Chapter 8 Abbreviations and Glossary

Table of Contents

Chapter 8	Abbreviations and Glossary	1
•	ABBREVIATIONS	
_	GLOSSARY	

8.1 Abbreviations

A300 ANSI A300, Tree Care Operations Standards

AASHTO American Association of State Highway and Transportation Officials

ACEP Agricultural Conservation Easement Program

AH Flood Insurance Rate Map (FIRM) zone: Areas subject to inundation by 1%-annual-chance

shallow flooding (usually areas of ponding) where average depths are between one and three feet. Base Flood Elevations (BFEs) derived from detailed hydraulic analyses are shown

in this zone. Mandatory flood insurance purchase requirements and floodplain

management standards apply.

AHPS Advanced Hydrologic Prediction Service

AHZ Active Hazard Zone

AIA American Institute of Architects

AKmax hypothetical maximum Alaska tsunami

AM Amplitude Modulation (AM)

ANSI American National Standards Institute
ANSS Advanced National Seismic System

AO Flood Insurance Rate Map (FIRM) zone: areas subject to inundation by 1%-annual-chance

shallow flooding (usually sheet flow on sloping terrain) where average depths are between one and three feet. Average flood depths derived from detailed hydraulic analyses are shown in this zone. Mandatory flood insurance purchase requirements and floodplain management standards apply. Some Zone AO have been designated in areas with high flood velocities such as alluvial fans and washes. Communities are encouraged to adopt

more restrictive requirements for these areas.

AOC Association of Oregon Counties
APA American Planning Association

APCO Association of Public Safety Communications Officials

AR Atmospheric River

ARES Amateur Radio Emergency Service

ARRA American Recovery and Reinvestment Act

ARRL Amateur Radio Relay League

ASCE American Society of Civil Engineers

ASDSO Association of State Dam Safety Officials
ASFPM Association of State Floodplain Managers

ATC Applied Technology Council

BCA Benefit-Cost Analysis

BCD Building Codes Division (State of Oregon, Department of Consumer and Business Services)

BCE Before Common Era
BCR Benefit-Cost Ratio
BFE Base Flood Elevation

BLM Bureau of Land Management (United States Department of the Interior)

BMP Best Management Practice

BNSF Burlington Northern-Santa Fe Railway

BPA Bonneville Power Administration

BusOR-IFA Business Oregon, Infrastructure Finance Authority

CAP Community Assistance Program (NFIP)

CAP-SSSE Community Assistance Program — State Support Services Element (NFIP)

CAV Community Assistance Visit (NFIP)

CB Coquille Bank

CBRL Coos Bay Rail Link

CCA Climate Change Adaptation

CDBG Community Development Block Grant

CD-ROM Compact Disc Read-Only Memory

CEI Critical Energy Infrastructure

CERT Community Emergency Response Team

CFR Code of Federal Regulations

CGIAR Formerly "Consultative Group on International Agricultural Research." Since 2008, known

simply as CGIAR, a global partnership that unites organizations engaged in research for a

food secure future

CI Critical Infrastructure/Essential Public Facilities

CMIP Coupled Model Intercomparison Project

CMIP5 Coupled Model Intercomparison Project, 5th phase

CMZ Channel Migration Zone
CNN Cable News Network

CPO Climate Program Office

CPW Community Planning Workshop (University of Oregon)

CRE Community Resilience Estimate

CREP Conservation Reserve Enhancement Program

CREW Cascadia Region Earthquake Workgroup

CRP Conservation Reserve Program

CRS Community Rating System (National Flood Insurance Program)

CSC Community Service Center (University of Oregon)

CSEPP Chemical Stockpile Emergency Preparedness Program

CSO combined sewer overflow

CSREES Cooperative State Research, Education, and Extension Service

CST Community Solutions Team
CSZ Cascadia Subduction Zone

CTP Cooperating Technical Partner (NFIP)

CVO Cascades Volcano Observatory

CWPP Community Wildfire Protection Plan

DAS Department of Administrative Services (State of Oregon)

DAS-CFO Department of Administrative Services-Chief Financial Office (State of Oregon)

