

Appendix C: Glossary of Terms

Adaptation (climate change)

Adjustment in natural or human systems to a new or changing environment. Adaptation to climate change refers to adjustment in natural or human systems in response to actual or expected climatic stimuli or their effects, which moderates harm or exploits beneficial opportunities (United State Environmental Protection Agency, 2013).

Adaptive management

A process of iteratively planning, implementing, and modifying strategies for managing resources in the face of uncertainty and change. Adaptive management involves adjusting approaches in response to observations of their effect and changes in the system brought on by resulting feedback effects and other variables (International Panel on Climate Change, 2014).

Climate change

Climate change refers to a change in the state of the climate that can be identified by changes in the mean and/or the variability of its properties, and that persists for an extended period, typically decades or longer. Climate change may be due to natural internal processes or external forcings such as modulations of the solar cycles, volcanic eruptions, and persistent anthropogenic changes in the composition of the atmosphere or in land use (International Panel on Climate Change, 2014).

Climate scenarios

A plausible and often simplified representation of the future climate, based on an internally consistent set of climatological relationships that has been constructed for explicit use in investigating the potential consequences of anthropogenic climate change, often serving as input to impact models. Climate projections often serve as the raw material for constructing climate scenarios, but climate scenarios usually require additional information such as the observed current climate (International Panel on Climate Change, 2014).

Climate-informed planning parameter

A factor that is employed in the design, planning, or investment process, that has been scaled to reflect future climate change.

Community based organization

A community-based organization is a group of individuals organized by and for a particular community of people based on shared interests and/or attributes. The community could be defined geographically (e.g. a neighborhood), could contain members from diverse backgrounds, and/or could be defined on the basis of something like religious beliefs or a shared condition. Members may include various stakeholders, such as the public, elected officials, advocacy groups, and business leaders (United States Department of Transportation).

Community resilience

Community resilience is the ability of communities to withstand, recover, and learn from past disasters, and to learn from past disasters to strengthen future response and recovery efforts. This can include but is not limited to physical and psychological health of the population, social and economic equity and

well-being of the community, effective risk communication, integration of organizations (governmental and nongovernmental) in planning, response, and recovery, and social connectedness for resource exchange, cohesion, response, and recovery (Los Angeles County Community Disaster Resilience).

Disadvantaged communities

Areas disproportionately affected by environmental pollution and other hazards that can lead to negative public health effects, exposure, or environmental degradation, or with concentrations of people that are of low income, high unemployment, low levels of homeownership, high rent burden, sensitive populations, or low levels of educational attainment (California Health and Safety Code Section 39711).

Downscaling

Downscaling is a method for obtaining high-resolution climate or climate change information from relatively coarse-resolution global climate models (National Center for Atmospheric Research).

Environmental justice

The fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation and enforcement of environmental laws, regulations, and policies (California Government Code §65040.12[e]).

Equity

Equity is just and fair inclusion into a society in which all can participate, prosper, and reach their full potential (PolicyLink).

Equity (climate)

The central equity challenges for climate change policy involve several core issues: addressing the impacts of climate change, which are felt unequally; identifying who is responsible for causing climate change and for actions to limit its effects; and understanding the ways in which climate policy intersects with other dimensions of human development, both globally and domestically (World Resources Institute, 2014).

Extreme (climate) events

The occurrence of a value of a weather or climate variable above (or below) a threshold value near the upper (or lower) ends of the range of observed values of the variable (International Panel on Climate Change, 2012).

Global climate models

A numerical representation of the climate system that is based on the physical, chemical, and biological properties of its components, their interactions, and feedback processes, and that accounts for all or some of its known properties (International Panel on Climate Change, 2012).

Integrated climate action

Program, plans, or policies that simultaneously reduce greenhouse gas emissions and decrease the risks posed by climate change on the system where the action is implemented.

Localized Constructed Analogs (LOCA)

LOCA is a technique for downscaling climate model projections of the future climate. The localized constructed analogs (LOCA) method is a statistical scheme that produces downscaled estimates suitable

for hydrological simulations using a multi-scale spatial matching scheme to pick appropriate analog days from observations (University of California, San Diego).

Mitigation (climate change)

A human intervention to reduce the human impact on the climate system; it includes strategies to reduce greenhouse gas sources and emissions and enhancing greenhouse gas sinks (United State Environmental Protection Agency, 2013).

Mitigation (of disaster risk and disaster)

The lessening of the potential adverse impacts of physical hazards (including those that are human-induced) through actions that reduce hazard, exposure, and vulnerability (International Panel on Climate Change, 2014).

Natural and green infrastructure

The preservation or restoration of ecological systems, or utilization of engineered systems that use ecological processes, to increase resiliency to climate change, manage other environmental hazards, or both. This may include, but is not limited to, floodplain and wetlands restoration or preservation, combining levees with restored natural systems to reduce flood risk, and urban tree planting to mitigate high heat days (California Government Code 65302).

Representative concentration pathways

Representative Concentration Pathways (RCPs) are four greenhouse gas concentration (not emissions) trajectories adopted by the IPCC for its fifth Assessment Report (International Panel on Climate Change, 2014).

Resilience (climate)

“Resilience is the capacity of any entity – an individual, a community, an organization, or a natural system – to prepare for disruptions, to recover from shocks and stresses, and to adapt and grow from a disruptive experience (Judith Rodin).”

Sea level rise

The worldwide average rise in mean sea level; may be due to a number of different causes, such as the thermal expansion of sea water and the addition of water to the oceans from the melting of glaciers, ice caps, and ice sheets; contrast with relative sea-level rise (United State Environmental Protection Agency, 2013).

Urban heat island

The relative warmth of a city compared with surrounding rural areas, associated with changes in runoff, effects on heat retention, and changes in surface albedo (International Panel on Climate Change, 2014).

Vulnerable populations

Vulnerable populations include, but are not limited to women; racial or ethnic groups; low-income individuals and families; individuals who are incarcerated or have been incarcerated; individuals with disabilities; individuals with mental health conditions; children; youth and young adults; seniors; immigrants and refugees; individuals who are limited English proficient (LEP); and Lesbian, Gay, Bisexual, Transgender, Queer, and Questioning (LGBTQQ) communities, or combinations of these populations (California Health and Safety Code Section 131019.5).