2004–2008 (water quality)	N/A	N/A	5 GCM, RCP8.5, 2015–2039 (2030s), SWAT, FA1	N/A	N/A	3,7	N/A	N/A	N/A	3,7	Around 2	1,05	1 249 564	Tons	Trang et al., 2017	HadGEM2-AO, CanESM2, IPSL-CM5A-LR, CNRM-CM5, and MPI-ESM-MR	N/A	2030s (2015–2039), 2060s (2045–2069), 2090s (2075–2099)	Table 11
Water quality (nutrient yield)	Southeast Asia (Cambodia, Laos, Vietnam) 35 River Basin (Sekong, Srepok, Sesan)	Change in phosphorus (P) yield [%], annual	1981–2008 (air temperatures), 2004–2008 (water quality)	N/A	N/A	5 GCM, RCP4.5, 2015–2039 (2030s), SWAT	N/A	N/A	5,1	N/A	N/A	N/A	5,1	Around 1.5	0,89	459 134	Tons	Trang et al., 2017	HadGEM2-AO, CanESM2, IPSL-CM5A-LR, CNRM-CM5, and MPI-ESM-MR	N/A	2030s (2015–2039), 2060s (2045–2069), 2090s (2075–2099)	Table 12
Water quality (nutrient yield)	Southeast Asia (Cambodia, Laos, Vietnam) 35 River Basin (Sekong, Srepok, Sesan)	Change in phosphorus (P) yield [%], annual	1981–2008 (air temperatures), 2004–2008 (water quality)	N/A	N/A	5 GCM, RCP8.5, 2015–2039 (2030s), SWAT	N/A	N/A	-3,6	N/A	N/A	N/A	-3,6	Around 2	1,05	459 134	Tons	Trang et al., 2017	HadGEM2-AO, CanESM2, IPSL-CM5A-LR, CNRM-CM5, and MPI-ESM-MR	N/A	2030s (2015–2039), 2060s (2045–2069), 2090s (2075–2099)	Table 12
Water quality (nutrient yield)	Southeast Asia (Cambodia, Laos, Vietnam) 35 River Basin (Sekong, Srepok, Sesan)	Change in phosphorus (P) yield [%], annual	1981–2008 (air temperatures), 2004–2008 (water quality)	N/A	N/A	5 GCM, RCP4.5, 2015–2039 (2030s), SWAT, FG1	N/A	N/A	12,6	N/A	N/A	N/A	12,6	Around 1.5	0,89	459 134	Tons	Trang et al., 2017	HadGEM2-AO, CanESM2, IPSL-CM5A-LR, CNRM-CM5, and MPI-ESM-MR	N/A	2030s (2015–2039), 2060s (2045–2069), 2090s (2075–2099)	Table 12

Risk	Region	Metric (Unit)	Baseline Time Period against Which Change Measured	Socio-economic Scenario and Date	Baseline Global T above Pre-industrial	Climate Scenario Used	Transient (T) or Equilibrium (E)	Dynamic Model?	Projected Impact at 1.5°C above Pre-Industrial	2°C	3°C	4°C	Projected Impact at Delta T(°C)	Delta T Relative to Pre-Industrial	Delta T Relative to Baseline Temperature	Projected Impact (Reference Value)	Projected Impact (Unit)	Reference	GCM (e.g., MIROC5)	RCM	Future Period	Cited Part
Water quality (nutrient yield)	Southeast Asia (Cambodia, Laos, Vietnam) 35 River Basin (Sekong, Srepok, Sesan)	Change in phosphorus (P) yield (%), annual	1981–2008 (air temperatures), 2004–2008 (water quality)	N/A	N/A	5 GCM, RCP8.5, 2013–2039 (2030s), SWAT, FG1	N/A	N/A	11,7	N/A	N/A	11,7	Around 2	1,05	459 134	Tons	Trang et al., 2017	HadGEM2-AO, CanESM2, IPSL-CM5A-LR, CNRM-CM5, and MPI ESM-MR	N/A	2030s (2015–2039), 2060s (2045–2069), 2090s (2075–2099)	Table 12	
Water quality (nutrient yield)	Southeast Asia (Cambodia, Laos, Vietnam) 35 River Basin (Sekong, Srepok, Sesan)	Change in phosphorus (P) yield (%), annual	1981–2008 (air temperatures), 2004–2008 (water quality)	N/A	N/A	5 GCM, RCP4.5, 2013–2039 (2030s), SWAT, FA1	N/A	N/A	14,9	N/A	N/A	14,9	Around 1.5	0,89	459 134	Tons	Trang et al., 2017	HadGEM2-AO, CanESM2, IPSL-CM5A-LR, CNRM-CM5, and MPI ESM-MR	N/A	2030s (2015–2039), 2060s (2045–2069), 2090s (2075–2099)	Table 12	
Water quality (nutrient yield)	Southeast Asia (Cambodia, Laos, Vietnam) 35 River Basin (Sekong, Srepok, Sesan)	Change in phosphorus (P) yield (%), annual	1981–2008 (air temperatures), 2004–2008 (water quality)	N/A	N/A	5 GCM, RCP8.5, 2013–2039 (2030s), SWAT, FA1	N/A	N/A	8,8	N/A	N/A	8,8	Around 2	1,05	459 134	Tons	Trang et al., 2017	HadGEM2-AO, CanESM2, IPSL-CM5A-LR, CNRM-CM5, and MPI ESM-MR	N/A	2030s (2015–2039), 2060s (2045–2069), 2090s (2075–2099)	Table 12	

Table 3.SM.2: 3.4.3 Terrestrial and wetland ecosystems

Risk	Region	Metric (Unit)	Baseline Time Period against Which Change Measured	Socio-Economic Scenario and Date	Baseline Global T	Climate Scenario	Transient (T) or Equilibrium (E)	Overshoot Scenario?	Dynamic Model?	Projected Impact at 1.5°C above Pre-Industrial	Projected Impact at 2°C above Pre-Industrial	Projected Impact at Delta T(°C)	Level of Risk after Adaptation at 1.5°C	Level of Risk after Adaptation at 2°C	Type of Adaptation Modelled	Reference
Biome shift to north and to higher elevation	Global	%	1980–2010	Present day population	0.7°C	4 RCP	T	No	Y	1°C above baseline: 3 to 8 %	2°C above baseline: 5 to 19%	4°C above baseline: 35%	N/A	N/A	N/A	Warszawski et al. (2013)
Biomass loss (tropical forest to savanna/grassland)	Central America	kg m <sup>-2</sup>	1961–1990	0.5°C	1°C	HadGEM2-ES, RCP4.5, 2071–2100	T	No	Y	For 2050, biomass decrease to 6.5 kg/m <sup>2</sup>	N/A	Local warming of 2 to 4°C (NDC): -4 kg m <sup>-2</sup> (from 7 to 3 kg m <sup>-2</sup> )	N/A	N/A	N/A	Lyra et al. (2017)
Phenological shifts for primary producers (PP), primary consumers (PC), secondary consumers (SC)	UK	Days	1961–1990	N/A	-	UKCP09 projections in 2050	T	-	Y	(Low emission scenario) PP: -2.2 (-1 to -3) / PC: -5 (-2.5 to -7.5) / SC: -2 (-1 to -3)	(Medium emission scenario) PP: -2.3 (-1.2 to -4) / PC: -6 (-3.5 to -8.5) / SC: -2.1 (-3 to -4)	-	N/A	N/A	N/A	Thackeray et al. (2016)
Loss of 50% or more of their climate range	Globe	%	2100 (A1B), no mitigation	-	Pre-industrial	SRES all scenarios are +2°C or more	T	-	Y	-60% losses if emissions peak in 2016, -40% if peak in 2030	-	N/A	N/A	N/A	N/A	Warren et al. (2013)
Loss of 50% or more of their climate range for insects	Globe	%	Not provided	N/A	Pre-industrial	21 CMIP5 models	T	No	N	9% (4–24%)	25% (10–44%)	-	6% (1–18%)	18% (6–35%)	Dispersal	Warren et al. 2018a
Loss of 50% or more of their climate range for vertebrates	Globe	%	Not provided	N/A	Pre-industrial	21 CMIP5 models	T	No	N	5% (3–11%)	10% (6–24%)	-	4% (2–9%)	8% (4–16%)	Dispersal	Warren et al. 2018a
Loss of 50% or more of their climate range for plants	Globe	%	Not provided	N/A	Pre-industrial	21 CMIP5 models	T	No	N	8% (4–15%)	16% (9–28%)	-	8% (4–15%)	16% (9–28%)	Dispersal	Warren et al. 2018a
% of globe identified as climatic refugia for the different taxa (plants/animals)	Global	%	-	-	-	7 CMIP5 models, AVOID2 scenario	T	Y	Y	An additional 4–15% acts as a refugium	-	-	N/A	N/A	N/A	Smith et al. (2018)
Loss of 50% or more of their climate range for plants	Global	%	-	-	-	21 CMIP5 models	-	-	-	Significant reduction	-	-	N/A	N/A	N/A	Smith et al. (2018)
Increase of potential habitat of bamboo	Japan	%	pre-industrial	N/A	Pre-industrial	MRI AGCM CMIP5 RCP8.5 at 2027 and 2041	T	No	Y	+11–13%	+16–19%	2°C–1.5°C = 6%	N/A	N/A	N/A	Takano et al. (2017)
Carbon storage in vegetation (GPP) and soil	Europe	%	pre-industrial	-	1881–1910	Euro-Cordex with RCP4.5, 2034–2063	T	No	Y	N/A	+5% in soil and +20% in GPP	-	N/A	N/A	N/A	Sakalli et al. (2017)
Area of cryogenic land surface processes (nivation, cryoturbation, gelification, permafrost)	Northern Europe	%	1981–2010	-	-	CMIP5 ensemble RCP2.6, RCP4.5, RCP8.5	T	-	Y	RCP2.6, 2040–69: -19% (maximum of the 4 processes)	RCP2.6, 2070–99: -19% (max)	0%	-	-	-	Aalto et al. (2017)
Spring events in temperate forests (oak)	UK	Days	1961–1990	-	0.5°C	SRES (A1F1) near term (2010–2039) and medium term (2040–2069)	T	-	Y	-14.3 days	-24.6 days	2°C–1.5°C = 10.3 days	-	-	-	Roberts et al. (2015)
Starting date of growing season	Northern China	Days	1961–1990	-	0.5°C	HadGEM3-RA: RCP4.5 and 8.5 (2050)	-	-	-	-6.5 days (s.d.=4.8 days)	-7.4 days (s.d.=4.8 days)	2°C–1.5°C = 0.9 days	-	-	-	Luo et al. (2014)
Ecosystem NPP and GPP	Europe	%	1971–2000	N/A	0.46°C	Euro-Cordex / IMPACT2C / 3 RCP	T	No	Y	N/A	N/A	-	N/A	N/A	N/A	Jacob et al. (2018)
Permafrost area	Globe	km <sup>2</sup>	1960–1990	-	0.5°C	CMIP5	T	No	Y	11 millions km <sup>2</sup> (present = 15)	9 millions km <sup>2</sup> (present = 15)	2 millions km <sup>2</sup> (1.55 to 2.5)	N/A	N/A	N/A	Chadburn et al. (2017)
	-	-	-	-	-	CMIP3 SRES A2	-	-	-	-	-	-	-	-	-	Meehl et al. (2007)
Forest biomass	Central America	%	1961–1990	-	-	Eta-HadGEM2	T	-	Y	-20%	-30%	10%	-	-	-	Lyra et al. (2017)
Fynbos biome area	South Africa	%	1961–1990	-	0.5°C above pre-industrial	Regional CCAM os 6 GCM, SRES A2	T	-	Y	-20%	-32% (average between 1°C and 2°C)	12%	-	-	-	Engelbrecht and Engelbrecht (2016)