DAS-CIO Department of Administrative Services-Chief Information Office (State of Oregon)

DAS-EAM Department of Administrative Services-Enterprise Asset Management (State of Oregon)

DAS-RM Department of Administrative Services-Risk Management Division (State of Oregon)

DAS-GEO Department of Administrative Services-Geospatial Enterprise Office (State of Oregon)

DCBS Department of Consumer and Business Services (State of Oregon)

DCBS-DFR Department of Consumer and Business-Department of Financial Regulation (State of

Oregon)

DEI Diversity, Equity, and Inclusion

DEM Digital Elevation Model

DEQ Department of Environmental Quality (State of Oregon)

DLCD Department of Land Conservation and Development (State of Oregon)

DMA Disaster Mitigation Act of 2000 (federal)

DMA2K Disaster Mitigation Act of 2000

DMV Department of Motor Vehicles (State of Oregon)

DNR Department of Natural Resources (Washington State)

DOD-USACE United States Department of Defense-U.S. Army Corps of Engineers

DOGAMI Department of Geology and Mineral Industries (State of Oregon)

DP Demographic Profile

DPSST Department of Public Safety Standards and Training (State of Oregon)

DR Alphabetic designation or precursor for Disaster Declaration Number

DRMS Decision, Risk, and Management Science

DRU Disaster Resilient University

DSL Department of State Lands (State of Oregon)

DTM Digital Terrain Model

EAM Enterprise Asset Management (State of Oregon Department of Administrative Services)

EAP Emergency Action Plan
EAS Emergency Alert System

ECC Emergency Coordination Center

EDA Economic Development Administration (U.S.)

EHP Environmental and Historic Preservation

EIS Environmental Impact Statement

EMI Emergency Management Institute (FEMA)

EMPG Emergency Management Performance Grant (State of Oregon)

ENSO El Niño Southern Oscillation

EO Education/Outreach

EOC Emergency Operations Center
EOP Emergency Operations Plan

EPA Environmental Protection Agency (U.S.)

EPCRA Emergency Planning and Community Right-to-Know Act

EQIP Environmental Quality Incentives Program

ER Emergency Relief

ESA Endangered Species Act
ESD Education Service District

ESEE Economic, Social, Environmental, and Energy

EWP Emergency Watershed Protection (NRCS Program)

FAA Federal Aviation Administration

FAS Federal Aid System (U.S. Highway Administration)

FEMA Federal Emergency Management Agency
FERC Federal Energy Regulatory Commission

FF Flash Flood

FHWA Federal Highway Administration

FIRM Flood Insurance Rate Map

FIS Flood Insurance Study
FM Frequency Modulation

FMA Flood Mitigation Assistance

FMAGP Fire Management Assistance Grant Program

FPD Fire Protection District

FSA/FMAGP Fire Suppression Assistance/Fire Management Assistance Grant Program

FTA Federal Transit Administration

FTE Full Time Equivalent

FY Fiscal Year

GCM Global Climate Models

GED General Education Development

GEO Geospatial Enterprise Office (State of Oregon, DAS)

GIS Geographic Information System

GNRO Governor's Natural Resources Office (State of Oregon)

GO General Obligation

GPS Global Positioning System

GSA General Services Administration (U.S.)
GSTF Greatest-Savings-to-the-Fund (FEMA)

GTN Gas Transmission Northwest

GWEB Governor's Watershed Enhancement Board

H High

Hazus Hazards U.S.

HB House Bill (State of Oregon)

HCD Housing and Community Development Act of 1974

HFRA Healthy Forest Restoration Act of 2003

HHPD High Hazard Potential Dam

HHZ High Hazard Zone
HM Hazard Mitigation

HMA Hazard Mitigation Assistance

HMGP Hazard Mitigation Grant Program

HMP Hazard Mitigation Plan

HMSE Hazard Mitigation and Structural Engineering

HMST Hazard Mitigation Survey Team

HMTAP Hazard Mitigation Technical Assistance Program (FEMA)

HR House Resolution (State of Oregon legislature)

HRFA Healthy Forest Restoration Act of 2003

HSPR Health Security, Preparedness, and Response (Oregon Health Authority)

HUD Housing and Urban Development (U.S.)

