Guide for Using Data from EPA's Creating Resilient Water Utilities

Purpose & Background

EPA's Creating Resilient Water Utilities (CRWU) initiative provides drinking water, wastewater, and stormwater (water sector) utilities with practical tools, training, and technical assistance needed to increase resilience to climate change. CRWU's Climate Resilience Evaluation and Awareness Tool (CREAT) and interactive maps (Storm Surge Inundation Map, CREAT Climate Scenarios Projection Map, and the Streamflow Projections Map), provide utilities with pre-processed data to aid in climate-based decision-making. To increase accessibility for geospatial users, CRWU provided these datasets in a zipped file geodatabase format (descriptions below). The accompanying data dictionaries for the datasets are listed in Appendix A: CRWU Data Dictionary.

Overview of Downloadable Datasets

CRWU/CREAT Hurricane Tracks Buffer Geospatial Data: Polygon-based hurricane tracks data. This dataset contains buffers of 50 nautical miles (nm) for hurricane tracks from the International Best Track Archive for Climate Stewardship (IBTrACS). The dataset contains the hurricane name, maximum hurricane category and maximum wind speed of the unique hurricane, and year in which the storm occurred. **Geographic extent of data:** Continental United States (CONUS), Alaska, Hawaii, Puerto Rico, US Virgin Islands, and Guam. **Related CRWU products:** **Storm Surge Inundation Map**.

CRWU/CREAT Historical Climate Grid Geospatial Data: Grid-based historical climate data. The dataset contains historical hurricane strike frequency, precipitation, and temperature data in a gridded geospatial format. The hurricane strike frequency data source is the International Best Track Archive for Climate Stewardship (IBTrACS). The precipitation and temperature data source is the Parameter-elevation Regressions on Independent Slopes Model (PRISM) dataset. **Geographic extent of data:** CONUS, Alaska, Hawaii, Puerto Rico, and US Virgin Islands. **Related CRWU products:** **Storm Surge Inundation Map; CREAT.**

CRWU/CREAT Weather Station Points Geospatial Data: Point-based weather station data. The dataset contains historical and projected number of "hot days" per year, defined as having maximum temperature exceeding 90, 95, and 100 degrees Fahrenheit. The data source is from the National Oceanic and Atmospheric Administration's National Climate Data Center climate stations. **Geographic extent of data:** CONUS, Alaska, Hawaii, and Puerto Rico. **Related CRWU products:** **CREAT Climate Scenarios Projection Map; CREAT.**

CRWU/CREAT Coastal Gages Geospatial Data: Point-based coastal flooding data. The dataset contains projected average number of flood days per year at NOAA coastal tide gages as well as elevation thresholds. The projected flood days data were calculated from gage measurements from the Sea Level Rise and Coastal Flood Hazard Scenarios and Tools Interagency Task Force and thresholds from NOAA coastal tide gages and its Weather Forecast Offices (WFO). **Geographic extent of data:** CONUS, Hawaii, US Virgin Islands, Puerto Rico, Guam, Northern Mariana Islands, and American Samoa. **Related CRWU products:** **CREAT Climate Scenarios Projection Map; CREAT.**

CRWU/CREAT Historical Climate Station Points Geospatial Data: Point-based historical climate station data. The dataset contains historical intense precipitation storm events from NOAA weather stations. Storm intensity is defined as the total precipitation during a 24-hour event and is presented for 5-year, 10-year, 15-year, 30-year, 50-year, and 100-year storm events based on data between 1981-2010. The data source is the National Oceanic and Atmospheric Administration's National Climate Data Center climate stations. **Geographic extent of data:** CONUS, Alaska, Hawaii, and Puerto Rico. **Related CRWU products:** **CREAT Climate Scenarios Projection Map; CREAT.**

CRWU/CREAT Climate Projection Grid Geospatial Data: Grid-based projected climate data. The dataset contains projected future precipitation and temperature trends in a gridded geospatial format. The data source data is an ensemble model output from the Coupled Model Intercomparison Project Phase 5 (CMIP5) dataset, provided as the "Downscaled CMIP3 and CMIP5 Climate and Hydrology Projections" archive by the U.S. Bureau of Reclamation and its collaborators. **Geographic extent of data:** CONUS, Alaska, Hawaii, Puerto Rico. **Related CRWU products:** **CREAT Climate Scenarios Projection Map; CREAT.**

CRWU/CREAT Historical Streamflow Gage Geospatial Data: Point-based historical streamflow gage data. The dataset contains United States Geological Survey (USGS) streamflow gage locations with observed streamflow metrics. The overall period of record is 1900 to 2017, though years of observations for each particular gage depends on data availability and is documented in the "Start Year" and "End Year" columns. **Geographic extent of data:** CONUS. **Related CRWU products:** **Streamflow Projections Map**; **CREAT**.

CRWU/CREAT Streamflow Projection Points Geospatial Data: Point-based streamflow projection data. These projection locations are the centers points of stream segments, defined by the National Hydrography Dataset Plus, Version 2 (NHDPlus2). A VIC hydrological model was run by the National Center for Atmospheric Research (NCAR), driven by climate model output. Five climate models from the Coupled Model Intercomparison Project Phase 5 (CMIP5) dataset were used, all using Representative Concentration Pathway (RCP) 8.5. **Geographic extent of data:** CONUS. **Related CRWU products:** **Streamflow Projections Map**; **CREAT**.

CRWU/CREAT Streamflow Projection Grid Geospatial Data: Grid-based streamflow projection data. The dataset contains projected future streamflow trends in a gridded geospatial format. These projection locations are the centers points of stream segments, defined by the National Hydrography Dataset Plus, Version 2 (NHDPlus2). A VIC hydrological model was run by the National Center for Atmospheric Research (NCAR), driven by climate model output. Five climate models from the Coupled Model Intercomparison Project Phase 5 (CMIP5) dataset were used, all using Representative Concentration Pathway (RCP) 8.5. **Geographic extent of data:** CONUS. **Related CRWU products:** **Streamflow Projections Map**; **CREAT**.

Appendix A. CRWU Data Dictionary

Scenario Description Table

Scenario	Description
Hot/Dry 2035 Scenario	The 'Hot/Dry' scenario is based on the average of the five climate models closest to the 95th percentile of annual temperature projections and 5th percentile of annual precipitation projections from the 38-model run ensemble (RCP of 8.5) from CMIP5 and used in CREAT for average climate conditions; this scenario represents a change towards hotter and drier conditions during the 2035 time period (2026-2045) when compared to other model projections
Hot/Dry 2060 Scenario	The 'Hot/Dry' scenario is based on the average of the five climate models closest to the 95th percentile of annual temperature projections and 5th percentile of annual precipitation projections from the 38-model run ensemble (RCP of 8.5) from CMIP5 and used in CREAT for average climate conditions; this scenario represents a change towards hotter and drier conditions during the 2060 time period (2051-2070) when compared to other model projections
Wet/Warm 2035 Scenario	The 'Warm/Wet' scenario is based on the average of the five climate models closest to the 5th percentile of annual temperature projections and 95th percentile of annual precipitation projections from the 38-model run ensemble (RCP of 8.5) from CMIP5 and used in CREAT for average climate conditions; this scenario represents a change towards warmer and wetter conditions during the 2035 time period (2026-2045) when compared to other model projections
Wet/Warm 2060 Scenario	The 'Warm/Wet' scenario is based on the average of the five climate models closest to the 5th percentile of annual temperature projections and 95th percentile of annual precipitation projections from the 38-model run ensemble (RCP of 8.5) from CMIP5 and used in CREAT for average climate conditions; this scenario represents a change towards warmer and wetter conditions during the 2060 time period (2051-2070) when compared to other model projections
Central 2035 Scenario	The 'Central' scenario is based on the average of the five climate models closest to the 50th percentile of both annual temperature and annual precipitation projections from the 38-model run ensemble (RCP of 8.5) from CMIP5 and used in CREAT for average climate conditions; this scenario represents a change towards conditions during the 2035 time period (2026-2045) comparable to the central tendency of other model projections
Central 2060 Scenario	The 'Central' scenario is based on the average of the five climate models closest to the 50th percentile of both annual temperature and annual precipitation projections from the 38-model run ensemble (RCP of 8.5) from CMIP5 and used in CREAT for average climate conditions; this scenario represents a change towards conditions during the 2060 time period (2051-2070) comparable to the central tendency of other model projections

Scenario	Description
Stormy 2035 Scenario	The 'Stormy' scenario is based on the average of the five climate models with the highest intensity projections from the 22-model run ensemble (RCP of 8.5) from CMIP5 and used in CREAT for storm intensity; this scenario represents a change towards increased storm intensities during the 2035 time period (2026-2045) when compared to other model projections
Less Stormy 2035 Scenario	The 'Less Stormy' scenario is based on the average of the five climate models with the lowest intensity projections from the 22-model run ensemble (RCP of 8.5) from CMIP5 and used in CREAT for storm intensity; this scenario represents a change towards smaller changes in storm intensities during the 2035 time period (2026-2045) when compared to other model projections
Stormy 2060 Scenario	The 'Stormy' scenario is based on the average of the five climate models with the highest intensity projections from the 22-model run ensemble (RCP of 8.5) from CMIP5 and used in CREAT for storm intensity; this scenario represents a change towards increased storm intensities during the 2060 time period (2051-2070) when compared to other model projections
Less Stormy 2060 Scenario	The 'Less Stormy' scenario is based on the average of the five climate models with the lowest intensity projections from the 22-model run ensemble (RCP of 8.5) from CMIP5 and used in CREAT for storm intensity; this scenario represents a change towards smaller changes in storm intensities during the 2060 time period (2051-2070) when compared to other model projections

Hurricane Tracks Buffer

Hurricane Tracks Attribute	Description
SID	A unique storm/hurricane identifier assigned by NOAA (IBTrACS)
SEASON	The year in which a storm occurred
BUFF_DIST	Distance of the tracks buffer, in miles
NAME	Name of the storm provided by NOAA
MAX_Type	The maximum category assigned to a storm based on the Saffir-Simpson Hurricane Wind Scale
MAX_Wind	The maximum wind speed (knots) that was reached during the active storm period

Historical Climate Grid

Historical Climate Grid Attribute	Description
CREAT_ID	A unique database identifier for each record used by CREAT
GRIDCODE	A unique identifier for each record used by the mapping component of CREAT
HurrGridID	A unique identifier for each record used for coastal storm and inundation maps
grid_over_land	A flag that identifies whether the grid cell is over land (1), coastal water (0), or the Great Lakes (2)
Longitude_Centroid	The longitude of the center of the selected grid; grid cells are 0.5 degrees by 0.5 degrees
Latitude_Centroid	The latitude of the center of the selected grid; grid cells are 0.5 degrees by 0.5 degrees
Longitude_Min	The longitude of the western-most grid extent; grid cells are 0.5 degrees by 0.5 degrees
Latitude_Min	The latitude of the southern-most grid extent; grid cells are 0.5 degrees by 0.5 degrees
Longitude_Max	The longitude of the eastern-most grid extent; grid cells are 0.5 degrees by 0.5 degrees
Latitude_Max	The latitude of the northern-most grid extent; grid cells are 0.5 degrees by 0.5 degrees
Coastal	A flag that identifies whether the grid cell is coastal (1), inland (0), or open water (null)
Start_Year_Hurricane_Grid	The first year of the hurricane strike record used for the hurricane strike counts
End_Year_Hurricane_Grid	The last year of the hurricane strike record used for the hurricane strike counts
Hurricane_Track_Buffer	The distance used (in nautical miles) when determining the buffer extent for hurricane track strike counts
Hurricane_Strikes_Category_1	The count of Category 1 hurricane strikes. Category determined by NOAA (IBTrACS) using the Saffir-Simpson Hurricane Scale. A strike is counted if the storm center passes within the 'Hurricane_Track_Buffer' distance of the grid cell during the period from 'Start_Year_Hurricane_Grid' to 'End_Year_Hurricane_Grid'
Hurricane_Strikes_Category_2	The count of Category 2 hurricane strikes. Category determined by NOAA (IBTrACS) using the Saffir-Simpson Hurricane Scale. A strike is counted if the storm center passes within the 'Hurricane_Track_Buffer' distance of the grid cell during the period from 'Start_Year_Hurricane_Grid' to 'End_Year_Hurricane_Grid'
Hurricane_Strikes_Category_3	The count of Category 3 hurricane strikes. Category determined by NOAA (IBTrACS) using the Saffir-Simpson Hurricane Scale. A strike is counted if the storm center passes within the 'Hurricane_Track_Buffer' distance of the grid cell during the period from 'Start_Year_Hurricane_Grid' to 'End_Year_Hurricane_Grid'