Table 3.SM.3: 3.4.4 Ocean Systems

Risk	Region	Metric (Unit)	Baseline Time Period against Which Change Measured	Baseline Global T	Climate Scenario	Transient (T) or Equilibrium (E)	Overshoot Scenario?	Dynamic Model?	Projected Impact at 1.5°C above Pre-Industrial	Projected Impact at 2°C above Pre-Industrial	Projected Impact at Delta T(°C)	Level of Risk after Adaptation at 1.5°C	Level of Risk after Adaptation at 2°C	Reference
SST/distributions of pelagic fish species	Northeast Pacific shelf seas	km/decade migrated	2000–2050	0.5°C	(SRES) A2	T	N	Y	30.1 ± 2.34 (SRES A2 is around 1.5°C at 2050, average across 28 species)	Likely to increase further	-	-	-	Cheung et al. (2015) (NW Pacific paper)
SST/distributions of pelagic fish species	West coast USA	Local extinction rate	2000–2050	0.5°C	(SRES) A2	T	N	Y	Increased	Likely to increase further	-	-	-	Cheung et al. (2015) (NW Pacific paper)
SST/distributions of pelagic fish species	Northeast Pacific shelf seas	Species invasion rate	2000–2050	0.5°C	(SRES) A2	T	N	Y	Increased	Likely to increase further	-	-	-	Cheung et al. (2015) (NW Pacific paper)
Increased SST (surface), reduced O <sub>2</sub> , decreased NPP	Global	Species turnover	1950–1969	Pre-industrial	19 CMIP5 models: RCP8.5 (3.5°C at end of century)	T	N	Y	-	-	21.6 ± 0.33%	-	-	Cheung et al. (2016)
Increased SST (surface), reduced O <sub>2</sub> , decreased NPP	Global	Species turnover	1950–1969	Pre-industrial	19 CMIP5 models: RCP2.6	E	N	Y	8.3 ± 0.05%	Likely to increase further	-	-	-	Cheung et al. (2016)
Increased SST (surface), reduced O <sub>2</sub> , decreased NPP	Indo-Pacific	Species turnover	1950–2100	1950 and 1969	19 CMIP5 models: RCP8.5	E	N	Y	-	-	36.4 ± 2.1%	-	-	Cheung et al. (2016)
Increased SST (surface), reduced O <sub>2</sub> , decreased NPP (species turnover)	Indo-Pacific	Species turnover	1950–2100	1950 and 1969	19 CMIP5 models: RCP2.6	E	N	Y	9.2 ± 0.8%	12.1 ± 0.8%	-	-	-	Cheung et al. (2016)
Increased SST (surface), reduced O <sub>2</sub> , decreased NPP (maximum catch potential)	Indo-Pacific	10 <sup>6</sup> metric tons	1950–2100	Average of the top 10-year global annual catches since 1950	19 CMIP5 models: RCP8.5	E	N	Y	-	Linear with change in increased SST, O <sub>2</sub> , NPP decrease, etc.)	-46.8 ± 1.2%	-	-	Cheung et al. (2016)
Increased SST (surface), reduced O <sub>2</sub> , decreased NPP (maximum catch potential)	Indo-Pacific	10 <sup>6</sup> metric tons	1950–2100	Average of the top 10-year global annual catches since 1950	19 CMIP5 models: RCP8.5	E	N	Y	-	-	-46.8 ± 1.2%	-	-	Cheung et al. (2016)
Increased SST (surface), reduced O <sub>2</sub> , decreased NPP (maximum catch potential)	Global	10 <sup>6</sup> metric tons	1950–2100	Average of the top 10-year global annual catches since 1950	19 CMIP5 models: RCP2.6	E	N	Y	-11.5 ± 0.6%	-20.2 ± 0.6%	-	-	-	Cheung et al. (2016)
Increased SST (surface), reduced O <sub>2</sub> , decreased NPP (maximum catch potential)	Arctic/temperate regions	%	1950–2100	Pre-industrial	19 CMIP5 models: RCP8.5	E	N	Y	50	Likely to increase further	400	-	-	Cheung et al. (2016)
Increased SST (surface), reduced O <sub>2</sub> , decreased NPP (maximum catch potential)	Equator	%	1950–2100	Pre-industrial	19 CMIP5 models: RCP8.5	E	N	Y	-70	Likely to increase further	-30	-	-	Cheung et al. (2016)
Increased SST (surface), reduced O <sub>2</sub> , decreased NPP (species turnover)	Arctic/temperate regions	%	1950–2100	Pre-industrial	19 CMIP5 models: RCP8.5	E	N	Y	3	Likely to increase further	20	-	-	Cheung et al. (2016)
Increased SST (surface), reduced O <sub>2</sub> , decreased NPP (species turnover)	Equator	%	1950–2100	Pre-industrial	19 CMIP5 models: RCP2.6	E	N	Y	5	Likely to increase further	35	-	-	Cheung et al. (2016)
Increased SST/coral bleaching and mortality	Tropics/subtropics	% loss of today's corals.	2000	0.5°C	"Commit", A1b, A1F1, B1, A2 (B1 is closest to 1.5°C)	T	N	N	80	95	100	Close to zero if corals can increase their tolerance by +1.5°C (no evidence but discussed)	No change	Donner et al. (2009)
Increased SST/coral bleaching and mortality	Tropics/subtropics	% loss of today's corals	1982–2005	-	RCP2.6	E	N	N	95	Even in the pathway with most pronounced emission reductions (RCP2.6), where CO <sub>2</sub> equivalent concentrations peak at 455 ppm (Supplementary Fig. S1), 95% of reef locations experience annual bleaching conditions by the end of the century	100	No change	No change	Hoodonk et al. (2013)
Increased SST/coral bleaching and mortality	Tropics/subtropics	Median year at which annual bleaching occurs	1983–2005	Pre-industrial	RCP8.5	T	N	N	2045	-	2055	No change	No change	Hoodonk et al. (2016)
Increased SST/coral bleaching and mortality	Australia	Likelihood of extreme events like 2015–2016 occurring, that cause coral bleaching	1861–2005 under both natural and anthropogenic forcings (historical), 1861–2005 under natural forcings only, and 2006–2100 under 4 RCP scenarios (RCP2.6, RCP4.5, RCP6.0 and RCP8.5) were analysed	1901–2005	16 models CMIP5	T,E	N	-	64% (53–76%)	87% (79–93%)	Even more likely	No change	No change	King et al. (2017)

Table 3.SM.4: 3.4.5 Coastal and low-lying areas

Risk	Region	Metric (Unit)	Baseline Time Period against Which Change Measured	Socio-Economic Scenario and Date	Baseline Global T	Climate Scenario	Transient (T) or Equilibrium (E)	Is it an Overshoot Scenario? How Long is it above 1.5°C and What is the Maximum Temperature and When?	Dynamic Model?	Projected Impact at 1.5°C above Pre-Industrial	Projected Impact at 2°C above Pre-Industrial	Projected Impact at Delta T for Defined Year (°C)	Delta T Relative to Pre-Industrial in Defined Year; Delta T (°C)	Level of Risk after Adaptation at 1.5°C	Level of Risk after Adaptation at 2°C	Type of Adaptation Modeled	Reference
Area situated below the 1-in-100-year flood plain	Global	(th km <sup>2</sup> )	1995	N/A	1850–1900	AMP1.5 (50th percentile). Stabilization at approx. 1.5°C	N/A	Yes. Overshoots after 2035 to 2150	No	562	N/A	N/A	N/A	Increasing (no adaptation assumed)	N/A	None	Brown et al. (2018a)
Area situated below the 1-in-100-year flood plain	Global	(th km <sup>2</sup> )	1995	N/A	1850–1900	AMP1.5 (95th percentile). Stabilization at approx. 1.5°C	N/A	Yes. Overshoots after 2045. Does not return to 1.5°C	No	575	590	N/A	N/A	Increasing (no adaptation assumed)	Increasing (no adaptation assumed)	None	Brown et al. (2018a)
Population situated below the 1-in-100-year flood plain	Global	(millions)	1995	SSP1–5	1850–1900	AMP1.5 (50th percentile). Stabilization at approx. 1.5°C	N/A	Yes. Overshoots after 2035 to 2150	No	128–137	N/A	N/A	N/A	Increasing (no adaptation assumed)	N/A	None	Brown et al. (2018a)
Population situated below the 1-in-100-year flood plain	Global	(millions)	1995	SSP1–5	1850–1900	AMP1.5 (95th percentile). Stabilization at approx. 1.5°C	N/A	Yes. Overshoots after 2045. Does not return to 1.5°C	No	134–143	136–144	N/A	N/A	Increasing (no adaptation assumed)	Increasing (no adaptation assumed)	None	Brown et al. (2018a)
Area situated below the 1-in-100-year flood plain	Global	(th km <sup>2</sup> )	1995	N/A	1850–1900	AMP2.0 (50th percentile). Stabilization at approx. 2.0°C	N/A	Yes. Overshoots after 2035. Does not return to 1.5°C	No	561	613	N/A	N/A	Increasing (no adaptation assumed)	Increasing (no adaptation assumed)	None	Brown et al. (2018a)
Area situated below the 1-in-100-year flood plain	Global	(th km <sup>2</sup> )	1995	N/A	1850–1900	AMP2.0 (95th percentile). Stabilization at approx. 2.0°C	N/A	Yes. Overshoots after 2025. Does not return to 1.5°C	No	562	590	N/A	N/A	Increasing (no adaptation assumed)	Increasing (no adaptation assumed)	None	Brown et al. (2018a)
Area situated below the 1-in-100-year flood plain	Global	(th km <sup>2</sup> )	1995	N/A	1850–1900	AMP2.0 (5th percentile). Stabilization at approx. 2.0°C	N/A	Yes. Overshoots after 2050. Does not return to 1.5°C	No	557	N/A	N/A	N/A	Increasing (no adaptation assumed)	N/A	None	Brown et al. (2018a)
Population situated below the 1-in-100-year flood plain	Global	(millions)	1995	SSP1–5	1850–1900	AMP2.0 (50th percentile). Stabilization at approx. 2.0°C	N/A	Yes. Overshoots after 2035. Does not return to 1.5°C	No	127–132	114–151	N/A	N/A	Increasing (no adaptation assumed)	Increasing (no adaptation assumed)	None	Brown et al. (2018a)
Population situated below the 1-in-100-year flood plain	Global	(millions)	1995	SSP1–5	1850–1900	AMP2.0 (95th percentile). Stabilization at approx. 2.0°C	N/A	Yes. Overshoots after 2025. Does not return to 1.5°C	No	126–129	134–143	N/A	N/A	Increasing (no adaptation assumed)	Increasing (no adaptation assumed)	None	Brown et al. (2018a)
Population situated below the 1-in-100-year flood plain	Global	(millions)	1995	SSP1–5	1850–1900	AMP2.0 (5th percentile). Stabilization at approx. 2.0°C	N/A	Yes. Overshoots after 2050. Does not return to 1.5°C	No	124–134	N/A	N/A	N/A	Increasing (no adaptation assumed)	N/A	None	Brown et al. (2018a)
Area situated below the 1-in-100-year flood plain	Global	(th km <sup>2</sup> )	1995	N/A	1850–1900	AMP2.5 (50th percentile). Stabilization at approx. 2.5°C	N/A	Yes. Overshoots after 2035. Does not return to 1.5°C	No	561	598	N/A	N/A	Increasing (no adaptation assumed)	Increasing (no adaptation assumed)	None	Brown et al. (2018a)
Area situated below the 1-in-100-year flood plain	Global	(th km <sup>2</sup> )	1995	N/A	1850–1900	AMP2.5 (95th percentile). Stabilization at approx. 2.5°C	N/A	Yes. Overshoots after 2035. Does not return to 1.5°C	No	569	591	N/A	N/A	Increasing (no adaptation assumed)	Increasing (no adaptation assumed)	None	Brown et al. (2018a)
Area situated below the 1-in-100-year flood plain	Global	(th km <sup>2</sup> )	1995	N/A	1850–1900	AMP2.5 (5th percentile). Stabilization at approx. 2.5°C	N/A	Yes. Overshoots after 2050. Does not return to 1.5°C	No	561	N/A	N/A	N/A	Increasing (no adaptation assumed)	N/A	None	Brown et al. (2018a)
Population situated below the 1-in-100-year flood plain	Global	(millions)	1995	SSP1–5	1850–1900	AMP2.5 (50th percentile). Stabilization at approx. 2.5°C	N/A	Yes. Overshoots after 2035. Does not return to 1.5°C	No	127–132	122–146	N/A	N/A	Increasing (no adaptation assumed)	Increasing (no adaptation assumed)	None	Brown et al. (2018a)
Population situated below the 1-in-100-year flood plain	Global	(millions)	1995	SSP1–5	1850–1900	AMP2.5 (95th percentile). Stabilization at approx. 2.5°C	N/A	Yes. Overshoots after 2030. Does not return to 1.5°C	No	128–132	134–143	N/A	N/A	Increasing (no adaptation assumed)	Increasing (no adaptation assumed)	None	Brown et al. (2018a)
Population situated below the 1-in-100-year flood plain	Global	(millions)	1995	SSP1–5	1850–1900	AMP2.5 (5th percentile). Stabilization at approx. 2.5°C	N/A	Yes. Overshoots after 2050. Does not return to 1.5°C	No	124–134	N/A	N/A	N/A	Increasing (no adaptation assumed)	N/A	None	Brown et al. (2018a)
Area situated below the 1-in-100-year flood plain	Global	(th km <sup>2</sup> )	1995	N/A	1850–1900	AMP3.0 (50th percentile). Stabilization at approx. 3.0°C	N/A	Yes. Overshoots after 2035. Does not return to 1.5°C	No	561	598	N/A	N/A	Increasing (no adaptation assumed)	Increasing (no adaptation assumed)	None	Brown et al. (2018a)
Area situated below the 1-in-100-year flood plain	Global	(th km <sup>2</sup> )	1995	N/A	1850–1900	AMP3.0 (95th percentile). Stabilization at approx. 3.0°C	N/A	Yes. Overshoots after 2025. Does not return to 1.5°C	No	562	591	N/A	N/A	Increasing (no adaptation assumed)	Increasing (no adaptation assumed)	None	Brown et al. (2018a)
Area situated below the 1-in-100-year flood plain	Global	(th km <sup>2</sup> )	1995	N/A	1850–1900	AMP3.0 (5th percentile). Stabilization at approx. 3.0°C	N/A	Yes. Overshoots after 2050. Does not return to 1.5°C	No	561	598	N/A	N/A	Increasing (no adaptation assumed)	Increasing (no adaptation assumed)	None	Brown et al. (2018a)
Area situated below the 1-in-100-year flood plain	Global	(th km <sup>2</sup> )	1995	N/A	1850–1900	AMP3.0 (50th percentile). Stabilization at approx. 3.0°C	N/A	Yes. Overshoots after 2050. Does not return to 1.5°C	No	599	N/A	N/A	N/A	Increasing (no adaptation assumed)	N/A	None	Brown et al. (2018a)
Population situated below the 1-in-100-year flood plain	Global	(millions)	1995	SSP1–5	1850–1900	AMP3.0 (50th percentile). Stabilization at approx. 3.0°C	N/A	Yes. Overshoots after 2035. Does not return to 1.5°C	No	127–132	122–136	N/A	N/A	Increasing (no adaptation assumed)	Increasing (no adaptation assumed)	None	Brown et al. (2018a)
Population situated below the 1-in-100-year flood plain	Global	(millions)	1995	SSP1–5	1850–1900	AMP3.0 (95th percentile). Stabilization at approx. 3.0°C	N/A	Yes. Overshoots after 2025. Does not return to 1.5°C	No	126–128	134–143	N/A	N/A	Increasing (no adaptation assumed)	Increasing (no adaptation assumed)	None	Brown et al. (2018a)
Population situated below the 1-in-100-year flood plain	Global	(millions)	1995	SSP1–5	1850–1900	AMP3.0 (5th percentile). Stabilization at approx. 3.0°C	N/A	Yes. Overshoots after 2050. Does not return to 1.5°C	No	124–134	N/A	N/A	N/A	Increasing (no adaptation assumed)	N/A	None	Brown et al. (2018a)
Area situated below the 1-in-100-year flood plain	Global	(th km <sup>2</sup> )	1995	N/A	1850–1900	AMP4.5 (50th percentile). Stabilization at approx. 4.5°C	N/A	Yes. Overshoots after 2035. Does not return to 1.5°C	No	561	593	N/A	N/A	Increasing (no adaptation assumed)	Increasing (no adaptation assumed)	None	Brown et al. (2018a)
Area situated below the 1-in-100-year flood plain	Global	(th km <sup>2</sup> )	1995	N/A	1850–1900	AMP4.5 (95th percentile). Stabilization at approx. 4.5°C	N/A	Yes. Overshoots after 2030. Does not return to 1.5°C	No	568	591	N/A	N/A	Increasing (no adaptation assumed)	Increasing (no adaptation assumed)	None	Brown et al. (2018a)