HWM High Water Mark

ICBO International Conference of Building Officials

ICC Increased Cost of Compliance (NFIP)

ID Insurance Division (Oregon Department of Consumer and Business Services)

IDA Initial Damage Assessment

IEBC International Existing Building Code

IFA Infrastructure Finance Authority (Business Oregon)

IHMT Interagency Hazard Mitigation Team
IMS Interpretive Map Series (DOGAMI)

IPCC Intergovernmental Panel on Climate Change
IPPM Insect Pest Prevention and Management

IR Indian Reservation

IRIS Incident Response Information System
ISA International Society of Arboriculture

ISO Insurance Services Office
JFO Joint Field Office (FEMA)

KOG Keep Oregon Green

KPM Key Performance Measure

L Low

LCDC Land Conservation and Development Commission (State of Oregon)

LEPC Local Emergency Planning Committee

LFD Local Fire Department

LFPC Local Fire Prevention Cooperative
LHZ Low Hazard Zone (coastal erosion)

LID Low Impact Development
LLC Limited Liability Company

LNG Liquefied Natural Gas

LNHMP Local Natural Hazards Mitigation Plan

LOC League of Oregon Cities

LP Legislative/Policy

LPA Landowner Preferred Alternative

LU Land Use/Development

LWI Local Wetlands Inventory

M Moderate

MAX Metropolitan Area Express light rail, operated by Tri-County Metropolitan Transportation

District of Oregon (TriMet)

MCDM Multi-Criteria Decision Method

MH Multi-Hazard

MHHW Mean High Water

MJO Madden Julian Oscillation
MLLW Mean Lower Low Water
MMI Modified Mercalli Index

MMMS Map Modernization Management Support (FEMA)

MP Mile Post or Maintenance/Planning

MV Most Vulnerable

MVC Motor Vehicle Collision

M_W Moment earthquake magnitude scale

N/A Not Available / Not Applicable

NARCCAP North American Regional Climate Change Assessment Program

NASA National Aeronautics and Space Administration
NASEO National Association of State Energy Officials

NB Nehalem Bank

NCC Northwest Coordination Center

NCHR Natural, Cultural, and Historical Resources

NDBC National Data Buoy Center

NDWS Native Database Web Service (Oracle)

NEHRP National Earthquake Hazards Reduction Program

NEMIS National Emergency Management Information System

NENA National Emergency Number Association

NERC North American Electric Reliability Corporation

NFIP National Flood Insurance Program

NFP National Fire Plan

NFPA National Fire Protection Association

NGA National Geospatial-Intelligence Agency

NGDC National Geophysical Data Center NGO Non-Governmental Organization NHMP Natural Hazards Mitigation Plan NID National Inventory of Dams

NMFS National Marine Fisheries Service

NOAA National Oceanic and Atmospheric Administration

NPS National Park Service

NRC National Resource Council

NRCS Natural Resources Conservation Service (U.S.)

NRI National Risk Index

NSF National Science Foundation
NSFHA No Special Flood Hazard Area

NTHMP National Tsunami Hazard Mitigation Program

NVEWS National Volcano Early Warning System

NWAC Northwest Weather and Avalanche Center

NWN Northwest (NW) Natural Gas

NWRFC Northwest River Forecast Center (National Weather Service)

NWS National Weather Service

OAIRS Oregon All Incident Reporting System (State Fire Marshal)

OAR Oregon Administrative Rule

OBSMAP Oregon Beach and Shoreline Mapping and Analysis Program

OCAR Oregon Climate Assessment Report

OCCRI Oregon Climate Change Research Institute
OCMP Oregon Coastal Management Program

OCS Oregon Climate Service

OCSRI Oregon Coastal Salmon Restoration Initiative

ODA Oregon Department of Agriculture
ODE Oregon Department of Education
ODF Oregon Department of Forestry

ODFW Oregon Department of Fish and Wildlife

ODOE Oregon Department of Energy

ODOT Oregon Department of Transportation

ODR Oregon Department of Revenue

ODTWG Oregon Distant Tsunami Working Group

OE Office of Electricity Delivery and Energy Reliability (U.S. Department of Energy)