Historical Climate Grid Attribute	Description
Hurricane_Strikes_Category_4	The count of Category 4 hurricane strikes. Category determined by NOAA (IBTrACS) using the Saffir-Simpson Hurricane Scale. A strike is counted if the storm center passes within the 'Hurricane_Track_Buffer' distance of the grid cell during the period from 'Start_Year_Hurricane_Grid' to 'End_Year_Hurricane_Grid'
Hurricane_Strikes_Category_5	The count of Category 5 hurricane strikes. Category determined by NOAA (IBTrACS) using the Saffir-Simpson Hurricane Scale. A strike is counted if the storm center passes within the 'Hurricane_Track_Buffer' distance of the grid cell during the period from 'Start_Year_Hurricane_Grid' to 'End_Year_Hurricane_Grid'
All_Hurricane_Category_1_ 5	The sum of counts for hurricane strike for Category 1 - 5 storms. Category determined by NOAA (IBTrACS) using the Saffir-Simpson Hurricane Scale. A strike is counted if the storm center passes within the 'Hurricane_Track_Buffer' distance of the grid cell during the period from 'Start_Year_Hurricane_Grid' to 'End_Year_Hurricane_Grid'
PRECIP_HIST_ANNUAL_TOTAL_IN	Average total precipitation (in inches) on annual basis for the grid cell from PRISM. The total precipitation is based on a spatial average of available climate station data during 1981 - 2010.
PRECIP_HIST_JAN_TOTAL_IN	Average total January precipitation (in inches) on monthly basis for the grid cell from PRISM. The total precipitation is based on a spatial average of available climate station data during 1981 - 2010.
PRECIP_HIST_FEB_TOTAL_IN	Average total February precipitation (in inches) on monthly basis for the grid cell from PRISM. The total precipitation is based on a spatial average of available climate station data during 1981 - 2010.
PRECIP_HIST_MAR_TOTAL_IN	Average total March precipitation (in inches) on monthly basis for the grid cell from PRISM. The total precipitation is based on a spatial average of available climate station data during 1981 - 2010.
PRECIP_HIST_APR_TOTAL_IN	Average total April precipitation (in inches) on monthly basis for the grid cell from PRISM. The total precipitation is based on a spatial average of available climate station data during 1981 - 2010.
PRECIP_HIST_MAY_TOTAL_IN	Average total May precipitation (in inches) on monthly basis for the grid cell from PRISM. The total precipitation is based on a spatial average of available climate station data during 1981 - 2010.
PRECIP_HIST_JUN_TOTAL_IN	Average total June precipitation (in inches) on monthly basis for the grid cell from PRISM. The total precipitation is based on a spatial average of available climate station data during 1981 - 2010.
PRECIP_HIST_JUL_TOTAL_IN	Average total July precipitation (in inches) on monthly basis for the grid cell from PRISM. The total precipitation is based on a spatial average of available climate station data during 1981 - 2010.
PRECIP_HIST_AUG_TOTAL_IN	Average total August precipitation (in inches) on monthly basis for the grid cell from PRISM. The total precipitation is based on a spatial average of available climate station data during 1981 - 2010.
PRECIP_HIST_SEP_TOTAL_IN	Average total September precipitation (in inches) on monthly basis for the grid cell from PRISM. The total precipitation is based on a spatial average of available climate station data during 1981 - 2010.

Historical Climate Grid Attribute	Description
PRECIP_HIST_OCT_TOTAL_IN	Average total October precipitation (in inches) on monthly basis for the grid cell from PRISM. The total precipitation is based on a spatial average of available climate station data during 1981 - 2010.
PRECIP_HIST_NOV_TOTAL_IN	Average total November precipitation (in inches) on monthly basis for the grid cell from PRISM. The total precipitation is based on a spatial average of available climate station data during 1981 - 2010.
PRECIP_HIST_DEC_TOTAL_IN	Average total December precipitation (in inches) on monthly basis for the grid cell from PRISM. The total precipitation is based on a spatial average of available climate station data during 1981 - 2010.
TEMP_HIST_ANNUAL_AVERAGE_F	Average daily temperature (in degrees F) on annual basis for the grid cell from PRISM. The average temperature is based on a spatial average of available climate station data during 1981 - 2010.
TEMP_HIST_JAN_AVERAGE_F	Average daily January temperature (in degrees F) on monthly basis for the grid cell from PRISM. The average temperature is based on a spatial average of available climate station data during 1981 - 2010.
TEMP_HIST_FEB_AVERAGE_F	Average daily February temperature (in degrees F) on monthly basis for the grid cell from PRISM. The average temperature is based on a spatial average of available climate station data during 1981 - 2010.
TEMP_HIST_MAR_AVERAGE_F	Average daily March temperature (in degrees F) on monthly basis for the grid cell from PRISM. The average temperature is based on a spatial average of available climate station data during 1981 - 2010.
TEMP_HIST_APR_AVERAGE_F	Average daily April temperature (in degrees F) on monthly basis for the grid cell from PRISM. The average temperature is based on a spatial average of available climate station data during 1981 - 2010.
TEMP_HIST_MAY_AVERAGE_F	Average daily May temperature (in degrees F) on monthly basis for the grid cell from PRISM. The average temperature is based on a spatial average of available climate station data during 1981 - 2010.
TEMP_HIST_JUN_AVERAGE_F	Average daily June temperature (in degrees F) on monthly basis for the grid cell from PRISM. The average temperature is based on a spatial average of available climate station data during 1981 - 2010.
TEMP_HIST_JUL_AVERAGE_F	Average daily July temperature (in degrees F) on monthly basis for the grid cell from PRISM. The average temperature is based on a spatial average of available climate station data during 1981 - 2010.
TEMP_HIST_AUG_AVERAGE_F	Average daily August temperature (in degrees F) on monthly basis for the grid cell from PRISM. The average temperature is based on a spatial average of available climate station data during 1981 - 2010.
TEMP_HIST_SEP_AVERAGE_F	Average daily September temperature (in degrees F) on monthly basis for the grid cell from PRISM. The average temperature is based on a spatial average of available climate station data during 1981 - 2010.
TEMP_HIST_OCT_AVERAGE_F	Average daily October temperature (in degrees F) on monthly basis for the grid cell from PRISM. The average temperature is based on a spatial average of available climate station data during 1981 - 2010.

Historical Climate Grid Attribute	Description
TEMP_HIST_NOV_AVERAGE_F	Average daily November temperature (in degrees F) on monthly basis for the grid cell from PRISM. The average temperature is based on a spatial average of available climate station data during 1981 - 2010.
TEMP_HIST_DEC_AVERAGE_F	Average daily December temperature (in degrees F) on monthly basis for the grid cell from PRISM. The average temperature is based on a spatial average of available climate station data during 1981 - 2010.

Weather Station Points

Weather Station Points Attribute	Description
Latitude	Latitude of the weather station
Longitude	Longitude of the weather station
STATION_NAME	Weather station name
Station_ID	Weather station ID
GRIDCODE	A unique identifier for each record used by the mapping component of CREAT
Historical_Hot_Days_Over_90_DegreeF	The number of historical hot days with maximum temperature over 90°F
Historical_Hot_Days_Over_95_DegreeF	The number of historical hot days with maximum temperature over 95°F
Historical_Hot_Days_Over_100_DegreeF	The number of historical hot days with maximum temperature over 100°F
Hot_Days_2035_WetWarm_Over_90_DegreeF_Days	The number of projected days over 90°F based on the 2035 Wet/Warm scenario (see Scenario Description table)
Hot_Days_2060_WetWarm_Over_90_DegreeF_Days	The number of projected days over 90°F based on the 2060 Wet/Warm scenario (see Scenario Description table)
Hot_Days_2035_Central_Over_90_DegreeF_Days	The number of projected days over 90°F based on the 2035 Central scenario (see Scenario Description table)
Hot_Days_2060_Central_Over_90_DegreeF_Days	The number of projected days over 90°F based on the 2060 Central scenario (see Scenario Description table)
Hot_Days_2035_HotDry_Over_90_DegreeF_Days	The number of projected days over 90°F based on the 2035 Hot/Dry scenario (see Scenario Description table)
Hot_Days_2060_HotDry_Over_90_DegreeF_Days	The number of projected days over 90°F based on the 2060 Hot/Dry scenario (see Scenario Description table)
Hot_Days_2035_WetWarm_Over_95_DegreeF_Days	The number of projected days over 95°F based on the 2035 Wet/Warm scenario (see Scenario Description table)
Hot_Days_2060_WetWarm_Over_95_DegreeF_Days	The number of projected days over 95°F based on the 2060 Wet/Warm scenario (see Scenario Description table)
Hot_Days_2035_Central_Over_95_DegreeF_Days	The number of projected days over 95°F based on the 2035 Central scenario (see Scenario Description table)
Hot_Days_2060_Central_Over_95_DegreeF_Days	The number of projected days over 95°F based on the 2060 Central scenario (see Scenario Description table)
Hot_Days_2035_HotDry_Over_95_DegreeF_Days	The number of projected days over 95°F based on the 2035 Hot/Dry scenario (see Scenario Description table)
Hot_Days_2060_HotDry_Over_95_DegreeF_Days	The number of projected days over 95°F based on the 2060 Hot/Dry scenario (see Scenario Description table)

Weather Station Points Attribute	Description
Hot_Days_2035_WetWarm_Over_100_DegreeF_Days	The number of projected days over 100°F based on the "Wet/Warm 2035" scenario (see Scenario Description table)
Hot_Days_2060_WetWarm_Over_100_DegreeF_Days	The number of projected days over 100°F based on the "Wet/Warm 2060" scenario (see Scenario Description table)
Hot_Days_2035_Central_Over_100_DegreeF_Days	The number of projected days over 100°F based on the "Central 2035" scenario (see Scenario Description table)
Hot_Days_2060_Central_Over_100_DegreeF_Days	The number of projected days over 100°F based on the "Central 2060" scenario (see Scenario Description table)
Hot_Days_2035_HotDry_Over_100_DegreeF_Days	The number of projected days over 100°F based on the "Hot/Dry 2035" scenario (see Scenario Description table)
Hot_Days_2060_HotDry_Over_100_DegreeF_Days	The number of projected days over 100°F based on the "Hot/Dry 2060" scenario (see Scenario Description table)