Risk	Region	Metric (Unit)	Baseline Time Period against Which Change Measured	Socio-Economic Scenario and Date	Baseline Global T	Climate Scenario	Transient (T) or Equilibrium (E)	Is it an Overshoot Scenario? How Long is it above 1.5°C and What is the Maximum Temperature and When?	Dynamic Model?	Projected Impact at 1.5°C above Pre-Industrial	Projected Impact at 2°C above Pre-Industrial	Projected Impact at Delta T for Defined Year (°C)	Delta T Relative to Pre-Industrial in Defined Year; Delta T (°C)	Level of Risk after Adaptation at 1.5°C	Level of Risk after Adaptation at 2°C	Type of Adaptation Modeled	Reference
Area situated below the 1-in-100-year flood plain	Global	(th km <sup>2</sup> )	1995	N/A	1850–1900	AMP4.5 (5th percentile). Stabilization at approx. 4.5°C	N/A	Yes. Overshoots after 2050. Does not return to 1.5°C	No	560	590	N/A	N/A	Increasing (no adaptation assumed)	Increasing (no adaptation assumed)	None	Brown et al. (2018a)
Population situated below the 1-in-100-year flood plain	Global	(millions)	1995	SSP1–5	1850–1900	AMP4.5 (50th percentile). Stabilization at approx. 4.5°C	N/A	Yes. Overshoots after 2035. Does not return to 1.5°C	No	127–131	125–137	N/A	N/A	Increasing (no adaptation assumed)	Increasing (no adaptation assumed)	None	Brown et al. (2018a)
Population situated below the 1-in-100-year flood plain	Global	(millions)	1995	SSP1–5	1850–1900	AMP4.5 (95th percentile). Stabilization at approx. 4.5°C	N/A	Yes. Overshoots after 2030. Does not return to 1.5°C	No	128–133	134–143	N/A	N/A	Increasing (no adaptation assumed)	Increasing (no adaptation assumed)	None	Brown et al. (2018a)
Population situated below the 1-in-100-year flood plain	Global	(millions)	1995	SSP1–5	1850–1900	AMP4.5 (5th percentile). Stabilization at approx. 4.5°C	N/A	Yes. Overshoots after 2050. Does not return to 1.5°C	No	124–134	101–144	N/A	N/A	Increasing (no adaptation assumed)	Increasing (no adaptation assumed)	None	Brown et al. (2018a)
Area situated below the 1-in-100-year flood plain	Global	(th km <sup>2</sup> )	1995	N/A	1850–1900	RCP8.5 (50th percentile)	N/A	Yes. Overshoots after 2035. Does not return to 1.5°C	No	563	576	N/A	N/A	Increasing (no adaptation assumed)	Increasing (no adaptation assumed)	None	Brown et al. (2018a)
Area situated below the 1-in-100-year flood plain	Global	(th km <sup>2</sup> )	1995	N/A	1850–1900	RCP8.5 (95th percentile)	N/A	Yes. Overshoots after 2030. Does not return to 1.5°C	No	569	585	N/A	N/A	Increasing (no adaptation assumed)	Increasing (no adaptation assumed)	None	Brown et al. (2018a)
Area situated below the 1-in-100-year flood plain	Global	(th km <sup>2</sup> )	1995	N/A	1850–1900	RCP8.5 (5th percentile)	N/A	Yes. Overshoots after 2040. Does not return to 1.5°C	No	557	567	N/A	N/A	Increasing (no adaptation assumed)	Increasing (no adaptation assumed)	None	Brown et al. (2018a)
Population situated below the 1-in-100-year flood plain	Global	(millions)	1995	SSP1–5	1850–1900	RCP8.5 (50th percentile)	N/A	Yes. Overshoots after 2045. Does not return to 1.5°C	No	127–133	130–139	N/A	N/A	Increasing (no adaptation assumed)	Increasing (no adaptation assumed)	None	Brown et al. (2018a)
Population situated below the 1-in-100-year flood plain	Global	(millions)	1995	SSP1–5	1850–1900	RCP8.5 (95th percentile)	N/A	Yes. Overshoots after 2040. Does not return to 1.5°C	No	128–132	133–141	N/A	N/A	Increasing (no adaptation assumed)	Increasing (no adaptation assumed)	None	Brown et al. (2018a)
Population situated below the 1-in-100-year flood plain	Global	(millions)	1995	SSP1–5	1850–1900	RCP8.5 (5th percentile)	N/A	Yes. Overshoots after 2050. Does not return to 1.5°C	No	125–132	125–136	N/A	N/A	Increasing (no adaptation assumed)	Increasing (no adaptation assumed)	None	Brown et al. (2018a)
Area situated below the 1-in-100-year flood plain	Global	(th km <sup>2</sup> )	1995	N/A	1850–1900	AMP1.5 (5th percentile). Stabilization at approx. 1.5°C	N/A	N/A	No	N/A	N/A	575	1.26°C in 2100	N/A	N/A	N/A	Brown et al. (2018a)
Area situated below the 1-in-100-year flood plain	Global	(th km <sup>2</sup> )	1995	N/A	1850–1900	AMP1.5 (5th percentile). Stabilization at approx. 1.5°C	N/A	N/A	No	N/A	N/A	592	1.15°C in 2200	N/A	N/A	N/A	Brown et al. (2018a)
Area situated below the 1-in-100-year flood plain	Global	(th km <sup>2</sup> )	1995	N/A	1850–1900	AMP1.5 (5th percentile). Stabilization at approx. 1.5°C	N/A	N/A	No	N/A	N/A	606	1.12°C in 2300	N/A	N/A	N/A	Brown et al. (2018a)
Area situated below the 1-in-100-year flood plain	Global	(th km <sup>2</sup> )	1995	N/A	1850–1900	AMP1.5 (95th percentile). Stabilization at approx. 1.5°C	N/A	Yes. Overshoots after 2045. Does not return to 1.5°C	No	575	590	669	2.33°C in 2100	Increasing (no adaptation assumed)	Increasing (no adaptation assumed)	None	Brown et al. (2018a)
Area situated below the 1-in-100-year flood plain	Global	(th km <sup>2</sup> )	1995	N/A	1850–1900	AMP1.5 (95th percentile). Stabilization at approx. 1.5°C	N/A	Yes. Overshoots after 2045. Does not return to 1.5°C	No	575	590	827	2.18°C in 2200	Increasing (no adaptation assumed)	Increasing (no adaptation assumed)	None	Brown et al. (2018a)
Area situated below the 1-in-100-year flood plain	Global	(th km <sup>2</sup> )	1995	N/A	1850–1900	AMP1.5 (95th percentile). Stabilization at approx. 1.5°C	N/A	Yes. Overshoots after 2045. Does not return to 1.5°C	No	575	590	843	1.82°C in 2300	Increasing (no adaptation assumed)	Increasing (no adaptation assumed)	None	Brown et al. (2018a)
Area situated below the 1-in-100-year flood plain	Global	(th km <sup>2</sup> )	1995	N/A	1850–1900	AMP1.5 (50th percentile). Stabilization at approx. 1.5°C	N/A	Yes. Overshoots after 2035 to 2150	No	562	N/A	620	1.58°C in 2100	Increasing (no adaptation assumed)	N/A	None	Brown et al. (2018a)
Area situated below the 1-in-100-year flood plain	Global	(th km <sup>2</sup> )	1995	N/A	1850–1900	AMP1.5 (50th percentile). Stabilization at approx. 1.5°C	N/A	Yes. Overshoots after 2035 to 2150	No	562	N/A	666	1.41°C in 2200	Increasing (no adaptation assumed)	N/A	None	Brown et al. (2018a)
Area situated below the 1-in-100-year flood plain	Global	(th km <sup>2</sup> )	1995	N/A	1850–1900	AMP1.5 (50th percentile). Stabilization at approx. 1.5°C	N/A	Yes. Overshoots after 2035 to 2150	No	562	N/A	702	1.33°C in 2300	Increasing (no adaptation assumed)	N/A	None	Brown et al. (2018a)
Area situated below the 1-in-100-year flood plain	Global	(th km <sup>2</sup> )	1995	N/A	1850–1900	AMP2.0 (5th percentile). Stabilization at approx. 2.0°C	N/A	Yes. Overshoots after 2050. Does not return to 1.5°C	No	557	N/A	585	1.72°C in 2100	Increasing (no adaptation assumed)	N/A	None	Brown et al. (2018a)
Area situated below the 1-in-100-year flood plain	Global	(th km <sup>2</sup> )	1995	N/A	1850–1900	AMP2.0 (5th percentile). Stabilization at approx. 2.0°C	N/A	Yes. Overshoots after 2050. Does not return to 1.5°C	No	557	N/A	642	1.60°C in 2300	Increasing (no adaptation assumed)	N/A	None	Brown et al. (2018a)
Area situated below the 1-in-100-year flood plain	Global	(th km <sup>2</sup> )	1995	N/A	1850–1900	AMP2.0 (95th percentile). Stabilization at approx. 2.0°C	N/A	Yes. Overshoots after 2025. Does not return to 1.5°C	No	562	590	686	2.64°C in 2100	Increasing (no adaptation assumed)	Increasing (no adaptation assumed)	None	Brown et al. (2018a)
Area situated below the 1-in-100-year flood plain	Global	(th km <sup>2</sup> )	1995	N/A	1850–1900	AMP2.0 (95th percentile). Stabilization at approx. 2.0°C	N/A	Yes. Overshoots after 2025. Does not return to 1.5°C	No	562	590	827	2.57°C in 2200	Increasing (no adaptation assumed)	Increasing (no adaptation assumed)	None	Brown et al. (2018a)