OECDD Oregon Economic and Community Development Department (now Business Oregon-IFA)

OEM Oregon Office of Emergency Management

OEMA Oregon Emergency Management Association

OERS Oregon Emergency Response System

OFR Open File Report

OGDC Oregon Geologic Data Compilation

OGIC Oregon Geographic Information Council

OHA Oregon Health Authority
OHD Oregon Health Division

OHIRA Oregon Hazard Identification and Risk Assessment

OHP Oregon Highway Plan

OIG Office of Inspector General (U.S.)

OLC Oregon Lidar Consortium

OMB Office of Management and Budget (U.S.)

OMD Oregon Military Department

ONHRA Oregon Natural Hazards Risk Assessment
OPDR Oregon Partnership for Disaster Resilience

OPH Oregon Public Health

OPRD Oregon Parks and Recreation Department

OPUC Oregon Public Utility Commission

OR-OSHA Oregon Occupational Safety and Health Administration

ORP Oregon Resilience Plan
ORS Oregon Revised Statutes

OSBEELS Oregon State Board of Examiners for Engineering and Land Surveying

OSBGE Oregon State Board of Geologist Examiners

OSFM Office of State Fire Marshal

OSG Oregon Sea Grant (Oregon State University)
OSHA Occupational Safety and Health Administration

OSLR Oregon Seismic Lifeline Report
OSMB Oregon State Marine Board

OSP Oregon State Police

OSSPAC Oregon Seismic Safety Policy Advisory Commission

OSU Oregon State University

OUNS Oregon Utility Notification System

OUS Oregon University System

OWEB Oregon Watershed Enhancement Board
OWRD Oregon Water Resources Department

PA Public Assistance

PAR Population at Risk

PAS Planning Advisory Service (American Planning Association)

PDA Preliminary Damage Assessment

PDF Portable Document Format

PDM Pre-Disaster Mitigation

PDSI Palmer Drought Severity Index

PFM Potential Failure Mode
PGE Portland General Electric

PL Public Law

PM₁₀ Particulate Matter less than 10 micrometers in diameter

PMT Project Management Team

PNP Private Non-Profit organization

PNW Pacific Northwest

PNWCG Pacific Northwest Wildfire Coordinating Group

PNWR Portland & Western Railroad
POTB Port of Tillamook Bay Railroad

PRISM Parameter-elevation Relationships on Independent Slopes Model, an interpolation method

and name of associated climate group at Oregon State University

PROMETHEE Preference Ranking METHod for Enrichment Evaluations

PSA Public Service Announcement
PSAP Public Safety Answering Point

PSU Portland State University

PUC Public Utility Commission (State of Oregon)

PUD People's Utility District

PVC Polyvinyl Chloride

RACES Radio Amateur Civil Emergency Services

RAFT Rapid Assessment of Flooding Tool

RAPTOR Real-Time Assessment and Planning Tool for Oregon

RARE Resource Assistance for Rural Environments (University of Oregon)

RAS-C Risk Assessment Sub-Committee (State of Oregon IHMT)

RCP Representative Concentration Pathway

REDARS2 Risks from Earthquake Damage to Roadway Systems

RFC Repetitive Flood Claim (NFIP)

RFPA Rangeland Fire Protection Association

RFPD Rural Fire Protection District

RGP Regional General Permit (Oregon Department of State Lands)

RHS Rural Housing Service (U.S. Department of Agriculture (USDA))

Risk MAP Risk Mapping, Assessment, and Planning Program (FEMA)

RL Repetitive Loss

RM Risk Management Division (State of Oregon, Department of Administrative Services)

ROS Rain on Snow ROW Right of Way

RPC Recovery Planning Cell (State of Oregon Executive Order 08-20)

RVS Rapid Visual Screening

RWIS Road Weather Information System
SB Senate Bill (Oregon Legislature)

SBA Small Business Administration (U.S.)