Coastal Gages

Coastal Gages Attribute	Description
Location	The name of the town and state the coastal gage is located in
Latitude	Latitude of the coastal gage site
Longitude	Longitude of the coastal gage site
ID	A unique identifier for each tide gage used by NOAA
Threshold_m	Elevation of threshold at which flooding occurs, in meters. Thresholds are based upon water level heights empirically calibrated to NOAA tide gauge measurements from years of impact monitoring by its Weather Forecast Offices (WFO) and emergency managers
Threshold_ft	Elevation of threshold at which flooding occurs, in feet. Thresholds are based upon water level heights empirically calibrated to NOAA tide gauge measurements from years of impact monitoring by its Weather Forecast Offices (WFO) and emergency managers
Flood_Days_0_0_m_Low_Scenario	The average number of expected days flooded per year based on the scenario where no sea level rise occurs (baseline scenario)
Flood_Days_0_5_m_Intermediate_Low_Scenario	The average number of expected days flooded per year based on the scenario where sea level is 0.5 meters above the baseline
Flood_Days_1_0_m_Intermediate_Scenario	The average number of expected days flooded per year based on the intermediate sea level rise scenario where sea level is 1 meter above the baseline
Flood_Days_1_5_m_Intermediate_High_Scenario	The average number of expected days flooded per year based on the scenario where sea level is 1.5 meters above the baseline
Flood_Days_2_0_m_High Scenario	The average number of expected days flooded per year based on the high sea level rise scenario where sea level is 2 meters above the baseline

Historical Climate Station Points

Historical Climate Station Points Attribute	Description
CELL_PK_ID	A unique grid identifier used by CREAT for the grid cell that each climate station is within
CLIMATE_STATION_PK_ID	A unique database identifier for each climate station used by CREAT
NOAA_STATION_ID	A unique climate station identifier assigned by NOAA
STATION_NAME	A unique climate station name assigned by NOAA
LATITUDE	Latitude of the NOAA climate station
LONGITUDE	Longitude of the NOAA climate station
CELL_HISTORIC_PK_ID	A unique grid identifier for the historic data used by CREAT.
IntensePrecip_Historic_5Year_24HourTotalIn	Historical storm intensity based on daily precipitation time series from climate station observations (as available between 1981-2010); storm intensity is defined as the total precipitation during a 24-hour event; the 5-year storm is an event that has a 20% chance of being exceeded in any year
IntensePrecip_Historic_10Year_24HourTotalIn	Historical storm intensity based on daily precipitation time series from climate station observations (as available between 1981-2010); storm intensity is defined as the total precipitation during a 24-hour event; the 10-year storm is an event that has a 10% chance of being exceeded in any year
IntensePrecip_Historic_15Year_24HourTotalIn	Historical storm intensity based on daily precipitation time series from climate station observations (as available between 1981-2010); storm intensity is defined as the total precipitation during a 24-hour event; the 15-year storm is an event that has a 6.6% chance of being exceeded in any year
IntensePrecip_Historic_30Year_24HourTotalIn	Historical storm intensity based on daily precipitation time series from climate station observations (as available between 1981-2010); storm intensity is defined as the total precipitation during a 24-hour event; the 30-year storm is an event that has a 3.3% chance of being exceeded in any year
IntensePrecip_Historic_50Year_24HourTotalIn	Historical storm intensity based on daily precipitation time series from climate station observations (as available between 1981-2010); storm intensity is defined as the total precipitation during a 24-hour event; the 50-year storm is an event that has a 2% chance of being exceeded in any year
IntensePrecip_Historic_100Year_24HourTotalIn	Historical storm intensity based on daily precipitation time series from climate station observations (as available between 1981-2010); storm intensity is defined as the total precipitation during a 24-hour event; the 100-year storm is an event that has a 1% chance of being exceeded in any year

Climate Projections Grid

Climate Projections Grid Attribute	Description
CREAT_ID	A unique database identifier for each record used by CREAT
GRIDCODE	A unique identifier for each record used by the mapping component of CREAT
HurrGridID	A unique identifier for each record used for coastal storm and inundation maps
grid_over_land	A flag that identifies whether the grid cell is over land (1), coastal water (0), or the Great Lakes (2)
Longitude_Min	The longitude of the western-most grid extent; grid cells are 0.5 degrees by 0.5 degrees
Latitude_Min	The latitude of the southern-most grid extent; grid cells are 0.5 degrees by 0.5 degrees
Longitude_Max	The longitude of the eastern-most grid extent; grid cells are 0.5 degrees by 0.5 degrees
Latitude_Max	The latitude of the northern-most grid extent; grid cells are 0.5 degrees by 0.5 degrees
Longitude_Centroid	The longitude of the center of the selected grid; grid cells are 0.5 degrees by 0.5 degrees
Latitude_Centroid	The latitude of the center of the selected grid; grid cells are 0.5 degrees by 0.5 degrees
Temp_2035_HotDry_Annual_ChangeF	Projected change (in degrees F) in annual average temperature, relative to historical value, for the "Hot/Dry 2035" scenario (See Scenario Description table). Average temperature is projected on annual basis for the grid cell as an average change over the scenario time period (2026-2045).
Temp_2035_Central_Annual_ChangeF	Projected change (in degrees F) in annual average temperature, relative to historical value, for the "Central 2035" scenario (See Scenario Description table). Average temperature is projected on annual basis for the grid cell as an average change over the scenario time period (2026-2045).
Temp_2035_WetWarm_Annual_ChangeF	Projected change (in degrees F) in annual average temperature, relative to historical value, for the "Wet/Warm 2035" scenario (See Scenario Description table). Average temperature is projected on annual basis for the grid cell as an average change over the scenario time period (2026-2045).
Temp_2060_HotDry_Annual_ChangeF	Projected change (in degrees F) in annual average temperature, relative to historical value, for the "Hot/Dry 2060" scenario (See Scenario Description table). Average temperature is projected on annual basis for the grid cell as an average change over the scenario time period (2051-2070).
Temp_2060_Central_Annual_ChangeF	Projected change (in degrees F) in annual average temperature, relative to historical value, for the "Central 2060" scenario (See Scenario Description table). Average temperature is projected on annual basis for the grid cell as an average change over the scenario time period (2051-2070).

Climate Projections Grid Attribute	Description
Temp_2060_WetWarm_Annual_ChangeF	Projected change (in degrees F) in annual average temperature, relative to historical value, for the "Wet/Warm 2060" scenario (See Scenario Description table). Average temperature is projected on annual basis for the grid cell as an average change over the scenario time period (2051-2070).
Precip_2035_HotDry_Annual_ChangePct	Projected change (%) in annual precipitation, relative to historical value, for the "Hot/Dry 2035" scenario (See Scenario Description table). Total precipitation is projected on annual basis for the grid cell as an average change over the scenario time period (2026-2045).
Precip_2035_Central_Annual_ChangePct	Projected change (%) in annual precipitation, relative to historical value, for the "Central 2035" scenario (See Scenario Description table). Total precipitation is projected on annual basis for the grid cell as an average change over the scenario time period (2026-2045).
Precip_2035_WetWarm_Annual_ChangePct	Projected change (%) in annual precipitation, relative to historical value, for the "Wet/Warm 2035" scenario (See Scenario Description table). Total precipitation is projected on annual basis for the grid cell as an average change over the scenario time period (2026-2045).
Precip_2060_HotDry_Annual_ChangePct	Projected change (%) in annual precipitation, relative to historical value, for the "Hot/Dry 2060" scenario (See Scenario Description table). Total precipitation is projected on annual basis for the grid cell as an average change over the scenario time period (2051-2070).
Precip_2060_Central_Annual_ChangePct	Projected change (%) in annual precipitation, relative to historical value, for the "Central 2060" scenario (See Scenario Description table). Total precipitation is projected on annual basis for the grid cell as an average change over the scenario time period (2051-2070).
Precip_2060_WetWarm_Annual_ChangePct	Projected change (%) in annual precipitation, relative to historical value, for the "Wet/Warm 2060" scenario (See Scenario Description table). Total precipitation is projected on annual basis for the grid cell as an average change over the scenario time period (2051-2070).
Temp_2035_HotDry_Jan_ChangeF	Projected change (in degrees F) in January average temperature, relative to historical value, for the "Hot/Dry 2035" scenario (See Scenario Description table). Average temperature is projected on monthly basis for the grid cell as an average change over the scenario time period (2026-2045).
Temp_2035_Central_Jan_ChangeF	Projected change (in degrees F) in January average temperature, relative to historical value, for the "Central 2035" scenario (See Scenario Description table). Average temperature is projected on monthly basis for the grid cell as an average change over the scenario time period (2026-2045).

Climate Projections Grid Attribute	Description
Temp_2035_WetWarm_Jan_ChangeF	Projected change (in degrees F) in January average temperature, relative to historical value, for the "Wet/Warm 2035" scenario (See Scenario Description table). Average temperature is projected on monthly basis for the grid cell as an average change over the scenario time period (2026-2045).
Temp_2060_HotDry_Jan_ChangeF	Projected change (in degrees F) in January average temperature, relative to historical value, for the "Hot/Dry 2060" scenario (See Scenario Description table). Average temperature is projected on monthly basis for the grid cell as an average change over the scenario time period (2051-2070).
Temp_2060_Central_Jan_ChangeF	Projected change (in degrees F) in January average temperature, relative to historical value, for the "Central 2060" scenario (See Scenario Description table). Average temperature is projected on monthly basis for the grid cell as an average change over the scenario time period (2051-2070).
Temp_2060_WetWarm_Jan_ChangeF	Projected change (in degrees F) in January average temperature, relative to historical value, for the "Wet/Warm 2060" scenario (See Scenario Description table). Average temperature is projected on monthly basis for the grid cell as an average change over the scenario time period (2051-2070).
Precip_2035_HotDry_Jan_ChangePct	Projected change (%) in January precipitation, relative to historical value, for the "Hot/Dry 2035" scenario (See Scenario Description table). Precipitation is projected on monthly basis for the grid cell as an average change over the scenario time period (2026-2045).
Precip_2035_Central_Jan_ChangePct	Projected change (%) in January precipitation, relative to historical value, for the "Central 2035" scenario (See Scenario Description table). Precipitation is projected on monthly basis for the grid cell as an average change over the scenario time period (2026-2045).
Precip_2035_WetWarm_Jan_ChangePct	Projected change (%) in January precipitation, relative to historical value, for the "Wet/Warm 2035" scenario (See Scenario Description table). Precipitation is projected on monthly basis for the grid cell as an average change over the scenario time period (2026-2045).
Precip_2060_HotDry_Jan_ChangePct	Projected change (%) in January precipitation, relative to historical value, for the "Hot/Dry 2060" scenario (See Scenario Description table). Precipitation is projected on monthly basis for the grid cell as an average change over the scenario time period (2051-2070).
Precip_2060_Central_Jan_ChangePct	Projected change (%) in January precipitation, relative to historical value, for the "Central 2060" scenario (See Scenario Description table). Precipitation is projected on monthly basis for the grid cell as an average change over the scenario time period (2051-2070).