Risk	Region	Metric (Unit)	Baseline Time Period against Which Change Measured	Socio-Economic Scenario and Date	Baseline Global T	Climate Scenario	Transient (T) or Equilibrium (E)	Is it an Overshoot Scenario? How Long is it above 1.5°C and What is the Maximum Temperature and When?	Dynamic Model?	Projected Impact at 1.5°C above Pre-Industrial	Projected Impact at 2°C above Pre-Industrial	Projected Impact at Delta T for Defined Year (°C)	Delta T Relative to Pre-Industrial in Defined Year; Delta T(°C)	Level of Risk after Adaptation at 1.5°C	Level of Risk after Adaptation at 2°C	Type of Adaptation Modeled	Reference
Area situated below the 1-in-100-year flood plain	Global	(th km <sup>2</sup> )	1995	N/A	1850–1900	AMP4.5 (5th percentile). Stabilization at approx. 4.5°C	N/A	Yes. Overshoots after 2050. Does not return to 1.5°C	No	560	590	760	3.17°C in 2300	Increasing (no adaptation assumed)	Increasing (no adaptation assumed)	None	Brown et al. (2018a)
Area situated below the 1-in-100-year flood plain	Global	(th km <sup>2</sup> )	1995	N/A	1850–1900	AMP4.5 (95th percentile). Stabilization at approx. 4.5°C	N/A	Yes. Overshoots after 2030. Does not return to 1.5°C	No	568	591	700	3.28°C in 2100	Increasing (no adaptation assumed)	Increasing (no adaptation assumed)	None	Brown et al. (2018a)
Area situated below the 1-in-100-year flood plain	Global	(th km <sup>2</sup> )	1995	N/A	1850–1900	AMP4.5 (95th percentile). Stabilization at approx. 4.5°C	N/A	Yes. Overshoots after 2030. Does not return to 1.5°C	No	568	591	961	4.66°C in 2200	Increasing (no adaptation assumed)	Increasing (no adaptation assumed)	None	Brown et al. (2018a)
Area situated below the 1-in-100-year flood plain	Global	(th km <sup>2</sup> )	1995	N/A	1850–1900	AMP4.5 (95th percentile). Stabilization at approx. 4.5°C	N/A	Yes. Overshoots after 2030. Does not return to 1.5°C	No	568	591	1290	4.75°C in 2300	Increasing (no adaptation assumed)	Increasing (no adaptation assumed)	None	Brown et al. (2018a)
Area situated below the 1-in-100-year flood plain	Global	(th km <sup>2</sup> )	1995	N/A	1850–1900	AMP4.5 (50th percentile). Stabilization at approx. 4.5°C	N/A	Yes. Overshoots after 2035. Does not return to 1.5°C	No	561	593	638	2.50°C in 2100	Increasing (no adaptation assumed)	Increasing (no adaptation assumed)	None	Brown et al. (2018a)
Area situated below the 1-in-100-year flood plain	Global	(th km <sup>2</sup> )	1995	N/A	1850–1900	AMP4.5 (50th percentile). Stabilization at approx. 4.5°C	N/A	Yes. Overshoots after 2035. Does not return to 1.5°C	No	561	593	786	3.4°C in 2200	Increasing (no adaptation assumed)	Increasing (no adaptation assumed)	None	Brown et al. (2018a)
Area situated below the 1-in-100-year flood plain	Global	(th km <sup>2</sup> )	1995	N/A	1850–1900	AMP4.5 (50th percentile). Stabilization at approx. 4.5°C	N/A	Yes. Overshoots after 2035. Does not return to 1.5°C	No	561	593	960	3.85°C in 2300	Increasing (no adaptation assumed)	Increasing (no adaptation assumed)	None	Brown et al. (2018a)
Area situated below the 1-in-100-year flood plain	Global	(th km <sup>2</sup> )	1995	N/A	1850–1900	RCP8.5 (5th percentile)	N/A	Yes. Overshoots after 2040. Does not return to 1.5°C	No	557	567	646	4.35°C in 2100	Increasing (no adaptation assumed)	Increasing (no adaptation assumed)	None	Brown et al. (2018a)
Area situated below the 1-in-100-year flood plain	Global	(th km <sup>2</sup> )	1995	N/A	1850–1900	RCP8.5 (5th percentile)	N/A	Yes. Overshoots after 2040. Does not return to 1.5°C	No	557	567	887	7.02°C in 2200	Increasing (no adaptation assumed)	Increasing (no adaptation assumed)	None	Brown et al. (2018a)
Area situated below the 1-in-100-year flood plain	Global	(th km <sup>2</sup> )	1995	N/A	1850–1900	RCP8.5 (5th percentile)	N/A	Yes. Overshoots after 2040. Does not return to 1.5°C	No	557	567	1190	7.52°C in 2300	Increasing (no adaptation assumed)	Increasing (no adaptation assumed)	None	Brown et al. (2018a)
Area situated below the 1-in-100-year flood plain	Global	(th km <sup>2</sup> )	1995	N/A	1850–1900	RCP8.5 (95th percentile)	N/A	Yes. Overshoots after 2030. Does not return to 1.5°C	No	569	585	792	5.83°C in 2100	Increasing (no adaptation assumed)	Increasing (no adaptation assumed)	None	Brown et al. (2018a)
Area situated below the 1-in-100-year flood plain	Global	(th km <sup>2</sup> )	1995	N/A	1850–1900	RCP8.5 (95th percentile)	N/A	Yes. Overshoots after 2030. Does not return to 1.5°C	No	569	585	1490	11.23°C in 2200	Increasing (no adaptation assumed)	Increasing (no adaptation assumed)	None	Brown et al. (2018a)
Area situated below the 1-in-100-year flood plain	Global	(th km <sup>2</sup> )	1995	N/A	1850–1900	RCP8.5 (95th percentile)	N/A	Yes. Overshoots after 2030. Does not return to 1.5°C	No	569	585	2220	13.14°C in 2300	Increasing (no adaptation assumed)	Increasing (no adaptation assumed)	None	Brown et al. (2018a)
Area situated below the 1-in-100-year flood plain	Global	(th km <sup>2</sup> )	1995	N/A	1850–1900	RCP8.5 (50th percentile)	N/A	Yes. Overshoots after 2035. Does not return to 1.5°C	No	563	576	708	4.93°C in 2100	Increasing (no adaptation assumed)	Increasing (no adaptation assumed)	None	Brown et al. (2018a)
Area situated below the 1-in-100-year flood plain	Global	(th km <sup>2</sup> )	1995	N/A	1850–1900	RCP8.5 (50th percentile)	N/A	Yes. Overshoots after 2035. Does not return to 1.5°C	No	563	576	1140	8.55°C in 2200	Increasing (no adaptation assumed)	Increasing (no adaptation assumed)	None	Brown et al. (2018a)
Area situated below the 1-in-100-year flood plain	Global	(th km <sup>2</sup> )	1995	N/A	1850–1900	RCP8.5 (50th percentile)	N/A	Yes. Overshoots after 2035. Does not return to 1.5°C	No	563	576	1630	9.54°C in 2300	Increasing (no adaptation assumed)	Increasing (no adaptation assumed)	None	Brown et al. (2018a)
Population situated below the 1-in-100-year flood plain	Global	(millions)	1995	SSP1–5 until 2100, then no change to 2300	1850–1900	AMP1.5 (5th percentile). Stabilization at approx. 1.5°C	N/A	N/A	No	N/A	N/A	95–141	1.26°C in 2100	N/A	N/A	None	Brown et al. (2018a)
Population situated below the 1-in-100-year flood plain	Global	(millions)	1995	SSP1–5 until 2100, then no change to 2300	1850–1900	AMP1.5 (5th percentile). Stabilization at approx. 1.5°C	N/A	N/A	No	N/A	N/A	112–170	1.12°C in 2300	N/A	N/A	None	Brown et al. (2018a)
Population situated below the 1-in-100-year flood plain	Global	(millions)	1995	SSP1–5 until 2100, then no change to 2300	1850–1900	AMP1.5 (95th percentile). Stabilization at approx. 1.5°C	N/A	Yes. Overshoots after 2045. Does not return to 1.5°C	No	134–143	136–144	114–173	2.33°C in 2100	Increasing (no adaptation assumed)	Increasing (no adaptation assumed)	None	Brown et al. (2018a)
Population situated below the 1-in-100-year flood plain	Global	(millions)	1995	SSP1–5 until 2100, then no change to 2300	1850–1900	AMP1.5 (95th percentile). Stabilization at approx. 1.5°C	N/A	Yes. Overshoots after 2045. Does not return to 1.5°C	No	134–143	136–144	165–263	1.82°C in 2300	Increasing (no adaptation assumed)	Increasing (no adaptation assumed)	None	Brown et al. (2018a)
Population situated below the 1-in-100-year flood plain	Global	(millions)	1995	SSP1–5 until 2100, then no change to 2300	1850–1900	AMP1.5 (50th percentile). Stabilization at approx. 1.5°C	N/A	Yes. Overshoots after 2035 to 2150	No	128–137	N/A	103–154	1.58°C in 2100	Increasing (no adaptation assumed)	N/A	None	Brown et al. (2018a)
Population situated below the 1-in-100-year flood plain	Global	(millions)	1995	SSP1–5 until 2100, then no change to 2300	1850–1900	AMP1.5 (50th percentile). Stabilization at approx. 1.5°C	N/A	Yes. Overshoots after 2035 to 2150	No	128–137	N/A	133–207	1.33°C in 2300	Increasing (no adaptation assumed)	N/A	None	Brown et al. (2018a)
Population situated below the 1-in-100-year flood plain	Global	(millions)	1995	SSP1–5 until 2100, then no change to 2300	1850–1900	AMP2.0 (5th percentile). Stabilization at approx. 2.0°C	N/A	Yes. Overshoots after 2050. Does not return to 1.5°C	No	124–133	N/A	97–144	1.72°C in 2100	Increasing (no adaptation assumed)	N/A	None	Brown et al. (2018a)
Population situated below the 1-in-100-year flood plain	Global	(millions)	1995	SSP1–5 until 2100, then no change to 2300	1850–1900	AMP2.0 (5th percentile). Stabilization at approx. 2.0°C	N/A	Yes. Overshoots after 2050. Does not return to 1.5°C	No	124–133	N/A	120–183	1.60°C in 2300	Increasing (no adaptation assumed)	N/A	None	Brown et al. (2018a)



Risk	Region	Metric (Unit)	Baseline Time Period against Which Change Measured	Socio-Economic Scenario and Date	Baseline Global T	Climate Scenario	Transient (T) or Equilibrium (E)	Is it an Overshoot Scenario? How Long is it above 1.5°C and What is the Maximum Temperature and When?	Dynamic Model?	Projected Impact at 1.5°C above Pre-Industrial	Projected Impact at 2°C above Pre-Industrial	Projected Impact at Delta T for Defined Year (°C)	Delta T Relative to Pre-Industrial in Defined Year; Delta T(°C)	Level of Risk after Adaptation at 1.5°C	Level of Risk after Adaptation at 2°C	Type of Adaptation Modeled	Reference
Population situated below the 1-in-100-year flood plain	Global	(millions)	1995	SSP1–5 until 2100, then no change to 2300	1850–1900	RCP8.5 (95th percentile)	N/A	Yes. Overshoots after 2040. Does not return to 1.5°C	No	128–132	133–141	142–221	5.83°C in 2100	Increasing (no adaptation assumed)	Increasing (no adaptation assumed)	None	Brown et al. (2018a)
Population situated below the 1-in-100-year flood plain	Global	(millions)	1995	SSP1–5 until 2100, then no change to 2300	1850–1900	RCP8.5 (95th percentile)	N/A	Yes. Overshoots after 2040. Does not return to 1.5°C	No	128–132	133–141	504–879	13.14°C in 2300	Increasing (no adaptation assumed)	Increasing (no adaptation assumed)	None	Brown et al. (2018a)
Population situated below the 1-in-100-year flood plain	Global	(millions)	1995	SSP1–5 until 2100, then no change to 2300	1850–1900	RCP8.5 (50th percentile)	N/A	Yes. Overshoots after 2045. Does not return to 1.5°C	No	127–133	130–139	123–189	4.93°C in 2100	Increasing (no adaptation assumed)	Increasing (no adaptation assumed)	None	Brown et al. (2018a)
Population situated below the 1-in-100-year flood plain	Global	(millions)	1995	SSP1–5 until 2100, then no change to 2300	1850–1900	RCP8.5 (50th percentile)	N/A	Yes. Overshoots after 2045. Does not return to 1.5°C	No	127–133	130–139	361–620	9.54°C in 2300	Increasing (no adaptation assumed)	Increasing (no adaptation assumed)	None	Brown et al. (2018a)
People at risk from flooding	Global	(millions yr <sup>-1</sup> )	1995	Average of SSP1–5	1850–1900	1.5°C scenario (50th percentile)	N/A	No	Yes	27,8	N/A	N/A	N/A	Increasing (assuming no upgrade to adaptation)	Increasing (assuming no upgrade to adaptation)	Dikes in base year, then no upgrade to adaptation	Nicholls et al. (2018)
People at risk from flooding	Global	(millions yr <sup>-1</sup> )	1995	Average of SSP1–5	1850–1900	1.5°C scenario (95th percentile)	N/A	No	Yes	2,3	N/A	N/A	N/A	Increasing (assuming no upgrade to adaptation)	Increasing (assuming no upgrade to adaptation)	Dikes in base year, then no upgrade to adaptation	Nicholls et al. (2018)
People at risk from flooding	Global	(millions yr <sup>-1</sup> )	1995	Average of SSP1–5	1850–1900	2.0°C scenario (50th percentile)	N/A	Yes. Overshoots in 2040. Does not return to 1.5°C	Yes	19,5	52,3	N/A	N/A	Increasing (assuming no upgrade to adaptation)	Increasing (assuming no upgrade to adaptation)	Dikes in base year, then no upgrade to adaptation	Nicholls et al. (2018)
People at risk from flooding	Global	(millions yr <sup>-1</sup> )	1995	Average of SSP1–5	1850–1900	2.0°C scenario (95th percentile)	N/A	Yes. Overshoots in 2005. Does not return to 1.5°C	Yes	2,3	14,9	N/A	N/A	Increasing (assuming no upgrade to adaptation)	Increasing (assuming no upgrade to adaptation)	Dikes in base year, then no upgrade to adaptation	Nicholls et al. (2018)
People at risk from flooding	Global	(millions yr <sup>-1</sup> )	1995	Average of SSP1–5	1850–1900	2.0°C scenario (5th percentile)	N/A	Yes. Overshoots in 2060. Does not return to 1.5°C	Yes	25,8	N/A	N/A	N/A	Increasing (assuming no upgrade to adaptation)	Increasing (assuming no upgrade to adaptation)	Dikes in base year, then no upgrade to adaptation	Nicholls et al. (2018)
People at risk from flooding	Global	(millions yr <sup>-1</sup> )	1995	Average of SSP1–5	1850–1900	RCP8.5 (50th percentile)	N/A	Yes. Overshoots in 2035. Does not return to 1.5°C	Yes	30	36,4	N/A	N/A	Increasing (assuming no upgrade to adaptation)	Increasing (assuming no upgrade to adaptation)	Dikes in base year, then no upgrade to adaptation	Nicholls et al. (2018)
People at risk from flooding	Global	(millions yr <sup>-1</sup> )	1995	Average of SSP1–5	1850–1900	RCP8.5 (95th percentile)	N/A	Yes. Overshoots in 2005. Does not return to 1.5°C	Yes	2,3	14,8	N/A	N/A	Increasing (assuming no upgrade to adaptation)	Increasing (assuming no upgrade to adaptation)	Dikes in base year, then no upgrade to adaptation	Nicholls et al. (2018)
People at risk from flooding	Global	(millions yr <sup>-1</sup> )	1995	Average of SSP1–5	1850–1900	RCP8.5 (5th percentile)	N/A	Yes. Overshoots in 2045. Does not return to 1.5°C	Yes	21,2	25	N/A	N/A	Increasing (assuming no upgrade to adaptation)	Increasing (assuming no upgrade to adaptation)	Dikes in base year, then no upgrade to adaptation	Nicholls et al. (2018)
People at risk from flooding	Global	(millions yr <sup>-1</sup> )	1995	Average of SSP1–5	1850–1900	1.5°C scenario (50th percentile)	N/A	No	Yes	N/A	N/A	62,7	1.48°C in 2100	Increasing (assuming no upgrade to adaptation)	Increasing (assuming no upgrade to adaptation)	Dikes in base year, then no upgrade to adaptation	Nicholls et al. (2018)
People at risk from flooding	Global	(millions yr <sup>-1</sup> )	1995	Average of SSP1–5	1850–1900	1.5°C scenario (95th percentile)	N/A	No	Yes	N/A	N/A	116,8	1.55°C in 2100	Increasing (assuming no upgrade to adaptation)	Increasing (assuming no upgrade to adaptation)	Dikes in base year, then no upgrade to adaptation	Nicholls et al. (2018)
People at risk from flooding	Global	(millions yr <sup>-1</sup> )	1995	Average of SSP1–5	1850–1900	2.0°C scenario (50th percentile)	N/A	Yes. Overshoots in 2040. Does not return to 1.5°C	Yes	N/A	N/A	75	2.03°C in 2100	Increasing (assuming no upgrade to adaptation)	Increasing (assuming no upgrade to adaptation)	Dikes in base year, then no upgrade to adaptation	Nicholls et al. (2018)
People at risk from flooding	Global	(millions yr <sup>-1</sup> )	1995	Average of SSP1–5	1850–1900	2.0°C scenario (95th percentile)	N/A	Yes. Overshoots in 2005. Does not return to 1.5°C	Yes	N/A	N/A	131,9	2.32°C in 2100	Increasing (assuming no upgrade to adaptation)	Increasing (assuming no upgrade to adaptation)	Dikes in base year, then no upgrade to adaptation	Nicholls et al. (2018)
People at risk from flooding	Global	(millions yr <sup>-1</sup> )	1995	Average of SSP1–5	1850–1900	2.0°C scenario (5th percentile)	N/A	Yes. Overshoots in 2060. Does not return to 1.5°C	Yes	N/A	N/A	41,7	1.77°C in 2100	Increasing (assuming no upgrade to adaptation)	Increasing (assuming no upgrade to adaptation)	Dikes in base year, then no upgrade to adaptation	Nicholls et al. (2018)
People at risk from flooding	Global	(millions yr <sup>-1</sup> )	1995	Average of SSP1–5	1850–1900	RCP8.5 (50th percentile)	N/A	Yes. Overshoots in 2035. Does not return to 1.5°C	Yes	N/A	N/A	103	3.81°C in 2100	Increasing (assuming no upgrade to adaptation)	Increasing (assuming no upgrade to adaptation)	Dikes in base year, then no upgrade to adaptation	Nicholls et al. (2018)
People at risk from flooding	Global	(millions yr <sup>-1</sup> )	1995	Average of SSP1–5	1850–1900	RCP8.5 (95th percentile)	N/A	Yes. Overshoots in 2005. Does not return to 1.5°C	Yes	N/A	N/A	166,3	6.29°C in 2100	Increasing (assuming no upgrade to adaptation)	Increasing (assuming no upgrade to adaptation)	Dikes in base year, then no upgrade to adaptation	Nicholls et al. (2018)