SC Steering Committee (OSLR)

SD Substantial Damage

SEAO Structural Engineers Association of Oregon

SES Social Ecological Systems

SFC-LPA Southern Flow Corridor — Landowner Preferred Alternative

SFHA Special Flood Hazard Area

SHMO State Hazard Mitigation Officer

SI Substantial Improvement
SJR Senate Joint Resolution

SLIDO Statewide Landslide Inventory Database for Oregon

SM Snowmelt

SMART Specific, Measurable, Achievable, Realistic, Time-oriented

SMC State Management Cost SME Subject Matter Expert

SNHMP State Natural Hazards Mitigation Plan

SNOTEL Snow Telemetry site; part of an automated system of snowpack and related climate sensors

operated by the USDA NRCS.

SOI Southern Oscillation Index SoVI Social Vulnerability Index

SRGP Seismic Rehabilitation Grant Program (State of Oregon)

SRIA Sandy Recovery Improvement Act of 2013

SRL Severe Repetitive Loss (NFIP)

SRS Self-Determination Act

SSF State Support Function

SUA State Unit on Aging

SUB Springfield Utility Board

SWCD Soil and Water Conservation District

TAG Technical Assistance Grant (Land Conservation and Development Commission)

TDD Transportation Development Division (ODOT)

TDR Transfer of Development Rights

TGM Transportation and Growth Management Program (Department of Transportation)

THIRA Threat and Hazard Identification and Risk Assessment

TIM Tsunami Inundation Map (DOGAMI)

TNC The Nature Conservancy

TOPSIS Technique for Order of preference by Similarity to Ideal Solution

TRG Technical Resource Guide

U.S.C. United States Code

UASI Urban Area Security Initiative

UGB Urban Growth Boundary

UO University of Oregon
UP Union Pacific (railroad)

URM Unreinforced Masonry

US United States

USACE United States Army Corps of Engineers

USDA United States Department of Agriculture

USDOC United States Department of Commerce

USDOE United States Department of Energy

USDOI United States Department of the Interior

USDOT United States Department of Transportation

USFS United States Forest Service

USFWS United States Fish and Wildlife Service

USGS United States Geological Survey

V Vulnerable

VE Flood Insurance Rate Map (FIRM) zone: an area inundated by 1% annual chance flooding

with velocity hazard (wave action); base flood elevations have been determined.

WACO Water Availability Committee of Oregon

WHZ Wildfire Hazard Zone

WRD Water Resources Department (State of Oregon)

WREP Wetlands Reserve Enhancement Program

WRH Western Region Headquarters (NOAA National Weather Service)

WRP Wetlands Reserve Program

WSSPC Western States Seismic Policy Council

WSU Washington State University
WUI Wildland-Urban Interface
WWRA West Wide Risk Assessment
WWTP Wastewater Treatment Plant

YBP Years Before Present

8.2 Glossary

100-year flood means a flooding condition which has a 1% chance of occurring each year. The 100-year flood is the benchmark upon which the National Flood Insurance Program (NFIP) is based.

Amplification is the modification of frequency or strength of seismic earth movement at a location due to thickness, topography, and physical properties of soft surface sediments.

Ash is composed of fine particles of volcanic rock and glass blown into the atmosphere by a volcanic eruption.

Atmospheric Rivers(ARs) are a key source of flooding in Oregon and are common along the West Coast. During the Winter, long narrow bands of moisture are generated from warm tropical areas of the Pacific. Driven by Pacific Storms, these bands of water vapor release large amounts of rainfall when they interact with coastal topography.

Benefit-Cost Analysis (BCA) is a method that determines the future risk reduction benefits of a hazard mitigation project and compares those benefits to its costs.

Bombs are fragments of tephra (particles ejected into the air during volcanic eruptions) larger than 2.5 inches.

Bedrock shaking is expected earth movement at a location due to seismic activity without considering soft sediment effects such as amplification and liquefaction.

Caldera is a large, generally circular, fault-bounded depression caused by the withdrawal of magma from below a volcano or volcanoes.

Cascadia Subduction Zone is the area where the seafloor plate (the Juan de Fuca or Gorda) is sliding down and below the North American plate.