Climate Projections Grid Attribute	Description
Precip_2060_WetWarm_Jan_ChangePct	Projected change (%) in January precipitation, relative to historical value, for the "Wet/Warm 2060" scenario (See Scenario Description table). Precipitation is projected on monthly basis for the grid cell as an average change over the scenario time period (2051-2070).
Temp_2035_HotDry_Feb_ChangeF	Projected change (in degrees F) in February average temperature, relative to historical value, for the "Hot/Dry 2035" scenario (See Scenario Description table). Average temperature is projected on monthly basis for the grid cell as an average change over the scenario time period (2026-2045).
Temp_2035_Central_Feb_ChangeF	Projected change (in degrees F) in February average temperature, relative to historical value, for the "Central 2035" scenario (See Scenario Description table). Average temperature is projected on monthly basis for the grid cell as an average change over the scenario time period (2026-2045).
Temp_2035_WetWarm_Feb_ChangeF	Projected change (in degrees F) in February average temperature, relative to historical value, for the "Wet/Warm 2035" scenario (See Scenario Description table). Average temperature is projected on monthly basis for the grid cell as an average change over the scenario time period (2026-2045).
Temp_2060_HotDry_Feb_ChangeF	Projected change (in degrees F) in February average temperature, relative to historical value, for the "Hot/Dry 2060" scenario (See Scenario Description table). Average temperature is projected on monthly basis for the grid cell as an average change over the scenario time period (2051-2070).
Temp_2060_Central_Feb_ChangeF	Projected change (in degrees F) in February average temperature, relative to historical value, for the "Central 2060" scenario (See Scenario Description table). Average temperature is projected on monthly basis for the grid cell as an average change over the scenario time period (2051-2070).
Temp_2060_WetWarm_Feb_ChangeF	Projected change (in degrees F) in February average temperature, relative to historical value, for the "Wet/Warm 2060" scenario (See Scenario Description table). Average temperature is projected on monthly basis for the grid cell as an average change over the scenario time period (2051-2070).
Precip_2035_HotDry_Feb_ChangePct	Projected change (%) in February precipitation, relative to historical value, for the "Hot/Dry 2035" scenario (See Scenario Description table). Precipitation is projected on monthly basis for the grid cell as an average change over the scenario time period (2026-2045).
Precip_2035_Central_Feb_ChangePct	Projected change (%) in February precipitation, relative to historical value, for the "Central 2035" scenario (See Scenario Description table). Precipitation is projected on monthly basis for the grid cell as an average change over the scenario time period (2026-2045).

Climate Projections Grid Attribute	Description
Precip_2035_WetWarm_Feb_ChangePct	Projected change (%) in February precipitation, relative to historical value, for the "Wet/Warm 2035" scenario (See Scenario Description table). Precipitation is projected on monthly basis for the grid cell as an average change over the scenario time period (2026-2045).
Precip_2060_HotDry_Feb_ChangePct	Projected change (%) in February precipitation, relative to historical value, for the "Hot/Dry 2060" scenario (See Scenario Description table). Precipitation is projected on monthly basis for the grid cell as an average change over the scenario time period (2051-2070).
Precip_2060_Central_Feb_ChangePct	Projected change (%) in February precipitation, relative to historical value, for the "Central 2060" scenario (See Scenario Description table). Precipitation is projected on monthly basis for the grid cell as an average change over the scenario time period (2051-2070).
Precip_2060_WetWarm_Feb_ChangePct	Projected change (%) in February precipitation, relative to historical value, for the "Wet/Warm 2060" scenario (See Scenario Description table). Precipitation is projected on monthly basis for the grid cell as an average change over the scenario time period (2051-2070).
Temp_2035_HotDry_Mar_ChangeF	Projected change (in degrees F) in March average temperature, relative to historical value, for the "Hot/Dry 2035" scenario (See Scenario Description table). Average temperature is projected on monthly basis for the grid cell as an average change over the scenario time period (2026-2045).
Temp_2035_Central_Mar_ChangeF	Projected change (in degrees F) in March average temperature, relative to historical value, for the "Central 2035" scenario (See Scenario Description table). Average temperature is projected on monthly basis for the grid cell as an average change over the scenario time period (2026-2045).
Temp_2035_WetWarm_Mar_ChangeF	Projected change (in degrees F) in March average temperature, relative to historical value, for the "Wet/Warm 2035" scenario (See Scenario Description table). Average temperature is projected on monthly basis for the grid cell as an average change over the scenario time period (2026-2045).
Temp_2060_HotDry_Mar_ChangeF	Projected change (in degrees F) in March average temperature, relative to historical value, for the "Hot/Dry 2060" scenario (See Scenario Description table). Average temperature is projected on monthly basis for the grid cell as an average change over the scenario time period (2051-2070).
Temp_2060_Central_Mar_ChangeF	Projected change (in degrees F) in March average temperature, relative to historical value, for the "Central 2060" scenario (See Scenario Description table). Average temperature is projected on monthly basis for the grid cell as an average change over the scenario time period (2051-2070).

Climate Projections Grid Attribute	Description
Temp_2060_WetWarm_Mar_ChangeF	Projected change (in degrees F) in March average temperature, relative to historical value, for the "Wet/Warm 2060" scenario (See Scenario Description table). Average temperature is projected on monthly basis for the grid cell as an average change over the scenario time period (2051-2070).
Precip_2035_HotDry_Mar_ChangePct	Projected change (%) in March precipitation, relative to historical value, for the "Hot/Dry 2035" scenario (See Scenario Description table). Precipitation is projected on monthly basis for the grid cell as an average change over the scenario time period (2026-2045).
Precip_2035_Central_Mar_ChangePct	Projected change (%) in March precipitation, relative to historical value, for the "Central 2035" scenario (See Scenario Description table). Precipitation is projected on monthly basis for the grid cell as an average change over the scenario time period (2026-2045).
Precip_2035_WetWarm_Mar_ChangePct	Projected change (%) in March precipitation, relative to historical value, for the "Wet/Warm 2035" scenario (See Scenario Description table). Precipitation is projected on monthly basis for the grid cell as an average change over the scenario time period (2026-2045).
Precip_2060_HotDry_Mar_ChangePct	Projected change (%) in March precipitation, relative to historical value, for the "Hot/Dry 2060" scenario (See Scenario Description table). Precipitation is projected on monthly basis for the grid cell as an average change over the scenario time period (2051-2070).
Precip_2060_Central_Mar_ChangePct	Projected change (%) in March precipitation, relative to historical value, for the "Central 2060" scenario (See Scenario Description table). Precipitation is projected on monthly basis for the grid cell as an average change over the scenario time period (2051-2070).
Precip_2060_WetWarm_Mar_ChangePct	Projected change (%) in March precipitation, relative to historical value, for the "Wet/Warm 2060" scenario (See Scenario Description table). Precipitation is projected on monthly basis for the grid cell as an average change over the scenario time period (2051-2070).
Temp_2035_HotDry_Apr_ChangeF	Projected change (in degrees F) in April average temperature, relative to historical value, for the "Hot/Dry 2035" scenario (See Scenario Description table). Average temperature is projected on monthly basis for the grid cell as an average change over the scenario time period (2026-2045).
Temp_2035_Central_Apr_ChangeF	Projected change (in degrees F) in April average temperature, relative to historical value, for the "Central 2035" scenario (See Scenario Description table). Average temperature is projected on monthly basis for the grid cell as an average change over the scenario time period (2026-2045).

Climate Projections Grid Attribute	Description
Temp_2035_WetWarm_Apr_ChangeF	Projected change (in degrees F) in April average temperature, relative to historical value, for the "Wet/Warm 2035" scenario (See Scenario Description table). Average temperature is projected on monthly basis for the grid cell as an average change over the scenario time period (2026-2045).
Temp_2060_HotDry_Apr_ChangeF	Projected change (in degrees F) in April average temperature, relative to historical value, for the "Hot/Dry 2060" scenario (See Scenario Description table). Average temperature is projected on monthly basis for the grid cell as an average change over the scenario time period (2051-2070).
Temp_2060_Central_Apr_ChangeF	Projected change (in degrees F) in April average temperature, relative to historical value, for the "Central 2060" scenario (See Scenario Description table). Average temperature is projected on monthly basis for the grid cell as an average change over the scenario time period (2051-2070).
Temp_2060_WetWarm_Apr_ChangeF	Projected change (in degrees F) in April average temperature, relative to historical value, for the "Wet/Warm 2060" scenario (See Scenario Description table). Average temperature is projected on monthly basis for the grid cell as an average change over the scenario time period (2051-2070).
Precip_2035_HotDry_Apr_ChangePct	Projected change (%) in April precipitation, relative to historical value, for the "Hot/Dry 2035" scenario (See Scenario Description table). Precipitation is projected on monthly basis for the grid cell as an average change over the scenario time period (2026-2045).
Precip_2035_Central_Apr_ChangePct	Projected change (%) in April precipitation, relative to historical value, for the "Central 2035" scenario (See Scenario Description table). Precipitation is projected on monthly basis for the grid cell as an average change over the scenario time period (2026-2045).
Precip_2035_WetWarm_Apr_ChangePct	Projected change (%) in April precipitation, relative to historical value, for the "Wet/Warm 2035" scenario (See Scenario Description table). Precipitation is projected on monthly basis for the grid cell as an average change over the scenario time period (2026-2045).
Precip_2060_HotDry_Apr_ChangePct	Projected change (%) in April precipitation, relative to historical value, for the "Hot/Dry 2060" scenario (See Scenario Description table). Precipitation is projected on monthly basis for the grid cell as an average change over the scenario time period (2051-2070).
Precip_2060_Central_Apr_ChangePct	Projected change (%) in April precipitation, relative to historical value, for the "Central 2060" scenario (See Scenario Description table). Precipitation is projected on monthly basis for the grid cell as an average change over the scenario time period (2051-2070).

Climate Projections Grid Attribute	Description
Precip_2060_WetWarm_Apr_ChangePct	Projected change (%) in April precipitation, relative to historical value, for the "Wet/Warm 2060" scenario (See Scenario Description table). Precipitation is projected on monthly basis for the grid cell as an average change over the scenario time period (2051-2070).
Temp_2035_HotDry_May_ChangeF	Projected change (in degrees F) in May average temperature, relative to historical value, for the "Hot/Dry 2035" scenario (See Scenario Description table). Average temperature is projected on monthly basis for the grid cell as an average change over the scenario time period (2026-2045).
Temp_2035_Central_May_ChangeF	Projected change (in degrees F) in May average temperature, relative to historical value, for the "Central 2035" scenario (See Scenario Description table). Average temperature is projected on monthly basis for the grid cell as an average change over the scenario time period (2026-2045).
Temp_2035_WetWarm_May_ChangeF	Projected change (in degrees F) in May average temperature, relative to historical value, for the "Wet/Warm 2035" scenario (See Scenario Description table). Average temperature is projected on monthly basis for the grid cell as an average change over the scenario time period (2026-2045).
Temp_2060_HotDry_May_ChangeF	Projected change (in degrees F) in May average temperature, relative to historical value, for the "Hot/Dry 2060" scenario (See Scenario Description table). Average temperature is projected on monthly basis for the grid cell as an average change over the scenario time period (2051-2070).
Temp_2060_Central_May_ChangeF	Projected change (in degrees F) in May average temperature, relative to historical value, for the "Central 2060" scenario (See Scenario Description table). Average temperature is projected on monthly basis for the grid cell as an average change over the scenario time period (2051-2070).
Temp_2060_WetWarm_May_ChangeF	Projected change (in degrees F) in May average temperature, relative to historical value, for the "Wet/Warm 2060" scenario (See Scenario Description table). Average temperature is projected on monthly basis for the grid cell as an average change over the scenario time period (2051-2070).
Precip_2035_HotDry_May_ChangePct	Projected change (%) in May precipitation, relative to historical value, for the "Hot/Dry 2035" scenario (See Scenario Description table). Precipitation is projected on monthly basis for the grid cell as an average change over the scenario time period (2026-2045).
Precip_2035_Central_May_ChangePct	Projected change (%) in May precipitation, relative to historical value, for the "Central 2035" scenario (See Scenario Description table). Precipitation is projected on monthly basis for the grid cell as an average change over the scenario time period (2026-2045).