Risk	Region	Metric (Unit)	Baseline Time Period against Which Change Measured	Socio-Economic Scenario and Date	Baseline Global T	Climate Scenario	Transient (T) or Equilibrium (E)	Is it an Overshoot Scenario? How Long is it above 1.5°C and What is the Maximum Temperature and When?	Dynamic Model?	Projected Impact at 1.5°C above Pre-Industrial	Projected Impact at 2°C above Pre-Industrial	Projected Impact at Delta T for Defined Year (°C)	Delta T Relative to Pre-Industrial in Defined Year; Delta T(°C)	Level of Risk after Adaptation at 1.5°C	Level of Risk after Adaptation at 2°C	Type of Adaptation Modeled	Reference
People at risk from flooding	Global	(millions yr <sup>-1</sup> )	1995	Average of SSP1–5	1850–1900	RCP8.5 (5th percentile)	N/A	Yes. Overshoots in 2045. Does not return to 1.5°C	Yes	N/A	N/A	69	3.04°C in 2100	Increasing (assuming no upgrade to adaptation)	Increasing (assuming no upgrade to adaptation)	Dikes in base year, then no upgrade to adaptation	Nicholls et al. (2018)
People at risk from flooding	Global	(millions yr <sup>-1</sup> )	1995	Average of SSP1–5	1850–1900	1.5°C scenario (50th percentile)	N/A	No	Yes	N/A	N/A	103,5	1.46°C in 2200	Increasing (assuming no upgrade to adaptation)	Increasing (assuming no upgrade to adaptation)	Dikes in base year, then no upgrade to adaptation	Nicholls et al. (2018)
People at risk from flooding	Global	(millions yr <sup>-1</sup> )	1995	Average of SSP1–5	1850–1900	1.5°C scenario (95th percentile)	N/A	No	Yes	N/A	N/A	180,4	1.55°C in 2200	Increasing (assuming no upgrade to adaptation)	Increasing (assuming no upgrade to adaptation)	Dikes in base year, then no upgrade to adaptation	Nicholls et al. (2018)
People at risk from flooding	Global	(millions yr <sup>-1</sup> )	1995	Average of SSP1–5	1850–1900	1.5°C scenario (5th percentile)	N/A	No	Yes	N/A	N/A	60	1.45°C in 2200	Increasing (assuming no upgrade to adaptation)	Increasing (assuming no upgrade to adaptation)	Dikes in base year, then no upgrade to adaptation	Nicholls et al. (2018)
People at risk from flooding	Global	(millions yr <sup>-1</sup> )	1995	Average of SSP1–5	1850–1900	2.0°C scenario (50th percentile)	N/A	Yes. Overshoots in 2040. Does not return to 1.5°C	Yes	N/A	N/A	124	1.98°C in 2200	Increasing (assuming no upgrade to adaptation)	Increasing (assuming no upgrade to adaptation)	Dikes in base year, then no upgrade to adaptation	Nicholls et al. (2018)
People at risk from flooding	Global	(millions yr <sup>-1</sup> )	1995	Average of SSP1–5	1850–1900	2.0°C scenario (95th percentile)	N/A	Yes. Overshoots in 2005. Does not return to 1.5°C	Yes	N/A	N/A	210,5	2.05°C in 2200	Increasing (assuming no upgrade to adaptation)	Increasing (assuming no upgrade to adaptation)	Dikes in base year, then no upgrade to adaptation	Nicholls et al. (2018)
People at risk from flooding	Global	(millions yr <sup>-1</sup> )	1995	Average of SSP1–5	1850–1900	2.0°C scenario (5th percentile)	N/A	Yes. Overshoots in 2060. Does not return to 1.5°C	Yes	N/A	N/A	75	1.94°C in 2200	Increasing (assuming no upgrade to adaptation)	Increasing (assuming no upgrade to adaptation)	Dikes in base year, then no upgrade to adaptation	Nicholls et al. (2018)
People at risk from flooding	Global	(millions yr <sup>-1</sup> )	1995	Average of SSP1–5	1850–1900	RCP8.5 (50th percentile)	N/A	Yes. Overshoots in 2035. Does not return to 1.5°C	Yes	N/A	N/A	238,3	6.87°C in 2200	Increasing (assuming no upgrade to adaptation)	Increasing (assuming no upgrade to adaptation)	Dikes in base year, then no upgrade to adaptation	Nicholls et al. (2018)
People at risk from flooding	Global	(millions yr <sup>-1</sup> )	1995	Average of SSP1–5	1850–1900	RCP8.5 (95th percentile)	N/A	Yes. Overshoots in 2005. Does not return to 1.5°C	Yes	N/A	N/A	402,4	12.01°C in 2200	Increasing (assuming no upgrade to adaptation)	Increasing (assuming no upgrade to adaptation)	Dikes in base year, then no upgrade to adaptation	Nicholls et al. (2018)
People at risk from flooding	Global	(millions yr <sup>-1</sup> )	1995	Average of SSP1–5	1850–1900	RCP8.5 (5th percentile)	N/A	Yes. Overshoots in 2045. Does not return to 1.5°C	Yes	N/A	N/A	152,3	4.97°C in 2200	Increasing (assuming no upgrade to adaptation)	Increasing (assuming no upgrade to adaptation)	Dikes in base year, then no upgrade to adaptation	Nicholls et al. (2018)
People at risk from flooding	Global	(millions yr <sup>-1</sup> )	1995	Average of SSP1–5	1850–1900	1.5°C scenario (50th percentile)	N/A	No	Yes	N/A	N/A	137,6	1.46°C in 2300	Increasing (assuming no upgrade to adaptation)	Increasing (assuming no upgrade to adaptation)	Dikes in base year, then no upgrade to adaptation	Nicholls et al. (2018)
People at risk from flooding	Global	(millions yr <sup>-1</sup> )	1995	Average of SSP1–5	1850–1900	1.5°C scenario (95th percentile)	N/A	No	Yes	N/A	N/A	233,2	1.54°C in 2300	Increasing (assuming no upgrade to adaptation)	Increasing (assuming no upgrade to adaptation)	Dikes in base year, then no upgrade to adaptation	Nicholls et al. (2018)
People at risk from flooding	Global	(millions yr <sup>-1</sup> )	1995	Average of SSP1–5	1850–1900	1.5°C scenario (5th percentile)	N/A	No	Yes	N/A	N/A	83,6	1.45°C in 2300	Increasing (assuming no upgrade to adaptation)	Increasing (assuming no upgrade to adaptation)	Dikes in base year, then no upgrade to adaptation	Nicholls et al. (2018)
People at risk from flooding	Global	(millions yr <sup>-1</sup> )	1995	Average of SSP1–5	1850–1900	2.0°C scenario (50th percentile)	N/A	Yes. Overshoots in 2040. Does not return to 1.5°C	Yes	N/A	N/A	164	1.96°C in 2300	Increasing (assuming no upgrade to adaptation)	Increasing (assuming no upgrade to adaptation)	Dikes in base year, then no upgrade to adaptation	Nicholls et al. (2018)
People at risk from flooding	Global	(millions yr <sup>-1</sup> )	1995	Average of SSP1–5	1850–1900	2.0°C scenario (95th percentile)	N/A	Yes. Overshoots in 2005. Does not return to 1.5°C	Yes	N/A	N/A	276,5	2.04°C in 2300	Increasing (assuming no upgrade to adaptation)	Increasing (assuming no upgrade to adaptation)	Dikes in base year, then no upgrade to adaptation	Nicholls et al. (2018)
People at risk from flooding	Global	(millions yr <sup>-1</sup> )	1995	Average of SSP1–5	1850–1900	2.0°C scenario (5th percentile)	N/A	Yes. Overshoots in 2060. Does not return to 1.5°C	Yes	N/A	N/A	100,1	1.95°C in 2300	Increasing (assuming no upgrade to adaptation)	Increasing (assuming no upgrade to adaptation)	Dikes in base year, then no upgrade to adaptation	Nicholls et al. (2018)
People at risk from flooding	Global	(millions yr <sup>-1</sup> )	1995	Average of SSP1–5	1850–1900	RCP8.5 (50th percentile)	N/A	Yes. Overshoots in 2035. Does not return to 1.5°C	Yes	N/A	N/A	385,7	7.95°C in 2300	Increasing (assuming no upgrade to adaptation)	Increasing (assuming no upgrade to adaptation)	Dikes in base year, then no upgrade to adaptation	Nicholls et al. (2018)
People at risk from flooding	Global	(millions yr <sup>-1</sup> )	1995	Average of SSP1–5	1850–1900	RCP8.5 (95th percentile)	N/A	Yes. Overshoots in 2005. Does not return to 1.5°C	Yes	N/A	N/A	703,3	14.77°C in 2300	Increasing (assuming no upgrade to adaptation)	Increasing (assuming no upgrade to adaptation)	Dikes in base year, then no upgrade to adaptation	Nicholls et al. (2018)
People at risk from flooding	Global	(millions yr <sup>-1</sup> )	1995	Average of SSP1–5	1850–1900	RCP8.5 (5th percentile)	N/A	Yes. Overshoots in 2045. Does not return to 1.5°C	Yes	N/A	N/A	228,4	5.46°C in 2300	Increasing (assuming no upgrade to adaptation)	Increasing (assuming no upgrade to adaptation)	Dikes in base year, then no upgrade to adaptation	Nicholls et al. (2018)