Catastrophic hazards are regional in scale and scope. Cascadia Subduction Zone earthquakes, and the ground shaking, subsidence, landsliding, liquefaction, and tsunamis that accompany them are catastrophic hazards.

Channel Migration is a natural geologic process, which descrivbes how a stream or river channel moves laterally over time.

Chronic hazards such as beach, dune, and bluff erosion; landslides; slumps; and flooding of low-lying lands during major storms usually cause gradual and cumulative damage.

Cinder is a bubbly (vesicular) volcanic rock fragment that forms when molten, gas-filled lava is thrown into the air, then solidifies as it falls.

Coastal Subsidence is a drop in elevation of land relative to sea level during an earthquake.

Conflagration Act is state legal authority established as a civil defense measure to mobilize structural fire suppression resources for massive urban fires. It must be authorized by the Governor. The act includes authorization for OSFM to assign firefighting forces and equipment beyond mutual aid agreements. It also designates reimbursement for aid to those departments participating.

Conflagration, in the context of this Plan, means Governor-declared fires with an imminent threat to life or structures that have exhausted local and mutual aid suppression resources.

Disaster Mitigation Act of 2000 (DMA2K) amended the Stafford Act, establishing a national program for pre-disaster mitigation; streamlining the administration of disaster relief; changing FEMA's post-disaster programs for individuals and families; establishing minimum standards for public and private structures; requiring local and state natural hazards mitigation plans that meet a FEMA standard (Section 322); revising FEMA funding for the repair, restoration, and replacement of damaged facilities (Section 406); revising FEMA's participation in the costs of WUI fire suppression through an expanded and renamed Fire Management Assistance Grant Program (Section 420); removing the requirement for post-disaster IHMT or HMST meetings and reports; and other amendments.

Distal volcanic hazards have an impact far beyond the active vent. Proximal and distal hazards are individual to each volcano.

El Niño-Southern Oscillation is a cycle in the Pacific Basin involving water and air temperatures that has a profound effect on weather patterns around the world; events typically last 6-18 months.

Emergency Action Plan is defined by Oregon law as a plan that assists a dam owner or operator, and local emergency management personnel, to perform actions to ensure human safety in the event of a potential or actual dam failure.

FireFree is an Oregon and national model developed in Oregon that predates the more recent nationally known Firewise. http://www.firefree.org/

Firewise is a program developed by the National Fire Protection Association (NFPA) featuring templates to help communities reduce risk and protect property from the dangers of wildland fires; an interactive, resource-rich website; and training programs throughout the nation. http://www.firewise.org/

Floodplain is a land area adjacent to a river, stream, lake, estuary, or other water body that is subject to flooding. These areas, if left undisturbed, act to store excess flood water.

Floodway is the channel of a river or other watercourse and adjacent land areas that must be reserved in order to discharge the base flood without cumulatively increasing the water surface elevation more than one foot.

Flows are rapid to slow mass movement of saturated material moving down a slope. *Debris flows* occur when a landslide moves rapidly downslope as a semi-fluid mass scouring or partially scouring soils from the slope along its path. Other *flow* types include earthflows, mudflows, lahars, debris torrents, and creep.

Foredune is a dune lying parallel to the ocean, occurring at the landward edge of the beach or at the landward limit of the highest tide, which has been stabilized by vegetation.

Goal 7 of the Oregon Statewide Land Use Planning Program calls for local comprehensive plans to include inventories, policies, and implementing measures to guide development in hazard areas with the goal of reducing losses from flooding, landslides, earthquakes, tsunamis, coastal erosion, and wildfires.

Hazard is any situation that has the potential of causing damage to people, property, or the environment.

Hazard Mitigation Grant Program means the program authorized under Section 404 of the Stafford Act and implemented at 44 CFR Part 206, Subpart N, which authorizes funding for certain mitigation measures identified through the evaluation of natural hazards conducted under Section 322 of the Stafford Act. (44 CFR 201.2)

Hazard mitigation means any sustained action taken to reduce or eliminate the long-term risk to human life and property from hazards. (44 CFR 201.2) It aims to enhance the capacity of a community to anticipate, respond, adapt and recover from natural hazard events.