Climate Projections Grid Attribute	Description
Precip_2035_WetWarm_May_ChangePct	Projected change (%) in May precipitation, relative to historical value, for the "Wet/Warm 2035" scenario (See Scenario Description table). Precipitation is projected on monthly basis for the grid cell as an average change over the scenario time period (2026-2045).
Precip_2060_HotDry_May_ChangePct	Projected change (%) in May precipitation, relative to historical value, for the "Hot/Dry 2060" scenario (See Scenario Description table). Precipitation is projected on monthly basis for the grid cell as an average change over the scenario time period (2051-2070).
Precip_2060_Central_May_ChangePct	Projected change (%) in May precipitation, relative to historical value, for the "Central 2060" scenario (See Scenario Description table). Precipitation is projected on monthly basis for the grid cell as an average change over the scenario time period (2051-2070).
Precip_2060_WetWarm_May_ChangePct	Projected change (%) in May precipitation, relative to historical value, for the "Wet/Warm 2060" scenario (See Scenario Description table). Precipitation is projected on monthly basis for the grid cell as an average change over the scenario time period (2051-2070).
Temp_2035_HotDry_Jun_ChangeF	Projected change (in degrees F) in June average temperature, relative to historical value, for the "Hot/Dry 2035" scenario (See Scenario Description table). Average temperature is projected on monthly basis for the grid cell as an average change over the scenario time period (2026-2045).
Temp_2035_Central_Jun_ChangeF	Projected change (in degrees F) in June average temperature, relative to historical value, for the "Central 2035" scenario (See Scenario Description table). Average temperature is projected on monthly basis for the grid cell as an average change over the scenario time period (2026-2045).
Temp_2035_WetWarm_Jun_ChangeF	Projected change (in degrees F) in June average temperature, relative to historical value, for the "Wet/Warm 2035" scenario (See Scenario Description table). Average temperature is projected on monthly basis for the grid cell as an average change over the scenario time period (2026-2045).
Temp_2060_HotDry_Jun_ChangeF	Projected change (in degrees F) in June average temperature, relative to historical value, for the "Hot/Dry 2060" scenario (See Scenario Description table). Average temperature is projected on monthly basis for the grid cell as an average change over the scenario time period (2051-2070).
Temp_2060_Central_Jun_ChangeF	Projected change (in degrees F) in June average temperature, relative to historical value, for the "Central 2060" scenario (See Scenario Description table). Average temperature is projected on monthly basis for the grid cell as an average change over the scenario time period (2051-2070).

Climate Projections Grid Attribute	Description
Temp_2060_WetWarm_Jun_ChangeF	Projected change (in degrees F) in June average temperature, relative to historical value, for the "Wet/Warm 2060" scenario (See Scenario Description table). Average temperature is projected on monthly basis for the grid cell as an average change over the scenario time period (2051-2070).
Precip_2035_HotDry_Jun_ChangePct	Projected change (%) in June precipitation, relative to historical value, for the "Hot/Dry 2035" scenario (See Scenario Description table). Precipitation is projected on monthly basis for the grid cell as an average change over the scenario time period (2026-2045).
Precip_2035_Central_Jun_ChangePct	Projected change (%) in June precipitation, relative to historical value, for the "Central 2035" scenario (See Scenario Description table). Precipitation is projected on monthly basis for the grid cell as an average change over the scenario time period (2026-2045).
Precip_2035_WetWarm_Jun_ChangePct	Projected change (%) in June precipitation, relative to historical value, for the "Wet/Warm 2035" scenario (See Scenario Description table). Precipitation is projected on monthly basis for the grid cell as an average change over the scenario time period (2026-2045).
Precip_2060_HotDry_Jun_ChangePct	Projected change (%) in June precipitation, relative to historical value, for the "Hot/Dry 2060" scenario (See Scenario Description table). Precipitation is projected on monthly basis for the grid cell as an average change over the scenario time period (2051-2070).
Precip_2060_Central_Jun_ChangePct	Projected change (%) in June precipitation, relative to historical value, for the "Central 2060" scenario (See Scenario Description table). Precipitation is projected on monthly basis for the grid cell as an average change over the scenario time period (2051-2070).
Precip_2060_WetWarm_Jun_ChangePct	Projected change (%) in June precipitation, relative to historical value, for the "Wet/Warm 2060" scenario (See Scenario Description table). Precipitation is projected on monthly basis for the grid cell as an average change over the scenario time period (2051-2070).
Temp_2035_HotDry_Jul_ChangeF	Projected change (in degrees F) in July average temperature, relative to historical value, for the "Hot/Dry 2035" scenario (See Scenario Description table). Average temperature is projected on monthly basis for the grid cell as an average change over the scenario time period (2026-2045).
Temp_2035_Central_Jul_ChangeF	Projected change (in degrees F) in July average temperature, relative to historical value, for the "Central 2035" scenario (See Scenario Description table). Average temperature is projected on monthly basis for the grid cell as an average change over the scenario time period (2026-2045).

Climate Projections Grid Attribute	Description
Temp_2035_WetWarm_Jul_ChangeF	Projected change (in degrees F) in July average temperature, relative to historical value, for the "Wet/Warm 2035" scenario (See Scenario Description table). Average temperature is projected on monthly basis for the grid cell as an average change over the scenario time period (2026-2045).
Temp_2060_HotDry_Jul_ChangeF	Projected change (in degrees F) in July average temperature, relative to historical value, for the "Hot/Dry 2060" scenario (See Scenario Description table). Average temperature is projected on monthly basis for the grid cell as an average change over the scenario time period (2051-2070).
Temp_2060_Central_Jul_ChangeF	Projected change (in degrees F) in July average temperature, relative to historical value, for the "Central 2060" scenario (See Scenario Description table). Average temperature is projected on monthly basis for the grid cell as an average change over the scenario time period (2051-2070).
Temp_2060_WetWarm_Jul_ChangeF	Projected change (in degrees F) in July average temperature, relative to historical value, for the "Wet/Warm 2060" scenario (See Scenario Description table). Average temperature is projected on monthly basis for the grid cell as an average change over the scenario time period (2051-2070).
Precip_2035_HotDry_Jul_ChangePct	Projected change (%) in July precipitation, relative to historical value, for the "Hot/Dry 2035" scenario (See Scenario Description table). Precipitation is projected on monthly basis for the grid cell as an average change over the scenario time period (2026-2045).
Precip_2035_Central_Jul_ChangePct	Projected change (%) in July precipitation, relative to historical value, for the "Central 2035" scenario (See Scenario Description table). Precipitation is projected on monthly basis for the grid cell as an average change over the scenario time period (2026-2045).
Precip_2035_WetWarm_Jul_ChangePct	Projected change (%) in July precipitation, relative to historical value, for the "Wet/Warm 2035" scenario (See Scenario Description table). Precipitation is projected on monthly basis for the grid cell as an average change over the scenario time period (2026-2045).
Precip_2060_HotDry_Jul_ChangePct	Projected change (%) in July precipitation, relative to historical value, for the "Hot/Dry 2060" scenario (See Scenario Description table). Precipitation is projected on monthly basis for the grid cell as an average change over the scenario time period (2051-2070).
Precip_2060_Central_Jul_ChangePct	Projected change (%) in July precipitation, relative to historical value, for the "Central 2060" scenario (See Scenario Description table). Precipitation is projected on monthly basis for the grid cell as an average change over the scenario time period (2051-2070).

Climate Projections Grid Attribute	Description
Precip_2060_WetWarm_Jul_ChangePct	Projected change (%) in July precipitation, relative to historical value, for the "Wet/Warm 2060" scenario (See Scenario Description table). Precipitation is projected on monthly basis for the grid cell as an average change over the scenario time period (2051-2070).
Temp_2035_HotDry_Aug_ChangeF	Projected change (in degrees F) in August average temperature, relative to historical value, for the "Hot/Dry 2035" scenario (See Scenario Description table). Average temperature is projected on monthly basis for the grid cell as an average change over the scenario time period (2026-2045).
Temp_2035_Central_Aug_ChangeF	Projected change (in degrees F) in August average temperature, relative to historical value, for the "Central 2035" scenario (See Scenario Description table). Average temperature is projected on monthly basis for the grid cell as an average change over the scenario time period (2026-2045).
Temp_2035_WetWarm_Aug_ChangeF	Projected change (in degrees F) in August average temperature, relative to historical value, for the "Wet/Warm 2035" scenario (See Scenario Description table). Average temperature is projected on monthly basis for the grid cell as an average change over the scenario time period (2026-2045).
Temp_2060_HotDry_Aug_ChangeF	Projected change (in degrees F) in August average temperature, relative to historical value, for the "Hot/Dry 2060" scenario (See Scenario Description table). Average temperature is projected on monthly basis for the grid cell as an average change over the scenario time period (2051-2070).
Temp_2060_Central_Aug_ChangeF	Projected change (in degrees F) in August average temperature, relative to historical value, for the "Central 2060" scenario (See Scenario Description table). Average temperature is projected on monthly basis for the grid cell as an average change over the scenario time period (2051-2070).
Temp_2060_WetWarm_Aug_ChangeF	Projected change (in degrees F) in August average temperature, relative to historical value, for the "Wet/Warm 2060" scenario (See Scenario Description table). Average temperature is projected on monthly basis for the grid cell as an average change over the scenario time period (2051-2070).
Precip_2035_HotDry_Aug_ChangePct	Projected change (%) in August precipitation, relative to historical value, for the "Hot/Dry 2035" scenario (See Scenario Description table). Precipitation is projected on monthly basis for the grid cell as an average change over the scenario time period (2026-2045).
Precip_2035_Central_Aug_ChangePct	Projected change (%) in August precipitation, relative to historical value, for the "Central 2035" scenario (See Scenario Description table). Precipitation is projected on monthly basis for the grid cell as an average change over the scenario time period (2026-2045).