Risk	Region	Metric (Unit)	Baseline Time Period against Which Change Measured	Socio-Economic Scenario and Date	Baseline Global T	Climate Scenario	Transient (T) or Equilibrium (E)	Is it an Overshoot Scenario? How Long is it above 1.5°C and What is the Maximum Temperature and When?	Dynamic Model?	Projected Impact at 1.5°C above Pre-Industrial	Projected Impact at 2°C above Pre-Industrial	Projected Impact at Delta T for Defined Year (°C)	Delta T Relative to Pre-Industrial in Defined Year; Delta T(°C)	Level of Risk after Adaptation at 1.5°C	Level of Risk after Adaptation at 2°C	Type of Adaptation Modeled	Reference
People at risk from flooding	Global	(millions yr <sup>-1</sup> )	1995	SSP1-5	Not defined	RCP2.6. HadGEM2-ES. Medium	N/A	Yes. Overshoots in 2020. Does not return to 1.5°C by 2100	Yes	1.3–1.4	0.6–1.0	N/A	N/A	Risk increases, but decreases with adaptation	Risk increases, but decreases with adaptation	Dikes are upgraded as sea levels and socio-economic conditions change	Hinkel et al. (2014)
People at risk from flooding	Global	(millions yr <sup>-1</sup> )	1995	SSP1-5	Not defined	RCP2.6. HadGEM2-ES. High	N/A	Yes. Overshoots in 2020. Does not return to 1.5°C by 2100	Yes	1.4–1.5	0.6–1.1	N/A	N/A	Risk increases, but decreases with adaptation	Risk increases, but decreases with adaptation	Dikes are upgraded as sea levels and socio-economic conditions change	Hinkel et al. (2014)
People at risk from flooding	Global	(millions yr <sup>-1</sup> )	1995	SSP1-5	Not defined	RCP2.6. HadGEM2-ES. Low	N/A	Yes. Overshoots in 2020. Does not return to 1.5°C by 2100	Yes	1.3–1.4	0.6–1.0	N/A	N/A	Risk increases, but decreases with adaptation	Risk increases, but decreases with adaptation	Dikes are upgraded as sea levels and socio-economic conditions change	Hinkel et al. (2014)
People at risk from flooding	Global	(millions yr <sup>-1</sup> )	1995	SSP1-5	Not defined	RCP2.6. HadGEM2-ES. Medium	N/A	Yes. Overshoots in 2020. Does not return to 1.5°C by 2100	Yes	0.6–0.7	11.9–13.5	N/A	N/A	Increasing (assuming no upgrade to adaptation)	Increasing (assuming no upgrade to adaptation)	Dikes in base year, then no upgrade to adaptation	Hinkel et al. (2014)
People at risk from flooding	Global	(millions yr <sup>-1</sup> )	1995	SSP1-5	Not defined	RCP2.6. HadGEM2-ES. High	N/A	Yes. Overshoots in 2020. Does not return to 1.5°C by 2100	Yes	0.8–0.8	19.0–21.6	N/A	N/A	Increasing (assuming no upgrade to adaptation)	Increasing (assuming no upgrade to adaptation)	Dikes in base year, then no upgrade to adaptation	Hinkel et al. (2014)
People at risk from flooding	Global	(millions yr <sup>-1</sup> )	1995	SSP1-5	Not defined	RCP2.6. HadGEM2-ES. Low	N/A	Yes. Overshoots in 2020. Does not return to 1.5°C by 2100	Yes	0.6–0.7	10.4–11.1	N/A	N/A	Increasing (assuming no upgrade to adaptation)	Increasing (assuming no upgrade to adaptation)	Dikes in base year, then no upgrade to adaptation	Hinkel et al. (2014)
People at risk from flooding	Global	(millions yr <sup>-1</sup> )	1995	SSP1-5	Not defined	RCP4.5. HadGEM2-ES. Medium	N/A	Yes. Overshoots in 2020. Does not return to 1.5°C by 2100	Yes	1.4–1.5	0.5–1.0	N/A	N/A	Risk increases, but decreases with adaptation	Risk increases, but decreases with adaptation	Dikes are upgraded as sea levels and socio-economic conditions change	Hinkel et al. (2014)
People at risk from flooding	Global	(millions yr <sup>-1</sup> )	1995	SSP1-5	Not defined	RCP4.5. HadGEM2-ES. High	N/A	Yes. Overshoots in 2020. Does not return to 1.5°C by 2100	Yes	1.5–1.6	0.5–1.1	N/A	N/A	Risk increases, but decreases with adaptation	Risk increases, but decreases with adaptation	Dikes are upgraded as sea levels and socio-economic conditions change	Hinkel et al. (2014)
People at risk from flooding	Global	(millions yr <sup>-1</sup> )	1995	SSP1-5	Not defined	RCP4.5. HadGEM2-ES. Low	N/A	Yes. Overshoots in 2020. Does not return to 1.5°C by 2100	Yes	1.4–1.5	0.5–1.0	N/A	N/A	Risk increases, but decreases with adaptation	Risk increases, but decreases with adaptation	Dikes are upgraded as sea levels and socio-economic conditions change	Hinkel et al. (2014)
People at risk from flooding	Global	(millions yr <sup>-1</sup> )	1995	SSP1-5	Not defined	RCP4.5. HadGEM2-ES. Medium	N/A	Yes. Overshoots in 2020. Does not return to 1.5°C by 2100	Yes	0.7–0.7	15.9–18.6	N/A	N/A	Increasing (assuming no upgrade to adaptation)	Increasing (assuming no upgrade to adaptation)	Dikes in base year, then no upgrade to adaptation	Hinkel et al. (2014)
People at risk from flooding	Global	(millions yr <sup>-1</sup> )	1995	SSP1-5	Not defined	RCP4.5. HadGEM2-ES. High	N/A	Yes. Overshoots in 2020. Does not return to 1.5°C by 2100	Yes	0.8–0.8	27.1–31.8	N/A	N/A	Increasing (assuming no upgrade to adaptation)	Increasing (assuming no upgrade to adaptation)	Dikes in base year, then no upgrade to adaptation	Hinkel et al. (2014)
People at risk from flooding	Global	(millions yr <sup>-1</sup> )	1995	SSP1-5	Not defined	RCP4.5. HadGEM2-ES. Low	N/A	Yes. Overshoots in 2020. Does not return to 1.5°C by 2100	Yes	6.3–6.6	13.6–15.9	N/A	N/A	Increasing (assuming no upgrade to adaptation)	Increasing (assuming no upgrade to adaptation)	Dikes in base year, then no upgrade to adaptation	Hinkel et al. (2014)
People at risk from flooding	Global	(millions yr <sup>-1</sup> )	1995	SSP1-5	Not defined	RCP8.5. HadGEM2-ES. Medium	N/A	Yes. Overshoots in 2020. Does not return to 1.5°C by 2100	Yes	1.4–1.5	0.7–1.2	N/A	N/A	Risk increases, but decreases with adaptation	Risk increases, but decreases with adaptation	Dikes are upgraded as sea levels and socio-economic conditions change	Hinkel et al. (2014)
People at risk from flooding	Global	(millions yr <sup>-1</sup> )	1995	SSP1-5	Not defined	RCP8.5. HadGEM2-ES. High	N/A	Yes. Overshoots in 2020. Does not return to 1.5°C by 2100	Yes	1.5–1.6	0.7–1.3	N/A	N/A	Risk increases, but decreases with adaptation	Risk increases, but decreases with adaptation	Dikes are upgraded as sea levels and socio-economic conditions change	Hinkel et al. (2014)
People at risk from flooding	Global	(millions yr <sup>-1</sup> )	1995	SSP1-5	Not defined	RCP8.5. HadGEM2-ES. Low	N/A	Yes. Overshoots in 2020. Does not return to 1.5°C by 2100	Yes	1.3–1.4	0.7–1.2	N/A	N/A	Risk increases, but decreases with adaptation	Risk increases, but decreases with adaptation	Dikes are upgraded as sea levels and socio-economic conditions change	Hinkel et al. (2014)
People at risk from flooding	Global	(millions yr <sup>-1</sup> )	1995	SSP1-5	Not defined	RCP8.5. HadGEM2-ES. Medium	N/A	Yes. Overshoots in 2020. Does not return to 1.5°C by 2100	Yes	6.9–7.2	14.4–16.5	N/A	N/A	Increasing (assuming no upgrade to adaptation)	Increasing (assuming no upgrade to adaptation)	Dikes in base year, then no upgrade to adaptation	Hinkel et al. (2014)
People at risk from flooding	Global	(millions yr <sup>-1</sup> )	1995	SSP1-5	Not defined	RCP8.5. HadGEM2-ES. High	N/A	Yes. Overshoots in 2020. Does not return to 1.5°C by 2100	Yes	8.4–8.6	23.7–27.0	N/A	N/A	Increasing (assuming no upgrade to adaptation)	Increasing (assuming no upgrade to adaptation)	Dikes in base year, then no upgrade to adaptation	Hinkel et al. (2014)
People at risk from flooding	Global	(millions yr <sup>-1</sup> )	1995	SSP1-5	Not defined	RCP8.5. HadGEM2-ES. Low	N/A	Yes. Overshoots in 2020. Does not return to 1.5°C by 2100	Yes	6.6–6.9	12.6–14.3	N/A	N/A	Increasing (assuming no upgrade to adaptation)	Increasing (assuming no upgrade to adaptation)	Dikes in base year, then no upgrade to adaptation	Hinkel et al. (2014)
Annual sea flood costs	Global	(billions USD yr <sup>-1</sup> )	1995	SSP1-5	Not defined	RCP2.6. HadGEM2-ES. Medium	N/A	Yes. Overshoots in 2020. Does not return to 1.5°C by 2100	Yes	9.8–10.3	10.4–11.3	N/A	N/A	Risk increases, but decreases with adaptation	Risk increases, but decreases with adaptation	Dikes are upgraded as sea levels and socio-economic conditions change	Hinkel et al. (2014)
Annual sea flood costs	Global	(billions USD yr <sup>-1</sup> )	1995	SSP1-5	Not defined	RCP2.6. HadGEM2-ES. High	N/A	Yes. Overshoots in 2020. Does not return to 1.5°C by 2100	Yes	10.4–11.4	11.5–12.4	N/A	N/A	Risk increases, but decreases with adaptation	Risk increases, but decreases with adaptation	Dikes are upgraded as sea levels and socio-economic conditions change	Hinkel et al. (2014)

Risk	Region	Metric (Unit)	Baseline Time Period against Which Change Measured	Socio-Economic Scenario and Date	Baseline Global T	Climate Scenario	Transient (T) or Equilibrium (E)	Is it an Overshoot Scenario? How Long is it above 1.5°C and What is the Maximum Temperature and When?	Dynamic Model?	Projected Impact at 1.5°C above Pre-Industrial	Projected Impact at 2°C above Pre-Industrial	Projected Impact at Delta T for Defined Year (°C)	Delta T Relative to Pre-Industrial in Defined Year; Delta T (°C)	Level of Risk after Adaptation at 1.5°C	Level of Risk after Adaptation at 2°C	Type of Adaptation Modeled	Reference
Annual sea flood costs	Global	(billions USD yr <sup>-1</sup> )	1995	SSP1–5	Not defined	RCP2.6. HadGEM2-ES. Low	N/A	Yes. Overshoots in 2020. Does not return to 1.5°C by 2100	Yes	9.6–10.6	10.1–11.0	N/A	N/A	Risk increases, but decreases with adaptation	Risk increases, but decreases with adaptation	Dikes are upgraded as sea levels and socio-economic conditions change	Hinkel et al. (2014)
Annual sea flood costs	Global	(billions USD yr <sup>-1</sup> )	1995	SSP1–5	Not defined	RCP2.6. HadGEM2-ES. Medium	N/A	Yes. Overshoots in 2020. Does not return to 1.5°C by 2100	Yes	47.4–53.6	152.7–2678.5	N/A	N/A	Increasing (assuming no upgrade to adaptation)	Increasing (assuming no upgrade to adaptation)	Dikes in base year, then no upgrade to adaptation	Hinkel et al. (2014)
Annual sea flood costs	Global	(billions USD yr <sup>-1</sup> )	1995	SSP1–5	Not defined	RCP2.6. HadGEM2-ES. High	N/A	Yes. Overshoots in 2020. Does not return to 1.5°C by 2100	Yes	57.6–65.0	259.2–452.8	N/A	N/A	Increasing (assuming no upgrade to adaptation)	Increasing (assuming no upgrade to adaptation)	Dikes in base year, then no upgrade to adaptation	Hinkel et al. (2014)
Annual sea flood costs	Global	(billions USD yr <sup>-1</sup> )	1995	SSP1–5	Not defined	RCP2.6. HadGEM2-ES. Low	N/A	Yes. Overshoots in 2020. Does not return to 1.5°C by 2100	Yes	543.3–51.1	132.8–23.6	N/A	N/A	Increasing (assuming no upgrade to adaptation)	Increasing (assuming no upgrade to adaptation)	Dikes in base year, then no upgrade to adaptation	Hinkel et al. (2014)
Annual sea flood costs	Global	(billions USD yr <sup>-1</sup> )	1995	SSP1–5	Not defined	RCP4.5. HadGEM2-ES. Medium	N/A	Yes. Overshoots in 2020. Does not return to 1.5°C by 2100	Yes	10.8–11.9	10.8–11.5	N/A	N/A	Risk increases, but decreases with adaptation	Risk increases, but decreases with adaptation	Dikes are upgraded as sea levels and socio-economic conditions change	Hinkel et al. (2014)
Annual sea flood costs	Global	(billions USD yr <sup>-1</sup> )	1995	SSP1–5	Not defined	RCP4.5. HadGEM2-ES. High	N/A	Yes. Overshoots in 2020. Does not return to 1.5°C by 2100	Yes	11.6–12.7	12.2–12.9	N/A	N/A	Risk increases, but decreases with adaptation	Risk increases, but decreases with adaptation	Dikes are upgraded as sea levels and socio-economic conditions change	Hinkel et al. (2014)
Annual sea flood costs	Global	(billions USD yr <sup>-1</sup> )	1995	SSP1–5	Not defined	RCP4.5. HadGEM2-ES. Low	N/A	Yes. Overshoots in 2020. Does not return to 1.5°C by 2100	Yes	10.7–11.7	10.4–11.1	N/A	N/A	Risk increases, but decreases with adaptation	Risk increases, but decreases with adaptation	Dikes are upgraded as sea levels and socio-economic conditions change	Hinkel et al. (2014)
Annual sea flood costs	Global	(billions USD yr <sup>-1</sup> )	1995	SSP1–5	Not defined	RCP4.5. HadGEM2-ES. Medium	N/A	Yes. Overshoots in 2020. Does not return to 1.5°C by 2100	Yes	52.2–59.3	214.2–410.5	N/A	N/A	Increasing (assuming no upgrade to adaptation)	Increasing (assuming no upgrade to adaptation)	Dikes in base year, then no upgrade to adaptation	Hinkel et al. (2014)
Annual sea flood costs	Global	(billions USD yr <sup>-1</sup> )	1995	SSP1–5	Not defined	RCP4.5. HadGEM2-ES. High	N/A	Yes. Overshoots in 2020. Does not return to 1.5°C by 2100	Yes	64.8–73.6	396.1–752.3	N/A	N/A	Increasing (assuming no upgrade to adaptation)	Increasing (assuming no upgrade to adaptation)	Dikes in base year, then no upgrade to adaptation	Hinkel et al. (2014)
Annual sea flood costs	Global	(billions USD yr <sup>-1</sup> )	1995	SSP1–5	Not defined	RCP4.5. HadGEM2-ES. Low	N/A	Yes. Overshoots in 2020. Does not return to 1.5°C by 2100	Yes	49.4–56.0	180.0–345.2	N/A	N/A	Increasing (assuming no upgrade to adaptation)	Increasing (assuming no upgrade to adaptation)	Dikes in base year, then no upgrade to adaptation	Hinkel et al. (2014)
Annual sea flood costs	Global	(billions USD yr <sup>-1</sup> )	1995	SSP1–5	Not defined	RCP4.5. HadGEM2-ES. Medium	N/A	Yes. Overshoots in 2020. Does not return to 1.5°C by 2100	Yes	10.1–11.1	10.9–11.8	N/A	N/A	Risk increases, but decreases with adaptation	Risk increases, but decreases with adaptation	Dikes are upgraded as sea levels and socio-economic conditions change	Hinkel et al. (2014)
Annual sea flood costs	Global	(billions USD yr <sup>-1</sup> )	1995	SSP1–5	Not defined	RCP8.5. HadGEM2-ES. High	N/A	Yes. Overshoots in 2020. Does not return to 1.5°C by 2100	Yes	10.8–11.9	12.2–13.1	N/A	N/A	Risk increases, but decreases with adaptation	Risk increases, but decreases with adaptation	Dikes are upgraded as sea levels and socio-economic conditions change	Hinkel et al. (2014)
Annual sea flood costs	Global	(billions USD yr <sup>-1</sup> )	1995	SSP1–5	Not defined	RCP8.5. HadGEM2-ES. Low	N/A	Yes. Overshoots in 2020. Does not return to 1.5°C by 2100	Yes	9.9–10.8	10.6–11.5	N/A	N/A	Risk increases, but decreases with adaptation	Risk increases, but decreases with adaptation	Dikes are upgraded as sea levels and socio-economic conditions change	Hinkel et al. (2014)
Annual sea flood costs	Global	(billions USD yr <sup>-1</sup> )	1995	SSP1–5	Not defined	RCP8.5. HadGEM2-ES. Medium	N/A	Yes. Overshoots in 2020. Does not return to 1.5°C by 2100	Yes	50.6–57.2	170.0–594.8	N/A	N/A	Increasing (assuming no upgrade to adaptation)	Increasing (assuming no upgrade to adaptation)	Dikes in base year, then no upgrade to adaptation	Hinkel et al. (2014)
Annual sea flood costs	Global	(billions USD yr <sup>-1</sup> )	1995	SSP1–5	Not defined	RCP8.5. HadGEM2-ES. High	N/A	Yes. Overshoots in 2020. Does not return to 1.5°C by 2100	Yes	62.5–70.6	296.5–512.0	N/A	N/A	Increasing (assuming no upgrade to adaptation)	Increasing (assuming no upgrade to adaptation)	Dikes in base year, then no upgrade to adaptation	Hinkel et al. (2014)
Annual sea flood costs	Global	(billions USD yr <sup>-1</sup> )	1995	SSP1–5	Not defined	RCP8.5. HadGEM2-ES. Low	N/A	Yes. Overshoots in 2020. Does not return to 1.5°C by 2100	Yes	48.0–54.2	145.7–252.9	N/A	N/A	Increasing (assuming no upgrade to adaptation)	Increasing (assuming no upgrade to adaptation)	Dikes in base year, then no upgrade to adaptation	Hinkel et al. (2014)
Long-term degradation of coral reefs	Global	N/A	1850–1900	N/A	N/A	Emulates the sea-level response of GCMs	N/A	The illustrative 1.5°C scenario used here does not allow for a GMT overshoot, but stays below 1.5°C over the course of the 21st century	N/A	89% [48% and 99% indicating the 66% range] and more of all global reef grid cells will be at risk of long-term degradation for a 1.5°C scenario in 2050	98% [86% and 100% indicating the 66% range] and more of all global reef grid cells will be at risk of long-term degradation for a 2.0°C scenario in 2050	N/A	N/A	N/A	Constant adaptive capacity	Schleussner et al. (2016)	

