15. Recovery

The recovery process begins soon after an incident happens. The objective of recovery is to bring affected households, businesses and communities to a condition of post-disaster routine where normal activities can resume. During recovery, damaged or destroyed structures are repaired or rebuilt when appropriate; residents reoccupy impacted areas; schools and government facilities reopen; and businesses and other organizations resume operations.

Recovery from landslides is particularly difficult. Homes and businesses are seldom protected against landslide losses by insurance and must deal with damages on their own. Governments and other eligible organizations usually find that obtaining federal relief for landslide losses is much more challenging than getting relief for losses from floods, wind or fire disasters of similar magnitude. Landslide recovery is especially complex and typically requires detailed geotechnical studies. Such recovery projects are usually expensive and often take many years to complete.

Insurance

One of the most effective tools that property owners have to protect themselves against financial losses from disasters is with insurance. Unfortunately, owners of homes or businesses hit by landslides often discover that these losses (usually called mass movements or earth movements in policy language) are not part of standard homeowner or small business insurance policy. Getting insurance that will cover losses from landslides is usually not possible from typical insurance carriers in most cases. This situation makes prevention and mitigation actions especially important for property owners.

Landslide insurance is sometimes available as a special "difference in conditions" policy sold by a "surplus lines insurer" that is usually an insurer separate from the one offering the standard policy. Refer to the Insurance Information Institute (www.iii. ora/article/insurance-for-landslides-and-mudflow) for more information.

Those insured under the National Flood Insurance Program (NFIP) are covered for mudflow damage. In order to be considered as flood damage, there must be a "general and temporary condition of partial or complete inundation of two or more acres of normally dry land — or — two or more properties (at least one of which is the NFIP property) impacted by the mudflow." The Standard Flood Insurance Policy (SFIP) defines a mudflow as "a river of liquid and flowing mud on the surfaces of normally dry land areas, as when the earth is carried by a current of water. Other earth movements, such as landslide, slope failure or a saturated soil mass moving by liquidity down a slope, are not mudflows. Refer to the leaflet, Understanding Mudflow and the NFIP, published by the Federal Emergency Management Agency, January 2018.

Federal Disaster Relief

1. Federal Emergency Management Agency (FEMA), Robert T. Stafford Disaster Relief and Emergency Assistance Act, PL 100-707. This act provides the authority for most federal disaster response and recovery activities, particularly those administered by FEMA. To trigger federal disaster relief, there must be a Presidential disaster declaration. Such declarations require losses from damages and expenses to be verified and substantial based on a per capita loss in a particular county. Consult with local or state emergency management to determine eligibility.

> Public Assistance Program (PA). Public assistance is provided when the President determines that an incident has exceeded the ability of state, local and tribal governments to respond and recover. A specific uninsured loss amount to governments and certain eligible non-profit organizations, based on a per capita ratio in the affected county, must be exceeded in order to be considered for PA. The policy for federal funding of the repair of facilities affected by landslides and slope failures is described in FEMA Recovery Policy RP9524.2 (23 May *2006).* This policy describes eligible emergency protective measures; debris removal; and repair, restoration or replacement of damaged facilities.

Individual Assistance Program (IA).

Individual assistance is provided in very limited circumstances when the effects of a disaster on individuals and households is particularly severe. Federal disaster declarations usually do not include IA. The maximum amount of IA that can be provided to any individual or household is \$34,900 (as of 2018). The average amounts actually received by households is significantly less. IA is unlikely to offer the amount required to repair or rebuild landslide damaged homes.

2. Federal Highway Administration (FHWA), Emergency Relief (FHWA ER). The FHWA ER program provides funds for emergency repairs and permanent repairs on Federal-aid highways, tribal transportation facilities, and roads on Federal lands that the Secretary [of Transportation] determines to have suffered serious damage as a result of natural disaster or catastrophic failure from an external cause. The two main types of repair authorized under ER are:

Emergency Repairs. Occur immediately following a disaster to restore essential traffic. minimize damage or protect remaining facilities. Activities may include:

- establishing emergency detours
- providing temporary bridges or ferry service
- regrading roadway.