Climate Projections Grid Attribute	Description
Precip_2035_WetWarm_Aug_ChangePct	Projected change (%) in August precipitation, relative to historical value, for the "Wet/Warm 2035" scenario (See Scenario Description table). Precipitation is projected on monthly basis for the grid cell as an average change over the scenario time period (2026-2045).
Precip_2060_HotDry_Aug_ChangePct	Projected change (%) in August precipitation, relative to historical value, for the "Hot/Dry 2060" scenario (See Scenario Description table). Precipitation is projected on monthly basis for the grid cell as an average change over the scenario time period (2051-2070).
Precip_2060_Central_Aug_ChangePct	Projected change (%) in August precipitation, relative to historical value, for the "Central 2060" scenario (See Scenario Description table). Precipitation is projected on monthly basis for the grid cell as an average change over the scenario time period (2051-2070).
Precip_2060_WetWarm_Aug_ChangePct	Projected change (%) in August precipitation, relative to historical value, for the "Wet/Warm 2060" scenario (See Scenario Description table). Precipitation is projected on monthly basis for the grid cell as an average change over the scenario time period (2051-2070).
Temp_2035_HotDry_Sep_ChangeF	Projected change (in degrees F) in September average temperature, relative to historical value, for the "Hot/Dry 2035" scenario (See Scenario Description table). Average temperature is projected on monthly basis for the grid cell as an average change over the scenario time period (2026-2045).
Temp_2035_Central_Sep_ChangeF	Projected change (in degrees F) in September average temperature, relative to historical value, for the "Central 2035" scenario (See Scenario Description table). Average temperature is projected on monthly basis for the grid cell as an average change over the scenario time period (2026-2045).
Temp_2035_WetWarm_Sep_ChangeF	Projected change (in degrees F) in September average temperature, relative to historical value, for the "Wet/Warm 2035" scenario (See Scenario Description table). Average temperature is projected on monthly basis for the grid cell as an average change over the scenario time period (2026-2045).
Temp_2060_HotDry_Sep_ChangeF	Projected change (in degrees F) in September average temperature, relative to historical value, for the "Hot/Dry 2060" scenario (See Scenario Description table). Average temperature is projected on monthly basis for the grid cell as an average change over the scenario time period (2051-2070).
Temp_2060_Central_Sep_ChangeF	Projected change (in degrees F) in September average temperature, relative to historical value, for the "Central 2060" scenario (See Scenario Description table). Average temperature is projected on monthly basis for the grid cell as an average change over the scenario time period (2051-2070).

Climate Projections Grid Attribute	Description
Temp_2060_WetWarm_Sep_ChangeF	Projected change (in degrees F) in September average temperature, relative to historical value, for the "Wet/Warm 2060" scenario (See Scenario Description table). Average temperature is projected on monthly basis for the grid cell as an average change over the scenario time period (2051-2070).
Precip_2035_HotDry_Sep_ChangePct	Projected change (%) in September precipitation, relative to historical value, for the "Hot/Dry 2035" scenario (See Scenario Description table). Precipitation is projected on monthly basis for the grid cell as an average change over the scenario time period (2026-2045).
Precip_2035_Central_Sep_ChangePct	Projected change (%) in September precipitation, relative to historical value, for the "Central 2035" scenario (See Scenario Description table). Precipitation is projected on monthly basis for the grid cell as an average change over the scenario time period (2026-2045).
Precip_2035_WetWarm_Sep_ChangePct	Projected change (%) in September precipitation, relative to historical value, for the "Wet/Warm 2035" scenario (See Scenario Description table). Precipitation is projected on monthly basis for the grid cell as an average change over the scenario time period (2026-2045).
Precip_2060_HotDry_Sep_ChangePct	Projected change (%) in September precipitation, relative to historical value, for the "Hot/Dry 2060" scenario (See Scenario Description table). Precipitation is projected on monthly basis for the grid cell as an average change over the scenario time period (2051-2070).
Precip_2060_Central_Sep_ChangePct	Projected change (%) in September precipitation, relative to historical value, for the "Central 2060" scenario (See Scenario Description table). Precipitation is projected on monthly basis for the grid cell as an average change over the scenario time period (2051-2070).
Precip_2060_WetWarm_Sep_ChangePct	Projected change (%) in September precipitation, relative to historical value, for the "Wet/Warm 2060" scenario (See Scenario Description table). Precipitation is projected on monthly basis for the grid cell as an average change over the scenario time period (2051-2070).
Temp_2035_HotDry_Oct_ChangeF	Projected change (in degrees F) in October average temperature, relative to historical value, for the "Hot/Dry 2035" scenario (See Scenario Description table). Average temperature is projected on monthly basis for the grid cell as an average change over the scenario time period (2026-2045).
Temp_2035_Central_Oct_ChangeF	Projected change (in degrees F) in October average temperature, relative to historical value, for the "Central 2035" scenario (See Scenario Description table). Average temperature is projected on monthly basis for the grid cell as an average change over the scenario time period (2026-2045).

Climate Projections Grid Attribute	Description
Temp_2035_WetWarm_Oct_ChangeF	Projected change (in degrees F) in October average temperature, relative to historical value, for the "Wet/Warm 2035" scenario (See Scenario Description table). Average temperature is projected on monthly basis for the grid cell as an average change over the scenario time period (2026-2045).
Temp_2060_HotDry_Oct_ChangeF	Projected change (in degrees F) in October average temperature, relative to historical value, for the "Hot/Dry 2060" scenario (See Scenario Description table). Average temperature is projected on monthly basis for the grid cell as an average change over the scenario time period (2051-2070).
Temp_2060_Central_Oct_ChangeF	Projected change (in degrees F) in October average temperature, relative to historical value, for the "Central 2060" scenario (See Scenario Description table). Average temperature is projected on monthly basis for the grid cell as an average change over the scenario time period (2051-2070).
Temp_2060_WetWarm_Oct_ChangeF	Projected change (in degrees F) in October average temperature, relative to historical value, for the "Wet/Warm 2060" scenario (See Scenario Description table). Average temperature is projected on monthly basis for the grid cell as an average change over the scenario time period (2051-2070).
Precip_2035_HotDry_Oct_ChangePct	Projected change (%) in October precipitation, relative to historical value, for the "Hot/Dry 2035" scenario (See Scenario Description table). Precipitation is projected on monthly basis for the grid cell as an average change over the scenario time period (2026-2045).
Precip_2035_Central_Oct_ChangePct	Projected change (%) in October precipitation, relative to historical value, for the "Central 2035" scenario (See Scenario Description table). Precipitation is projected on monthly basis for the grid cell as an average change over the scenario time period (2026-2045).
Precip_2035_WetWarm_Oct_ChangePct	Projected change (%) in October precipitation, relative to historical value, for the "Wet/Warm 2035" scenario (See Scenario Description table). Precipitation is projected on monthly basis for the grid cell as an average change over the scenario time period (2026-2045).
Precip_2060_HotDry_Oct_ChangePct	Projected change (%) in October precipitation, relative to historical value, for the "Hot/Dry 2060" scenario (See Scenario Description table). Precipitation is projected on monthly basis for the grid cell as an average change over the scenario time period (2051-2070).
Precip_2060_Central_Oct_ChangePct	Projected change (%) in October precipitation, relative to historical value, for the "Central 2060" scenario (See Scenario Description table). Precipitation is projected on monthly basis for the grid cell as an average change over the scenario time period (2051-2070).

Climate Projections Grid Attribute	Description
Precip_2060_WetWarm_Oct_ChangePct	Projected change (%) in October precipitation, relative to historical value, for the "Wet/Warm 2060" scenario (See Scenario Description table). Precipitation is projected on monthly basis for the grid cell as an average change over the scenario time period (2051-2070).
Temp_2035_HotDry_Nov_ChangeF	Projected change (in degrees F) in November average temperature, relative to historical value, for the "Hot/Dry 2035" scenario (See Scenario Description table). Average temperature is projected on monthly basis for the grid cell as an average change over the scenario time period (2026-2045).
Temp_2035_Central_Nov_ChangeF	Projected change (in degrees F) in November average temperature, relative to historical value, for the "Central 2035" scenario (See Scenario Description table). Average temperature is projected on monthly basis for the grid cell as an average change over the scenario time period (2026-2045).
Temp_2035_WetWarm_Nov_ChangeF	Projected change (in degrees F) in November average temperature, relative to historical value, for the "Wet/Warm 2035" scenario (See Scenario Description table). Average temperature is projected on monthly basis for the grid cell as an average change over the scenario time period (2026-2045).
Temp_2060_HotDry_Nov_ChangeF	Projected change (in degrees F) in November average temperature, relative to historical value, for the "Hot/Dry 2060" scenario (See Scenario Description table). Average temperature is projected on monthly basis for the grid cell as an average change over the scenario time period (2051-2070).
Temp_2060_Central_Nov_ChangeF	Projected change (in degrees F) in November average temperature, relative to historical value, for the "Central 2060" scenario (See Scenario Description table). Average temperature is projected on monthly basis for the grid cell as an average change over the scenario time period (2051-2070).
Temp_2060_WetWarm_Nov_ChangeF	Projected change (in degrees F) in November average temperature, relative to historical value, for the "Wet/Warm 2060" scenario (See Scenario Description table). Average temperature is projected on monthly basis for the grid cell as an average change over the scenario time period (2051-2070).
Precip_2035_HotDry_Nov_ChangePct	Projected change (%) in November precipitation, relative to historical value, for the "Hot/Dry 2035" scenario (See Scenario Description table). Precipitation is projected on monthly basis for the grid cell as an average change over the scenario time period (2026-2045).
Precip_2035_Central_Nov_ChangePct	Projected change (%) in November precipitation, relative to historical value, for the "Central 2035" scenario (See Scenario Description table). Precipitation is projected on monthly basis for the grid cell as an average change over the scenario time period (2026-2045).

Climate Projections Grid Attribute	Description
Precip_2035_WetWarm_Nov_ChangePct	Projected change (%) in November precipitation, relative to historical value, for the "Wet/Warm 2035" scenario (See Scenario Description table). Precipitation is projected on monthly basis for the grid cell as an average change over the scenario time period (2026-2045).
Precip_2060_HotDry_Nov_ChangePct	Projected change (%) in November precipitation, relative to historical value, for the "Hot/Dry 2060" scenario (See Scenario Description table). Precipitation is projected on monthly basis for the grid cell as an average change over the scenario time period (2051-2070).
Precip_2060_Central_Nov_ChangePct	Projected change (%) in November precipitation, relative to historical value, for the "Central 2060" scenario (See Scenario Description table). Precipitation is projected on monthly basis for the grid cell as an average change over the scenario time period (2051-2070).
Precip_2060_WetWarm_Nov_ChangePct	Projected change (%) in November precipitation, relative to historical value, for the "Wet/Warm 2060" scenario (See Scenario Description table). Precipitation is projected on monthly basis for the grid cell as an average change over the scenario time period (2051-2070).
Temp_2035_HotDry_Dec_ChangeF	Projected change (in degrees F) in December average temperature, relative to historical value, for the "Hot/Dry 2035" scenario (See Scenario Description table). Average temperature is projected on monthly basis for the grid cell as an average change over the scenario time period (2026-2045).
Temp_2035_Central_Dec_ChangeF	Projected change (in degrees F) in December average temperature, relative to historical value, for the "Central 2035" scenario (See Scenario Description table). Average temperature is projected on monthly basis for the grid cell as an average change over the scenario time period (2026-2045).
Temp_2035_WetWarm_Dec_ChangeF	Projected change (in degrees F) in December average temperature, relative to historical value, for the "Wet/Warm 2035" scenario (See Scenario Description table). Average temperature is projected on monthly basis for the grid cell as an average change over the scenario time period (2026-2045).
Temp_2060_HotDry_Dec_ChangeF	Projected change (in degrees F) in December average temperature, relative to historical value, for the "Hot/Dry 2060" scenario (See Scenario Description table). Average temperature is projected on monthly basis for the grid cell as an average change over the scenario time period (2051-2070).
Temp_2060_Central_Dec_ChangeF	Projected change (in degrees F) in December average temperature, relative to historical value, for the "Central 2060" scenario (See Scenario Description table). Average temperature is projected on monthly basis for the grid cell as an average change over the scenario time period (2051-2070).