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Long-term degradation of coral reefs	Global	N/A	1850–1900	N/A	N/A	Emulates the sea-level response of GCMs	N/A	The illustrative 1.5°C scenario used here does not allow for a GMT overshoot, but stays below 1.5°C over the course of the 21st century	N/A	69% [14% and 98% indicating the 66% range] and more of all global reef grid cells will be at risk of long-term degradation for a 1.5°C scenario in 2100	99% [85% and 100% indicating the 66% range] and more of all global reef grid cells will be at risk of long-term degradation for a 2.0°C scenario in 2050	N/A	N/A	N/A	N/A	Constant adaptive capacity	Schleussner et al. (2016)
Long-term degradation of coral reefs	Global	N/A	1850–1900	N/A	N/A	Emulates the sea-level response of GCMs	N/A	The illustrative 1.5°C scenario used here does not allow for a GMT overshoot, but stays below 1.5°C over the course of the 21st century	N/A	94% [60% and 100% indicating the 66% range] and more of all global reef grid cells will be at risk of long-term degradation for a 1.5°C scenario in 2050	100% [95% and 100% indicating the 66% range] and more of all global reef grid cells will be at risk of long-term degradation for a 2.0°C scenario in 2050	N/A	N/A	N/A	N/A	Saturation adaptive capacity	Schleussner et al. (2016)
Long-term degradation of coral reefs	Global	N/A	1850–1900	N/A	N/A	Emulates the sea-level response of GCMs	N/A	The illustrative 1.5°C scenario used here does not allow for a GMT overshoot, but stays below 1.5°C over the course of the 21st century	N/A	69% [14% and 98% indicating the 66% range] and more of all global reef grid cells will be at risk of long-term degradation for a 1.5°C scenario in 2100	6% [1% and 50% indicating the 66% range] and more of all global reef grid cells will be at risk of long-term degradation for a 2.0°C scenario in 2100	N/A	N/A	N/A	N/A	Saturation adaptive capacity	Schleussner et al. (2016)
Long-term degradation of coral reefs	Global	N/A	1850–1900	N/A	N/A	Emulates the sea-level response of GCMs	N/A	The illustrative 1.5°C scenario used here does not allow for a GMT overshoot, but stays below 1.5°C over the course of the 21st century	N/A	9% [2% and 49% indicating the 66% range] and more of all global reef grid cells will be at risk of long-term degradation for a 1.5°C scenario in 2050	39% [8% and 81% indicating the 66% range] and more of all global reef grid cells will be at risk of long-term degradation for a 2.0°C scenario in 2050	N/A	N/A	N/A	N/A	Adaptation adaptive capacity	Schleussner et al. (2016)

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Long-term degradation of coral reefs	Global	N/A	1850–1900	N/A	N/A	Emulates the sea-level response of GCMs	N/A	The illustrative 1.5°C scenario used here does not allow for a GMT overshoot, but stays below 1.5°C over the course of the 21st century	N/A	1% [0% and 2% indicating the 66% range] and more of all global reef cells will be at risk of long-term degradation for a 1.5°C scenario in 2100	1% [0% and 2% indicating the 66% range] and more of all global reef cells will be at risk of long-term degradation for a 2.0°C scenario in 2100	N/A	N/A	N/A	N/A	Adaptation adaptive capacity	Schleussner et al. (2016)
Human population exposure	Global	millions people	1875–1900	2010 population levels	N/A	Not available	T - 19-yr running average relative to 2000	1.5°C ± 0.25°C in 2100 (50th)	N/A	46.12 in 2100	N/A	N/A	N/A	N/A	N/A	None	Rasmussen et al. (2018)
Human population exposure	Global	millions people	1875–1900	2010 population levels	N/A	Not available	T - 19-yr running average relative to 2000	1.5°C ± 0.25°C in 2100 (95th)	N/A	69.23 in 2100	N/A	N/A	N/A	N/A	N/A	None	Rasmussen et al. (2018)
Human population exposure	Global	millions people	1875–1900	2010 population levels	N/A	Not available	T - 19-yr running average relative to 2000	1.5°C ± 0.25°C in 2100 (5th)	N/A	31.92 in 2100	N/A	N/A	N/A	N/A	N/A	None	Rasmussen et al. (2018)
Human population exposure	Global	millions people	1875–1900	2010 population levels	N/A	Not available	T - 19-yr running average relative to 2000	2.0°C ± 0.25°C in 2100 (50th)	N/A	48.76 in 2100	N/A	N/A	N/A	N/A	N/A	None	Rasmussen et al. (2018)
Human population exposure	Global	millions people	1875–1900	2010 population levels	N/A	Not available	T - 19-yr running average relative to 2000	2.0°C ± 0.25°C in 2100 (95th)	N/A	79.65 in 2100	N/A	N/A	N/A	N/A	N/A	None	Rasmussen et al. (2018)
Human population exposure	Global	millions people	1875–1900	2010 population levels	N/A	Not available	T - 19-yr running average relative to 2000	2.0°C ± 0.25°C in 2100 (5th)	N/A	32.01 in 2100	N/A	N/A	N/A	N/A	N/A	None	Rasmussen et al. (2018)
Human population exposure	Global	millions people	1875–1900	2010 population levels	N/A	Not available	T - 19-yr running average relative to 2000	2.5°C ± 0.25°C in 2100 (50th)	N/A	N/A	50.35 in 2100	N/A	N/A	N/A	N/A	None	Rasmussen et al. (2018)
Human population exposure	Global	millions people	1875–1900	2010 population levels	N/A	Not available	T - 19-yr running average relative to 2000	2.5°C ± 0.25°C in 2100 (95th)	N/A	N/A	77.38 in 2100	N/A	N/A	N/A	N/A	None	Rasmussen et al. (2018)
Human population exposure	Global	millions people	1875–1900	2010 population levels	N/A	Not available	T - 19-yr running average relative to 2000	2.5°C ± 0.25°C in 2100 (5th)	N/A	N/A	33.33 in 2100	N/A	N/A	N/A	N/A	None	Rasmussen et al. (2018)
Human population exposure	Global	millions people	1875–1900	2010 population levels	N/A	Not available	T - 19-yr running average relative to 2000	1.5°C ± 0.25°C in 2150 (50th)	N/A	56.05 in 2150	N/A	N/A	N/A	N/A	N/A	None	Rasmussen et al. (2018)
Human population exposure	Global	millions people	1875–1900	2010 population levels	N/A	Not available	T - 19-yr running average relative to 2000	1.5°C ± 0.25°C in 2150 (95th)	N/A	112.97 in 2150	N/A	N/A	N/A	N/A	N/A	None	Rasmussen et al. (2018)
Human population exposure	Global	millions people	1875–1900	2010 population levels	N/A	Not available	T - 19-yr running average relative to 2000	1.5°C ± 0.25°C in 2150 (5th)	N/A	32.54 in 2150	N/A	N/A	N/A	N/A	N/A	None	Rasmussen et al. (2018)

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Human population exposure	Global	millions people	1875–1900	2010 population levels	N/A	Not available	T - 19-yr running average relative to 2000	2.0°C ± 0.25°C in 2150 (50th)	N/A	N/A	61.84 in 2150	N/A	N/A	N/A	N/A	None	Rasmussen et al. (2018)
Human population exposure	Global	millions people	1875–1900	2010 population levels	N/A	Not available	T - 19-yr running average relative to 2000	2.0°C ± 0.25°C in 2150 (95th)	N/A	N/A	138.63 in 2150	N/A	N/A	N/A	N/A	None	Rasmussen et al. (2018)
Human population exposure	Global	millions people	1875–1900	2010 population levels	N/A	Not available	T - 19-yr running average relative to 2000	2.0°C ± 0.25°C in 2150 (5th)	N/A	N/A	32.89 in 2150	N/A	N/A	N/A	N/A	None	Rasmussen et al. (2018)
Human population exposure	Global	millions people	1875–1900	2010 population levels	N/A	Not available	T - 19-yr running average relative to 2000	2.5°C ± 0.25°C in 2150 (50th)	N/A	N/A	N/A	62.27 in 2150	N/A	N/A	N/A	None	Rasmussen et al. (2018)
Human population exposure	Global	millions people	1875–1900	2010 population levels	N/A	Not available	T - 19-yr running average relative to 2000	2.5°C ± 0.25°C in 2150 (95th)	N/A	N/A	N/A	126.9 in 2150	N/A	N/A	N/A	None	Rasmussen et al. (2018)
Human population exposure	Global	millions people	1875–1900	2010 population levels	N/A	Not available	T - 19-yr running average relative to 2000	2.5°C ± 0.25°C in 2150 (5th)	N/A	N/A	N/A	34.08 in 2150	N/A	N/A	N/A	None	Rasmussen et al. (2018)
Potentially inundated areas from SLR (exposure)	Global	th km <sup>2</sup>	2006	N/A	1850–1990	MIROC-ESM RCP2.6	T	1.5°C occurs between 2010 and 2020 and temperature continues to increase	N/A	67.7–74.2	80.4–83.4	N/A	N/A	Increasing (no adaptation assumed)	Increasing (no adaptation assumed)	None	Yotsukuri et al. (2017) (in Japanese)
Potentially inundated areas from SLR (exposure)	Global	th km <sup>2</sup>	2006	N/A	1850–1990	MIROC-ESM RCP4.5	T	1.5°C occurs between 2010 and 2020 and temperature continues to increase	N/A	69.9–74.0	81.4–84.7	N/A	N/A	Increasing (no adaptation assumed)	Increasing (no adaptation assumed)	None	Yotsukuri et al. (2017) (in Japanese)
Potentially inundated areas from SLR (exposure)	Global	th km <sup>2</sup>	2006	N/A	1850–1990	MIROC-ESM RCP8.5	T	1.5°C occurs between 2010 and 2020 and temperature continues to increase	N/A	69.3–73.9	73.9–81.9	N/A	N/A	Increasing (no adaptation assumed)	Increasing (no adaptation assumed)	None	Yotsukuri et al. (2017) (in Japanese)
Potentially inundated areas from SLR and astronomical high tides (exposure)	Global	th km <sup>2</sup>	2006	N/A	1850–1990	MIROC-ESM RCP2.6	T	1.5°C occurs between 2010 and 2020 and temperature continues to increase	N/A	283.0–291.9	308.2–313.3	N/A	N/A	Increasing (no adaptation assumed)	Increasing (no adaptation assumed)	None	Yotsukuri et al. (2017) (in Japanese)
Potentially inundated areas from SLR and astronomical high tides (exposure)	Global	th km <sup>2</sup>	2006	N/A	1850–1990	MIROC-ESM RCP4.5	T	1.5°C occurs between 2010 and 2020 and temperature continues to increase	N/A	283.9–291.1	303.2–314.5	N/A	N/A	Increasing (no adaptation assumed)	Increasing (no adaptation assumed)	None	Yotsukuri et al. (2017) (in Japanese)
Potentially inundated areas from SLR and astronomical high tides (exposure)	Global	th km <sup>2</sup>	2006	N/A	1850–1990	MIROC-ESM RCP8.5	T	1.5°C occurs between 2010 and 2020 and temperature continues to increase	N/A	285.0–291.1	303.2–322.2	N/A	N/A	Increasing (no adaptation assumed)	Increasing (no adaptation assumed)	None	Yotsukuri et al. (2017) (in Japanese)
Exposed population from SLR and astronomical high tides	Global	millions people	2006	SSP1,2,3	1850–1990	MIROC-ESM RCP2.6	T	1.5°C occurs between 2010 and 2020 and temperature continues to increase	N/A	48.6–65.9	72.8–77.9	N/A	N/A	Increasing (no adaptation assumed)	Increasing (no adaptation assumed)	None	Yotsukuri et al. (2017) (in Japanese)
Exposed population from SLR and astronomical high tides	Global	millions people	2006	SSP1,2,3	1850–1990	MIROC-ESM RCP4.5	T	1.5°C occurs between 2010 and 2020 and temperature continues to increase	N/A	48.9–65.4	72.7–77.7	N/A	N/A	Increasing (no adaptation assumed)	Increasing (no adaptation assumed)	None	Yotsukuri et al. (2017) (in Japanese)
Exposed population from SLR and astronomical high tides	Global	millions people	2006	SSP1,2,3	1850–1990	MIROC-ESM RCP8.5	T	1.5°C occurs between 2010 and 2020 and temperature continues to increase	N/A	58.9–65.8	65.3–73.6	N/A	N/A	Increasing (no adaptation assumed)	Increasing (no adaptation assumed)	None	Yotsukuri et al. (2017) (in Japanese)
Economic damage due to SLR and astronomical high tides (Three damage function)	Global	billions USD (2005)	2006	SSP1,2,3	1850–1990	MIROC-ESM RCP2.6	T	1.5°C occurs between 2010 and 2020 and temperature continues to increase	N/A	32–54	75–133	N/A	N/A	Increasing (no adaptation assumed)	Increasing (no adaptation assumed)	None	Yotsukuri et al. (2017) (in Japanese)

Risk	Region	Metric (Unit)	Baseline Time Period against Which Change Measured	Socio-Economic Scenario and Date	Baseline Global T	Climate Scenario	Transient (T) or Equilibrium (E)	Is it an Overshoot Scenario? How Long is it above 1.5°C and What is the Maximum Temperature and When?	Dynamic Model?	Projected Impact at 1.5°C above Pre-Industrial	Projected Impact at 2°C above Pre-Industrial	Projected Impact at Delta T for Defined Year (°C)	Delta T Relative to Pre-Industrial in Defined Year; Delta T(°C)	Level of Risk after Adaptation at 1.5°C	Level of Risk after Adaptation at 2°C	Type of Adaptation Modeled	Reference
Economic damage due to SLR and astronomical high tides (Three damage function)	Global	billions USD (2005)	2006	SSP1,2,3	1850–1990	MIROC-ESM RCP4.5	T	1.5°C occurs between 2010 and 2020 and temperature continues to increase	N/A	32–53	75–134	N/A	N/A	Increasing (no adaptation assumed)	Increasing (no adaptation assumed)	None	Yotsukuri et al. (2017) (in Japanese)
Economic damage due to SLR and astronomical high tides (Three damage function)	Global	billions USD (2005)	2006	SSP1,2,3	1850–1990	MIROC-ESM RCP8.5	T	1.5°C occurs between 2010 and 2020 and temperature continues to increase	N/A	33–54	53–91	N/A	N/A	Increasing (no adaptation assumed)	Increasing (no adaptation assumed)	None	Yotsukuri et al. (2017) (in Japanese)