Hazus (HAZards **U**nited **S**tates) is a loss estimation methodology that is a FEMA software program using mathematical formulas and information about building stock, local geology, and the location and size of potential earthquakes, economic data, and other information to estimate losses from potential earthquakes.

Hazus-MH (Hazus **M**ulti-**H**azards) is a methodology that expands on Hazus (cf.) by estimating potential losses from earthquakes, hurricane winds, and floods.

High hazard potential classification dams are those where failure or mis-operation will probably cause loss of human life."

Lahar is a type of mudflow that originates on the slopes of volcanoes when volcanic ash and debris become saturated with water and flows rapidly downslope.

Lava is magma that reaches the Earth's surface through a volcanic eruption and when cooled and solidified, forms igneous rock.

Landslide is any detached mass of soil, rock, or debris that moves down a slope or a stream channel.

Lateral spreading is failure on very gentle slopes or flat terrain. The failure is usually associated with water-saturated, loose sediment spreading laterally due to liquefaction during earthquakes or human-caused rapid ground motion.

Lidar (Light Detection and Ranging) is an optical remote sensing technology that can measure the distance to, or other properties of a target by illuminating the target with light, often using pulses from a laser.

Liquefaction is the reaction of saturated soil to seismic earth movement causing the soil to behave like a liquid.

Littoral cells are beaches composed of sand, gravel, or both that may be bounded by prominent headlands limiting sand exchange.

Magma is molten rock that may be completely liquid or a mixture of liquid rock, dissolved gases and crystals.

Pyroclastic flow is an extremely hot mixture of gas, ash and pumice fragments that travels down the flanks of a volcano or along the surface of the ground at speeds of up to 150 miles per hour and tends to flow down valleys.

Magnitude (M) is a measure of the amount of energy released by an earthquake.

Major disaster means any natural catastrophe including any hurricane, tornado, storm, high water, wind-driven water, tidal wave, tsunami, earthquake, volcanic eruption, landslide, mudslide, snowstorm or drought, or, regardless of cause, any fire, flood, or explosion in any part of the United States, which in the determination of the President causes damage of sufficient severity and magnitude to warrant major disaster assistance to supplement the efforts and available resources of states, local governments, and disaster relief organizations in alleviating the damage, loss, hardship, or suffering caused thereby. (44 CFR 206.2)

Megathrust is both the giant fault that separates the two plates in a subduction zone and the giant earthquake that occurs when that fault moves.

National Fire Plan is a federal program that helps manage the impact of wildfire on communities. It has five main components: (a) firefighting, (b) rehabilitation and restoration, (c) hazardous fuel reduction, (d) community assistance, and (e) accountability.

National Flood Insurance Program is the program run by the federal government to improve floodplain management, reduce flood-related disaster costs, and provide flood insurance for residents of flood-prone communities.

Natural Hazards Mitigation Plan means a plan meeting the requirements of 44 CFR 201.4, 201.5, or 201.6.

National Risk Index is a dataset and online tool to help illustrate the United States communities most at risk for 18 natural hazards.

Orographic Lifting is the process by which air is forced to rise over a mountain or other geographical feature. It's a major cause of precipitation in mountainous areas.

Overtopping – wave-induced flood hazards

Pacific Decadal Oscillation is a similar but longer-term cycle than the El Niño-Southern Oscillation with typical events lasting 20-30 years.

Proximal volcanic hazards have an impact limited to a distance of about 30 miles or less from the active vent.

Public Assistance is that part of the disaster assistance program in which the federal government supplements the efforts and available resources of state and local governments to restore certain public facilities or services. Public Assistance includes emergency assistance, debris removal, community disaster loans, and the permanent repair, restoration, or replacement of public and designated private nonprofit facilities damaged or destroyed by a major disaster and is further described under Section 406 of the Stafford Act.

Pyroclastic surge is a dilute version of a pyroclastic flow, which can move even more rapidly and easily moves up and over ridges.

Range fires burn across lands typically open and lacking timber stands or large accumulations of fuel.