Climate Projections Grid Attribute	Description
Temp_2060_WetWarm_Dec_ChangeF	Projected change (in degrees F) in December average temperature, relative to historical value, for the "Wet/Warm 2060" scenario (See Scenario Description table). Average temperature is projected on monthly basis for the grid cell as an average change over the scenario time period (2051-2070).
Precip_2035_HotDry_Dec_ChangePct	Projected change (%) in December precipitation, relative to historical value, for the "Hot/Dry 2035" scenario (See Scenario Description table). Precipitation is projected on monthly basis for the grid cell as an average change over the scenario time period (2026-2045).
Precip_2035_Central_Dec_ChangePct	Projected change (%) in December precipitation, relative to historical value, for the "Central 2035" scenario (See Scenario Description table). Precipitation is projected on monthly basis for the grid cell as an average change over the scenario time period (2026-2045).
Precip_2035_WetWarm_Dec_ChangePct	Projected change (%) in December precipitation, relative to historical value, for the "Wet/Warm 2035" scenario (See Scenario Description table). Precipitation is projected on monthly basis for the grid cell as an average change over the scenario time period (2026-2045).
Precip_2060_HotDry_Dec_ChangePct	Projected change (%) in December precipitation, relative to historical value, for the "Hot/Dry 2060" scenario (See Scenario Description table). Precipitation is projected on monthly basis for the grid cell as an average change over the scenario time period (2051-2070).
Precip_2060_Central_Dec_ChangePct	Projected change (%) in December precipitation, relative to historical value, for the "Central 2060" scenario (See Scenario Description table). Precipitation is projected on monthly basis for the grid cell as an average change over the scenario time period (2051-2070).
Precip_2060_WetWarm_Dec_ChangePct	Projected change (%) in December precipitation, relative to historical value, for the "Wet/Warm 2060" scenario (See Scenario Description table). Precipitation is projected on monthly basis for the grid cell as an average change over the scenario time period (2051-2070).
Storm100Yr_2035_LessStormy_Annual_ChangePct	Projected change (%) in storm intensity, relative to historical value, for the "Less Stormy 2035" scenario (See Scenario Description table). Storm intensity is defined as the total precipitation during a 24-hour event; the 100-year storm is an event that has a 1% chance of being exceeded in any year. Storm intensity is projected on annual basis for the grid cell as an average change over the scenario time period (2026-2045).
Storm100Yr_2035_Stormy_Annual_ChangePct	Projected change (%) in storm intensity, relative to historical value, for the "Stormy 2035" scenario (See Scenario Description table). Storm intensity is defined as the total precipitation during a 24-hour event; the 100-year storm is an event that has a 1% chance of being exceeded in any year. Storm intensity is projected on annual basis for the grid cell as an average change over the scenario time period (2026-2045).

Climate Projections Grid Attribute	Description
Storm100Yr_2060_LessStormy_Annual_ChangePct	Projected change (%) in storm intensity, relative to historical value, for the "Less Stormy 2060" scenario (See Scenario Description table). Storm intensity is defined as the total precipitation during a 24-hour event; the 100-year storm is an event that has a 1% chance of being exceeded in any year. Storm intensity is projected on annual basis for the grid cell as an average change over the scenario time period (2051-2070).
Storm100Yr_2060_Stormy_Annual_ChangePct	Projected change (%) in storm intensity, relative to historical value, for the "Stormy 2060" scenario (See Scenario Description table). Storm intensity is defined as the total precipitation during a 24-hour event; the 100-year storm is an event that has a 1% chance of being exceeded in any year. Storm intensity is projected on annual basis for the grid cell as an average change over the scenario time period (2051-2070).
Storm50Yr_2035_LessStormy_Annual_ChangePct	Projected change (%) in storm intensity, relative to historical value, for the "Less Stormy 2035" scenario (See Scenario Description table). Storm intensity is defined as the total precipitation during a 24-hour event; the 50-year storm is an event that has a 2% chance of being exceeded in any year. Storm intensity is projected on annual basis for the grid cell as an average change over the scenario time period (2026-2045).
Storm50Yr_2035_Stormy_Annual_ChangePct	Projected change (%) in storm intensity, relative to historical value, for the "Stormy 2035" scenario (See Scenario Description table). Storm intensity is defined as the total precipitation during a 24-hour event; the 50-year storm is an event that has a 2% chance of being exceeded in any year. Storm intensity is projected on annual basis for the grid cell as an average change over the scenario time period (2026-2045).
Storm50Yr_2060_LessStormy_Annual_ChangePct	Projected change (%) in storm intensity, relative to historical value, for the "Less Stormy 2060" scenario (See Scenario Description table). Storm intensity is defined as the total precipitation during a 24-hour event; the 50-year storm is an event that has a 2% chance of being exceeded in any year. Storm intensity is projected on annual basis for the grid cell as an average change over the scenario time period (2051-2070).
Storm50Yr_2060_Stormy_Annual_ChangePct	Projected change (%) in storm intensity, relative to historical value, for the "Stormy 2060" scenario (See Scenario Description table). Storm intensity is defined as the total precipitation during a 24-hour event; the 50-year storm is an event that has a 2% chance of being exceeded in any year. Storm intensity is projected on annual basis for the grid cell as an average change over the scenario time period (2051-2070).
Storm30Yr_2035_LessStormy_Annual_ChangePct	Projected change (%) in storm intensity, relative to historical value, for the "Less Stormy 2035" scenario (See Scenario Description table). Storm intensity is defined as the total precipitation during a 24-hour event; the 30-year storm is an event that has a 3.3% chance of being exceeded in any year. Storm intensity is projected on annual basis for the grid cell as an average change over the scenario time period (2026-2045).

Climate Projections Grid Attribute	Description
Storm30Yr_2035_Stormy_Annual_ChangePct	Projected change (%) in storm intensity, relative to historical value, for the "Stormy 2035" scenario (See Scenario Description table). Storm intensity is defined as the total precipitation during a 24-hour event; the 30-year storm is an event that has a 3.3% chance of being exceeded in any year. Storm intensity is projected on annual basis for the grid cell as an average change over the scenario time period (2026-2045).
Storm30Yr_2060_LessStormy_Annual_ChangePct	Projected change (%) in storm intensity, relative to historical value, for the "Less Stormy 2060" scenario (See Scenario Description table). Storm intensity is defined as the total precipitation during a 24-hour event; the 30-year storm is an event that has a 3.3% chance of being exceeded in any year. Storm intensity is projected on annual basis for the grid cell as an average change over the scenario time period (2051-2070).
Storm30Yr_2060_Stormy_Annual_ChangePct	Projected change (%) in storm intensity, relative to historical value, for the "Stormy 2060" scenario (See Scenario Description table). Storm intensity is defined as the total precipitation during a 24-hour event; the 30-year storm is an event that has a 3.3% chance of being exceeded in any year. Storm intensity is projected on annual basis for the grid cell as an average change over the scenario time period (2051-2070).
Storm15Yr_2035_LessStormy_Annual_ChangePct	Projected change (%) in storm intensity, relative to historical value, for the "Less Stormy 2035" scenario (See Scenario Description table). Storm intensity is defined as the total precipitation during a 24-hour event; the 15-year storm is an event that has a 6.6% chance of being exceeded in any year. Storm intensity is projected on annual basis for the grid cell as an average change over the scenario time period (2026-2045).
Storm15Yr_2035_Stormy_Annual_ChangePct	Projected change (%) in storm intensity, relative to historical value, for the "Stormy 2035" scenario (See Scenario Description table). Storm intensity is defined as the total precipitation during a 24-hour event; the 15-year storm is an event that has a 6.6% chance of being exceeded in any year. Storm intensity is projected on annual basis for the grid cell as an average change over the scenario time period (2026-2045).
Storm15Yr_2060_LessStormy_Annual_ChangePct	Projected change (%) in storm intensity, relative to historical value, for the "Less Stormy 2060" scenario (See Scenario Description table). Storm intensity is defined as the total precipitation during a 24-hour event; the 15-year storm is an event that has a 6.6% chance of being exceeded in any year. Storm intensity is projected on annual basis for the grid cell as an average change over the scenario time period (2051-2070).
Storm15Yr_2060_Stormy_Annual_ChangePct	Projected change (%) in storm intensity, relative to historical value, for the "Stormy 2060" scenario (See Scenario Description table). Storm intensity is defined as the total precipitation during a 24-hour event; the 15-year storm is an event that has a 6.6% chance of being exceeded in any year. Storm intensity is projected on annual basis for the grid cell as an average change over the scenario time period (2051-2070).

Climate Projections Grid Attribute	Description
Storm10Yr_2035_LessStormy_Annual_ChangePct	Projected change (%) in storm intensity, relative to historical value, for the "Less Stormy 2035" scenario (See Scenario Description table). Storm intensity is defined as the total precipitation during a 24-hour event; the 10-year storm is an event that has a 10% chance of being exceeded in any year. Storm intensity is projected on annual basis for the grid cell as an average change over the scenario time period (2026-2045).
Storm10Yr_2035_Stormy_Annual_ChangePct	Projected change (%) in storm intensity, relative to historical value, for the "Stormy 2035" scenario (See Scenario Description table). Storm intensity is defined as the total precipitation during a 24-hour event; the 10-year storm is an event that has a 10% chance of being exceeded in any year. Storm intensity is projected on annual basis for the grid cell as an average change over the scenario time period (2026-2045).
Storm10Yr_2060_LessStormy_Annual_ChangePct	Projected change (%) in storm intensity, relative to historical value, for the "Less Stormy 2060" scenario (See Scenario Description table). Storm intensity is defined as the total precipitation during a 24-hour event; the 10-year storm is an event that has a 10% chance of being exceeded in any year. Storm intensity is projected on annual basis for the grid cell as an average change over the scenario time period (2051-2070).
Storm10Yr_2060_Stormy_Annual_ChangePct	Projected change (%) in storm intensity, relative to historical value, for the "Stormy 2060" scenario (See Scenario Description table). Storm intensity is defined as the total precipitation during a 24-hour event; the 10-year storm is an event that has a 10% chance of being exceeded in any year. Storm intensity is projected on annual basis for the grid cell as an average change over the scenario time period (2051-2070).
Storm5Yr_2035_LessStormy_Annual_ChangePct	Projected change (%) in storm intensity, relative to historical value, for the "Less Stormy 2035" scenario (See Scenario Description table). Storm intensity is defined as the total precipitation during a 24-hour event; the 5-year storm is an event that has a 20% chance of being exceeded in any year. Storm intensity is projected on annual basis for the grid cell as an average change over the scenario time period (2026-2045).
Storm5Yr_2035_Stormy_Annual_ChangePct	Projected change (%) in storm intensity, relative to historical value, for the "Stormy 2035" scenario (See Scenario Description table). Storm intensity is defined as the total precipitation during a 24-hour event; the 5-year storm is an event that has a 20% chance of being exceeded in any year. Storm intensity is projected on annual basis for the grid cell as an average change over the scenario time period (2026-2045).
Storm5Yr_2060_LessStormy_Annual_ChangePct	Projected change (%) in storm intensity, relative to historical value, for the "Less Stormy 2060" scenario (See Scenario Description table). Storm intensity is defined as the total precipitation during a 24-hour event; the 5-year storm is an event that has a 20% chance of being exceeded in any year. Storm intensity is projected on annual basis for the grid cell as an average change over the scenario time period (2051-2070).

Climate Projections Grid Attribute	Description
Storm5Yr_2060_Stormy_Annual_ChangePct	Projected change (%) in storm intensity, relative to historical value, for the "Stormy 2060" scenario (See Scenario Description table). Storm intensity is defined as the total precipitation during a 24-hour event; the 5-year storm is an event that has a 20% chance of being exceeded in any year. Storm intensity is projected on annual basis for the grid cell as an average change over the scenario time period (2051-2070).