Table 3.SM.5: 3.4.6 Food security and food production systems

Risk	Region	Metric (Unit)	Baseline Time Period Against Which Change Measured	Socio-Economic Scenario and Date	Baseline Global T	Climate Scenario	Transient (T) or Equilibrium (E)	Overshoot Scenario?	Dynamic Model?	Projected Impact at 1.5°C above Pre-Industrial	Projected Impact at 2°C above Pre-Industrial	Projected Impact at Delta T [°C]	Delta T Relative to Pre-Industrial	Level of Risk After Adaptation at 1.5°C	Level of Risk After Adaptation at 2°C	Type of Adaptation Modelled	Reference	
Water scarcity	Mediterranean	%	1986–2005	Not available	0.6	RCP8.5; ISI-MIP	N/A	N/A	Y	-9	-17	N/A	N/A	N/A	N/A	Not available		
Crop yield - wheat	Tropical regions	%	1986–2005	Not available	0.6	RCP8.5; ISI-MIP	N/A	N/A	Y	-9	-15	N/A	N/A	N/A	N/A	Not available		
Crop yield - maize	Tropical regions	%	1986–2005	Not available	0.6	RCP8.5; ISI-MIP	N/A	N/A	Y	-3	-4	N/A	N/A	N/A	N/A	Not available		
Crop yield - soy	Tropical regions	%	1986–2005	Not available	0.6	RCP8.5; ISI-MIP	N/A	N/A	Y	6	7	N/A	N/A	N/A	N/A	Not available		
Crop yield - rice	Tropical regions	%	1986–2005	Not available	0.6	RCP8.5; ISI-MIP	N/A	N/A	Y	6	6	N/A	N/A	N/A	N/A	Not available	Schleussner et al. (2017)	
Crop yield - wheat	Global	%	1986–2005	Not available	0.6	RCP8.5; ISI-MIP	N/A	N/A	Y	2	0	N/A	N/A	N/A	N/A	Not available		
Crop yield - maize	Global	%	1986–2005	Not available	0.6	RCP8.5; ISI-MIP	N/A	N/A	Y	1.5	-6	N/A	N/A	N/A	N/A	Not available		
Crop yield - soy	Global	%	1986–2005	Not available	0.6	RCP8.5; ISI-MIP	N/A	N/A	Y	7	1	N/A	N/A	N/A	N/A	Not available		
Crop yield - rice	Global	%	1986–2005	Not available	0.6	RCP8.5; ISI-MIP	N/A	N/A	Y	7	7	N/A	N/A	N/A	N/A	Not available		
Crop yield	France	%	1980–2009	Not available	Mean seasonal T (°C) 1980–2009 (1.7°C)	CO <sub>2</sub> concentration (360, 450, 540, 630)	N/A	N/A	N	-6.7%	-9	N/A	N/A	N/A	N/A	Not available		
Crop yield	USA	%	1980–2009	Not available	Mean seasonal T (°C) 1980–2009 (2.1°C)	CO <sub>2</sub> concentration (360, 450, 540, 630)	N/A	N/A	N	-9	-12	N/A	N/A	N/A	N/A	Not available	Bassu et al. (2015)	
Crop yield	Brazil	%	1980–2009	Not available	Mean seasonal T (°C) 1980–2009 (2.5°C)	CO <sub>2</sub> concentration (360, 450, 540, 630)	N/A	N/A	N	-11.7	-15.6	N/A	N/A	N/A	N/A	Not available		
Crop yield	Tanzania	%	1980–2009	Not available	Mean seasonal T (°C) 1980–2009 (2.7°C)	CO <sub>2</sub> concentration (360, 450, 540, 630)	N/A	N/A	N	-10.6	-14.2	N/A	N/A	N/A	N/A	Not available		
Crop yield - maize	Drylands	%	1971–1981	SSP2	Not available	RCP8.5; 2006–2100	N/A	N/A	Not available	-0.9	-1.1	N/A	N/A	N/A	N/A	Not available		
Crop yield - maize	Humid lands	%	1971–1981	SSP2	Not available	RCP8.5; 2006–2100	N/A	N/A	Not available	3.2	-3.5	N/A	N/A	N/A	N/A	Not available	Huang et al. (2017)	
Crop yield - maize	Global	%	1971–1981	SSP2	Not available	RCP8.5; 2006–2100	N/A	N/A	Not available	2.6	-2.8	N/A	N/A	N/A	N/A	Not available		
Crop yield - wheat	Global	%	1981–2010	Not available	Temperature (+2, +4)°C factor levels	N/A	N/A	N	-9	-12	N/A	N/A	N/A	N/A	Not available	Asseng et al. (2015)		
Crop yield - maize	Brazil	%	1982–2012	Not available	Precipitation: -30 to -20%	+3°C and precipitation (-30, -20, -10, 0, +10, +20, +30)°C factor levels	N/A	N/A	N	-10/-15	-15/-20	N/A	N/A	N/A	N/A	Not available		
Crop yield - maize	Brazil	%	1982–2012	Not available	Precipitation: -20 to -10%	Temperature (+0.5, +1, +1.5, +2, +2.5, +3°C and precipitation (-20, -10, 0, +10, +20, +30)°C factor levels	N/A	N/A	N	-5/-10	-10/-15	N/A	N/A	N/A	N/A	Not available	Lana et al. (2017)	
Crop yield - maize	Brazil	%	1982–2012	Not available	Precipitation: -10 to 0%	Temperature (+0.5, +1, +1.5, +2, +2.5, +3°C and precipitation (-10, 0, +10, +20, +30)°C factor levels	N/A	N/A	N	0/-5	-5/-10	N/A	N/A	N/A	N/A	Not available		
Crop yield - maize	Brazil	%	1982–2012	Not available	Precipitation: 0 to +30%	Temperature (+0.5, +1, +1.5, +2, +2.5, +3°C and precipitation (-20, +20, +30)°C factor levels	N/A	N/A	N	0/-5	0/-5	N/A	N/A	N/A	N/A	Not available		
Crop yield - wheat	Global	%	1960–2012	SSP1,2,3	Not available	RCP2.6 (+1.8°C, 4.5 (+2.7°C), 6.0 (+3.7°C), 8.1 (+4.9°C), 2020–2100)	N/A	N/A	Not available	58	59	N/A	N/A	N/A	N/A	Not available		
Crop yield - maize	Global	%	1960–2012	SSP1,2,3	Not available	RCP2.6 (+1.8°C, 4.5 (+2.7°C), 6.0 (+3.7°C), 8.1 (+4.9°C), 2020–2100)	N/A	N/A	Not available	29	23	N/A	N/A	N/A	N/A	Not available	Lizumi et al. (2017)	
Crop yield - soy	Global	%	1960–2012	SSP1,2,3	Not available	RCP2.6 (+1.8°C, 4.5 (+2.7°C), 6.0 (+3.7°C), 8.1 (+4.9°C), 2020–2100)	N/A	N/A	Not available	53	47	N/A	N/A	N/A	N/A	Not available		
Crop yield - rice	Global	%	1960–2012	SSP1,2,3	Not available	RCP2.6 (+1.8°C, 4.5 (+2.7°C), 6.0 (+3.7°C), 8.1 (+4.9°C), 2020–2100)	N/A	N/A	Not available	36	41	N/A	N/A	N/A	N/A	Not available		
Crop yield - onions	Netherlands	Fraction	1992–2008	Not available	Temperature (+1 and 2)°C factor levels, 2020–2050	N/A	N/A	Not available	-0.255	-0.37	N/A	N/A	N/A	N/A	Chemical protection, UV-light protection	Mandryk et al. (2017)		
Crop yield - potatoes	Netherlands	Fraction	1992–2008	Not available	Temperature (+1 and 2)°C factor levels, 2020–2050	N/A	N/A	Not available	-0.09	-0.42	N/A	N/A	N/A	N/A	Plant in ground, irrigation, crop cover, air conditioning, chemical protection, UV-light protection	Mandryk et al. (2017)		
Crop yield - maize	Southwest United States	%	1950–1999	Not available	0.5	RCP4.5 (2020–2050), RCP8.5 (2020–2050)	N/A	N/A	Not available	-6.9	-9.2	-4.6 ( +1°C)	1.5°C	N/A	N/A	Not available	Cammarano and Tian (2018)	
Crop yield - wheat	Southwest United States	%	1950–1999	Not available	0.5	RCP4.5 (2020–2050), RCP8.5 (2020–2050)	N/A	N/A	Not available	-5.7	-7.6	-3.8 ( +1°C)	1.5°C	N/A	N/A	Not available		
Crop yield - maize	Southwest United States	%	1979–2009	Not available	0.5	SRES A2 (2041–2070)	N/A	N/A	Not available	+36/+83	-5.13 ( +2.7°C)	Not available	N/A	-3.6	Bochar			
Crop yield - maize	Southwest United States	%	1979–2009	Not available	0.5	SRES A2 (2041–2070)	N/A	N/A	Not available	+36/+83	-5.13 ( +2.7°C)	Not available	N/A	10	Irrigation			
Crop yield - soy	Southwest United States	%	1979–2009	Not available	0.5	SRES A2 (2041–2070)	N/A	N/A	Not available	-1/-13	Not available	N/A	N/A	Bochar				
Crop yield - soy	Southwest United States	%	1979–2009	Not available	0.5	SRES A2 (2041–2070)	N/A	N/A	Not available	-1/-13	Not available	N/A	N/A	Bochar				
Crop yield - C3 aggregated (soybean, alfalfa, winter wheat)	Southwest United States	%	1979–2009	Not available	0.5	SRES A2 (2041–2070)	N/A	N/A	Not available	-10/-22	Not available	N/A	N/A	-5, -7	Bochar	Lychuk et al. (2017)		
Crop - C3 aggregated (soybean, alfalfa, winter wheat)	Southwest United States	%	1979–2009	Not available	0.5	SRES A2 (2041–2070)	N/A	N/A	Not available	-10/-22	Not available	N/A	N/A	0	irrigation			
Crop - C4 aggregated (corn, sorghum, pearl millet)	Southwest United States	%	1979–2009	Not available	0.5	SRES A2 (2041–2070)	N/A	N/A	Not available	-6/-10	Not available	N/A	N/A	-3, -5	Bochar			
Crop - C4 aggregated (corn, sorghum, pearl millet)	Southwest United States	%	1979–2009	Not available	0.5	SRES A2 (2041–2070)	N/A	N/A	Not available	-6/-10	Not available	N/A	N/A	N/A	Irrigation			
Crop shift - olive tree	Mediterranean	%	1950–1999	Not available	0.5	SRES A1B (2001–2060)	N/A	N/A	Not available	14	Not available	N/A	N/A	N/A	N/A	Not available	Moriondo et al. (2013)	
Crop shift - olive tree	Mediterranean	%	1950–1999	Not available	0.5	SRES A1B (2001–2060)	N/A	N/A	Not available	18	Not available	N/A	N/A	N/A	N/A	Not available	Jantz et al. (2015)	
Loss of area in global biodiversity	Global	%	1500–2005	Not available	0.5	RCP4.5 (model ensemble)	N/A	N/A	Not available	-25	Not available	N/A	N/A	N/A	N/A	Not available	Gergel et al. (2017)	
Wildfire - dead fuel moisture	Western USA	%	1960–2005	Not available	0.5	RCP8.5 (CMIP5 project)	N/A	N/A	Not available	0/-5	-10/-15	Not available	N/A	N/A	N/A	Not available		
Wildfire - increase in number of days per fire season with potential active fire growth	Canada (East)	%	1971–2000	Not available	0.5	RCP8.5 (model ensemble)	N/A	N/A	Not available	+12/+45	Not available	N/A	N/A	N/A	N/A	Not available	Wotton et al. (2017)	
Wildfire - increase in number of days per fire season with potential active fire growth	Canada (West)	%	1971–2000	Not available	0.5	RCP8.5 (model ensemble)	N/A	N/A	Not available	+12/+35	Not available	N/A	N/A	N/A	N/A	Not available		
Wildfire - future probability of fire	USA (Alaska)	Ratio	1950–2009	Not available	0.5	RCP8.5 (model ensemble)	N/A	N/A	N	- +26	- +44	Not available	N/A	N/A	N/A	Not available	Young et al. (2016)	
Wildfire - fire weather index	Mediterranean	%	1961–1990	Not available	0.5	SRES B2	N/A	N/A	N	Not available	16,0	Not available	N/A	N/A	N/A	N/A	Not available	
Wildfire - fire weather index	France	%	1961–1990	Not available	0.5	SRES B2	N/A	N/A	N	Not available	21	Not available	N/A	N/A	N/A	N/A	Not available	Moriondo et al. (2006)
Wildfire - fire weather index	Portugal	%	1961–1990	Not available	0.5	SRES B2	N/A	N/A	N	Not available	11	Not available	N/A	N/A	N/A	N/A	Not available	
Wildfire - fire weather index	Spain	%	1961–1990	Not available	0.5	SRES B2	N/A	N/A	N	Not available	18	Not available	N/A	N/A	N/A	N/A	Not available	
Wildfire - projected annual area burned	Canada	%	1961–1990	Not available	0.5	SRES A2 (2041–2070)	N/A	N/A	N	Not available	- +57	Not available	N/A	N/A	N/A	N/A	Not available	
Wildfire - fire occurrence	Canada	%	1961–1990	Not available	0.5	SRES A2 (2041–2070)	N/A	N/A	N	Not available	- +102	Not available	N/A	N/A	N/A	N/A	Not available	Boulanger et al. (2014)
Wildfire - fire occurrence density	Northeast China	%	1965–2009	Not available	0.5	SRES B1 (2081–2100 – CSCM3)	N/A	N/A	N	Not available	- +30	Not available	N/A	N/A	N/A	N/A	Not available	Liu et al. (2012)