Repetitive Loss structure means a structure covered under an NFIP flood insurance policy that (1) has incurred flood-related damage on two occasions, in which the cost of repair, on average, equaled or exceeded 25% of the value of the structure at the time of each such flood event; and (2) at the time of the second incidence of flood-related damage, the contract for flood insurance contains increased cost of compliance coverage

Rock falls are masses of rock fragments that break away from a steep slope and travel mostly by free fall, coming to rest at the base of a slope as talus debris.

Senate Bill 360 in 1997 established the policy and framework for meeting the fire protection needs of the wildland-urban interface.

Severe Repetitive Loss structure means a structure covered under an NFIP flood insurance policy and has incurred flood-related damage (1) for which four or more separate claims have been made under flood insurance coverage, with the amount of each claim (including building and contents payments) exceeding \$5,000 and with the cumulative amount of such claims payments exceeding \$20,000; or (2) for which at least two separate flood insurance claims payments (building payments only) have been made, with the cumulative amount of such claims exceeding the value of the insured structure

Shield volcano is a gently sloping volcano in the shape of a flattened dome and built almost exclusively of lava flows.

Slides have a distinct zone of weakness that separates the overlying failed material from more stable underlying material. Types of slides include rotational (movement along a curved surface) and translational (movement along a flat surface).

Social vulnerability is the susceptibility of social groups to the adverse impacts of natural hazards, including disproportionate death, injury, loss, or disruption of livelihood.

Special Flood Hazard Area is the land in the floodplain within a community subject to a 1% or greater chance of flooding in any given year. (44 CFR 59.1)

Stafford Act means the Robert T. Stafford Disaster Relief and Emergency Assistance Act (PL 100-707, which amended PL 91-606 and PL 93-288; then was further amended by PL 106-390, the Disaster Mitigation Act of 2000; and PL 109-295, the Post-Katrina Emergency Reform Act).

State Hazard Mitigation Officer is the official representative of state government who is the primary point of contact with FEMA, other federal agencies, and local governments in mitigation planning and implementation of mitigation programs and activities required under the Stafford Act. In Oregon, the State Hazard Mitigation Officer position resides in the Oregon Department of Emergency Management (OEM).

State Interagency Hazard Mitigation Team is a permanent body of state agency officials established in 1997 to understand losses arising from natural hazards and coordinate recommended strategies to mitigate loss of life, property, and natural resources.

Stratovolcano is a relatively long-lived volcano built up of both lava flows and pyroclastic material.

Structural fire protection is protection of structures by established municipal fire departments and rural fire protection districts with specific equipment and training.

Subduction zone is the area between two converging plates, one of which is sliding down and below the other.

Subduction zone earthquake is an earthquake along a subduction zone. In Oregon, it usually refers to the Cascadia Subduction Zone (CSZ), which lies offshore of the Oregon coast.

Subduction is the process of one crustal plate sliding down and below another crustal plate as the two converge.

Surface fault is a fault that ruptures to the Earth's surface.

Tectonic refers to large-scale vertical or horizontal movement of the earth's crust.

Tectonic plate is a slab of rigid lithosphere (crust and uppermost mantle) that moves over the asthenosphere.

Tephra is a general term for all sizes of particles ejected into the air during volcanic eruptions. Tephra includes particles as tiny as volcanic ash and as large as bombs.

Tsunami is a series of waves generated by undersea earthquakes or landslides.

Vulnerability is the susceptibility of life, property, or the environment to damage if a hazard manifests to potential. It is a function of exposure, sensitivity, and capacity to adapt to hazards.

Wave runup is the swash of a broken wave as it travels up the beach face.

Wildfire hazard zone means the portion of a local government jurisdiction that has been determined to be at risk of a catastrophic wildfire.

Wildland-urban interface (also known as wildland interface, forestland-urban interface, interface) is an area where structures are adjacent to or are intermingled with natural vegetative fuels which is prone to the occurrence of wildland fires.

Whole community, as defined by FEMA, refers to the national focus on enabling the participation in national preparedness activities of a wider range of players from the private and nonprofit sectors,

including non-governmental organizations and the public, in conjunction with the participation of all levels of government to foster better coordination and working relationships.	