Historical Streamflow Gage

Historical Streamflow Gage Attribute	Description
site_no_display	A unique identifier for each streamflow gage used by USGS, formatted for displaying purposes
station_nm	Station name used by USGS
station_name_formatted	Station name used by USGS, formatted for displaying purposes
drain_area_va	Total drainage area of the upstream watershed
drain_area_units	Units for total drainage area
USGS Site ID	A unique identifier for each streamflow gage used by USGS. Attribute is numeric and does not contain leading zeros used for USGS Site IDs
Longitude	Longitude of the streamflow gage site
Latitude	Latitude of the streamflow gage site
Start Year	The first year of the streamflow gage record data
End Year	The last year of the streamflow gage record data
>95% Comp Yrs	Number of 'complete' years in the streamflow gage record, defined as years with >95% data completeness of daily flow time series. Only data from complete years were used in calculations of flow statistics
Avg Min Q	Annual minimum daily streamflow
Avg Max Q	Annual maximum daily streamflow
Avg Mean Q	Annual average daily streamflow
7Q10	10-year low daily streamflow. The 7-day low flow that has a 50% probability of occurring in any given year
7Q2	2-year low daily streamflow. The 7-day low flow that has a 50% probability of occurring in any given year
Avg Mn Date	The dates of the minimum flows for each year in the period of record, and the average minimum dates over all years (as Julian Days).
Avg Max Date	The dates of the maximum flows for each year in the period of record, and the average maximum dates over all years (as Julian Days).

Historical Streamflow Gage Attribute	Description
MinDate CI	The confidence intervals on the average minimum dates (NOTE: these values should be used only as an indication of the relative consistency in the min flow date, and in many cases could not be calculated due to the variability of the data)
MaxDate CI	The confidence intervals on the average maximum dates (NOTE: these values should be used only as an indication of the relative consistency in the max flow date, and in many cases could not be calculated due to the variability of the data)

Streamflow Projection Points

Streamflow Projection Points Attribute	Description
REACHCODE	National Hydrography Dataset (NHD) reach code, a unique code given to all points within a reach
Latitude	Latitude of the streamflow point
Longitude	Longitude of the streamflow point
COMID	NHDPlus2 Common Identifier (ComID), a ten digit integer used as an identifier for an NHDPlus catchment
GNIS_NAME	Name of the stream in which the streamflow point lies
Stream_Order	Order of the stream in which the streamflow point lies
Drain_Area_SqKm	Total drainage area of the upstream watershed in square kilometers
Streamflow_Proj_Wetter_Ratio_Annual_High_Max	Annual high streamflow (average highest single-day streamflow) under the Wetter Projection. This maximum predicted value is given as a ratio of the projected future flow (2071 - 2100) divided by baseline historical flow (1976 - 2005)
Streamflow_Proj_Wetter_Ratio_Annual_High_90	Annual high streamflow (average highest single-day streamflow) under the Wetter Projection. This 90th percentile predicted value is given as a ratio of the projected future flow (2071 - 2100) divided by baseline historical flow (1976 - 2005)
Streamflow_Proj_Drier_Ratio_Annual_High_10	Annual high streamflow (average highest single-day streamflow) under the Drier Projection. This 10th percentile predicted value is given as a ratio of the projected future flow (2071 - 2100) divided by baseline historical flow (1976 - 2005)
Streamflow_Proj_Drier_Ratio_Annual_High_Min	Annual high streamflow (average highest single-day streamflow) under the Drier Projection. This minimum predicted value is given as a ratio of the projected future flow (2071 - 2100) divided by baseline historical flow (1976 - 2005)
Streamflow_Proj_Wetter_Ratio_Annual_Average_Max	Annual average daily streamflow under the Wetter Projection. This maximum predicted value is given as a ratio of the projected future flow (2071 - 2100) divided by baseline historical flow (1976 - 2005)
Streamflow_Proj_Wetter_Ratio_Annual_Average_90	Annual average daily streamflow under the Wetter Projection. This 90th percentile predicted value is given as a ratio of the projected future flow (2071 - 2100) divided by baseline historical flow (1976 - 2005)

Streamflow Projection Points Attribute	Description
Streamflow_Proj_Drier_Ratio_Annual_Average_10	Annual average daily streamflow under the Drier Projection. This 10th percentile predicted value is given as a ratio of the projected future flow (2071 - 2100) divided by baseline historical flow (1976 - 2005)
Streamflow_Proj_Wetter_Ratio_Annual_Low_90	Annual low streamflow (average lowest single-day streamflow) under the Wetter Projection. This 90th percentile predicted value is given as a ratio of the projected future flow (2071 - 2100) divided by baseline historical flow (1976 - 2005)
Streamflow_Proj_Drier_Ratio_Annual_Low_10	Annual low streamflow (average lowest single-day streamflow) under the Drier Projection. This 10th percentile predicted value is given as a ratio of the projected future flow (2071 - 2100) divided by baseline historical flow (1976 - 2005)
Streamflow_Proj_Wetter_Ratio_10yr_Low_90	10-year low streamflow (the 7-day low flow that has a 10% chance of occurring in any given year) based on the Wetter Projection. This 90th percentile predicted value is given as a ratio of the projected future flow (2071 - 2100) divided by baseline historical flow (1976 - 2005)
Streamflow_Proj_Drier_Ratio_10yr_Low_10	10-year low streamflow (the 7-day low flow that has a 10% chance of occurring in any given year) based on the Drier Projection. This 10th percentile predicted value is given as a ratio of the projected future flow (2071 - 2100) divided by baseline historical flow (1976 - 2005)
Streamflow_Proj_Wetter_Ratio_2yr_Low_90	2-year low streamflow (the 7-day low flow that has a 50% chance of occurring in any given year) based on the Wetter Projection. This 90th percentile predicted value is given as a ratio of the projected future flow (2071 - 2100) divided by baseline historical flow (1976 - 2005)
Streamflow_Proj_Drier_Ratio_2yr_Low_10	2-year low streamflow (the 7-day low flow that has a 50% chance of occurring in any given year) based on the Drier Projection. This 10th percentile predicted value is given as a ratio of the projected future flow (2071 - 2100) divided by baseline historical flow (1976 - 2005)
Streamflow_Proj_Drier_Ratio_Annual_Average_Min	Annual average daily streamflow under the Drier Projection. This minimum predicted value is given as a ratio of the projected future flow (2071 - 2100) divided by baseline historical flow (1976 - 2005)
Streamflow_Proj_Wetter_Ratio_Annual_Low_Max	Annual low streamflow (average lowest single-day streamflow) under the Wetter Projection. This maximum predicted value is given as a ratio of the projected future flow (2071 - 2100) divided by baseline historical flow (1976 - 2005)
Streamflow_Proj_Drier_Ratio_Annual_Low_Min	Annual low streamflow (average lowest single-day streamflow) under the Drier Projection. This minimum predicted value is given as a ratio of the projected future flow (2071 - 2100) divided by baseline historical flow (1976 - 2005)

Streamflow Projection Points Attribute	Description
Streamflow_Proj_Wetter_Ratio_10yr_Low_Max	10-year low streamflow (the 7-day low flow that has a 10% chance of occurring in any given year) based on the Wetter Projection. This maximum predicted value is given as a ratio of the projected future flow (2071 - 2100) divided by baseline historical flow (1976 - 2005)
Streamflow_Proj_Drier_Ratio_10yr_Low_Min	10-year low streamflow (the 7-day low flow that has a 10% chance of occurring in any given year) based on the Drier Projection. This minimum predicted value is given as a ratio of the projected future flow (2071 - 2100) divided by baseline historical flow (1976 - 2005)
Streamflow_Proj_Wetter_Ratio_2yr_Low_Max	2-year low streamflow (the 7-day low flow that has a 50% chance of occurring in any given year) based on the Wetter Projection. This maximum predicted value is given as a ratio of the projected future flow (2071 - 2100) divided by baseline historical flow (1976 - 2005)
Streamflow_Proj_Wetter_Ratio_2yr_Low_Min	2-year low streamflow (the 7-day low flow that has a 50% chance of occurring in any given year) based on the Drier Projection. This minimum predicted value is given as a ratio of the projected future flow (2071 - 2100) divided by baseline historical flow (1976 - 2005)

Streamflow Projections Grid

Streamflow Projections Grid Attribute	Description
GRIDCODE	A unique identifier for each record used by the mapping component of CREAT
Reach_Count	The number of stream reaches in the grid cell
HurrGridID	A unique identifier for each record used for coastal storm and inundation maps
grid_over_land	A flag that identifies whether the grid cell is over land (1), coastal water (0), or the Great Lakes (2)
Streamflow_Proj_Drier_Ratio_Annual_Low	Annual low streamflow (average lowest single-day streamflow) under the Drier Projection. This 10th percentile predicted value is given as a ratio of the projected future flow (2071 - 2100) divided by baseline historical flow (1976 - 2005)
Streamflow_Proj_Wetter_Ratio_Annual_Low	Annual low streamflow (average lowest single-day streamflow) under the Wetter Projection. This 90th percentile predicted value is given as a ratio of the projected future flow (2071 - 2100) divided by baseline historical flow (1976 - 2005)
Streamflow_Proj_Drier_Ratio_Annual_High	Annual high streamflow (average highest single-day streamflow) under the Drier Projection. This 10th percentile 10th percentile predicted value is given as a ratio of the projected future flow (2071 - 2100) divided by baseline historical flow (1976 - 2005)
Streamflow_Proj_Wetter_Ratio_Annual_High	Annual high streamflow (average highest single-day streamflow) under the Wetter Projection. This 90th percentile predicted value is given as a ratio of the projected future flow (2071 - 2100) divided by baseline historical flow (1976 - 2005)
Streamflow_Proj_Drier_Ratio_Annual_Average	Annual average daily streamflow under the Drier Projection. This 10th percentile predicted value is given as a ratio of the projected future flow (2071 - 2100) divided by baseline historical flow (1976 - 2005)
Streamflow_Proj_Wetter_Ratio_Annual_Average	Annual average daily streamflow under the Wetter Projection. This 90th percentile predicted value is given as a ratio of the projected future flow (2071 - 2100) divided by baseline historical flow (1976 - 2005)
Streamflow_Proj_Drier_Ratio_2yr_Low	2-year low streamflow (the 7-day low flow that has a 50% chance of occurring in any given year) based on the Drier Projection. This 10th percentile predicted value is given as a ratio of the projected future flow (2071 - 2100) divided by baseline historical flow (1976 - 2005)

Streamflow Projections Grid Attribute	Description
Streamflow_Proj_Wetter_Ratio_2yr_Low	2-year low streamflow (the 7-day low flow that has a 50% chance of occurring in any given year) based on the Wetter Projection. This 90th percentile predicted value is given as a ratio of the projected future flow (2071 - 2100) divided by baseline historical flow (1976 - 2005)
Streamflow_Proj_Drier_Ratio_10yr_Low	10-year low streamflow (the 7-day low flow that has a 10% chance of occurring in any given year) based on the Drier Projection. This 10th percentile predicted value is given as a ratio of the projected future flow (2071 - 2100) divided by baseline historical flow (1976 - 2005)
Streamflow_Proj_Wetter_Ratio_10yr_Low	10-year low streamflow (the 7-day low flow that has a 10% chance of occurring in any given year) based on the Wetter Projection. This 90th percentile predicted value is given as a ratio of the projected future flow (2071 - 2100) divided by baseline historical flow (1976 - 2005)