Permanent Repairs. Conducted to restore roads and highways to pre-disaster conditions. Activities may include:

- restoring pavement surfaces
- reconstructing damaged bridges and culverts
- replacing signs, guardrails, fences and other highway devices.

The FHWA ER pays 100% of the cost of emergency repairs. Emergency repairs must be completed within 180 days of the disaster event. Sometimes emergency funds may be available on a "quick release" basis that are released before detailed damage assessments and cost estimates have been finished.

Debris removal is an emergency repair. Debris typically includes trees, tree limbs, other woody materials, sand, mud, silt, gravel, rocks and other miscellaneous materials. Whether FHWA ER will pay for debris removal depends on whether or not the debris is eligible to be removed using FEMA funding. Disaster-related debris removal that is eligible for FEMA Stafford Act funding is not eligible for ER funds. Refer to the FHWA FR for additional details.

Generally, FHWA ER pays 80% of the cost of permanent repairs for non-interstate roads, and 90% of the cost for Interstate Highways. There is a minimum eligible cost of \$5,000 per incident site. Local governments cannot apply for Highway ER, but instead must seek relief through state government application for ER.

Removal of rock and mudslides from a Federal-aid highway is eligible for FHWA ER when the slide is either associated with another natural disaster or by itself qualifies as an eligible natural disaster. If found cost effective, ER funds can be used to stabilize slide areas to protect a highway facility from future disaster damage. Such stabilization is considered to be an ER-eligible betterment. Also, relocation of the road rather than slide correction is an eligible betterment if found to be cost effective and

accompanied by proper documentation.

Note that "erosion damage" due primarily or wholly to rainfall and resulting from surface saturation of slopes and embankments, rather than from floodwaters, is not eligible for reimbursement. FHWA considers such work as "heavy maintenance" as a direct result of a disaster that "can be reasonably accommodated by a state or local road authority's maintenance, emergency or contingency program." Refer to the FHWA ER manual at www.fhwa.dot.gov/ reports/erm/er.pdf.

- 3. Federal Transit Administration (FTA), Public Transportation Emergency Relief (FTA ER). FTA ER provides federal funding on a reimbursement basis to public transportation agencies, states, and other governmental authorities for damage to public transportation facilities or operations as a result of a natural disaster or other emergency and to protect assets from future damage. Since there is not permanent appropriation for FTA ER, this program cannot provide funding immediately after a disaster or emergency. Transit agencies must rely on FEMA for a quick response. Refer to the FTA ER manual for additional details at www.transit.dot.gov/sites/fta.dot.gov/files/docs/ FTA Emergency Relief Manual and Guide -Sept_2015.pdf.
- 4. Natural Resources Conservation Service (NRCS), Emergency Watershed Protection (EWP). The NRCS EWP program enables communities to quickly address serious and long-lasting damages to infrastructure and the land that are the result of natural disaster. EWP activities include:
 - debris removal from stream channels, road culverts and bridges;
 - reshape or protection of eroded streambanks;
 - correct damaged drainage facilities;
 - establish vegetative cover on critically eroding lands;
 - repair of levees and structures; and
 - repair conservation practices.

All EWP projects must demonstrate that they reduce threats to life and property; be economically, environmentally and socially sound; and must be designed based on acceptable engineering standards. Public and private landowners are

eligible to apply for EWP through a local sponsor (cities, counties, conservation or watershed districts or recognized tribal organizations). NRCS pays up to 75% of the cost for eligible emergency projects. Local sponsors are responsible for the remaining 25% in cash or in-kind services. Refer to www.nrcs.usda.gov/Internet/FSE DOCUMENTS/ stelprdb1045263.pdf.

State Disaster Relief

Minnesota Statutes Chapter 12B, Public Disaster Assistance. The State of Minnesota's disaster assistance provides relief when local governments and other eligible institutional applicants incur damages that, on a per capita basis, equal or exceed 50 percent of the countywide per capita impact indicator under the FEMA Public Assistance Program under the federal Stafford Act.

Minnesota does not have an Individual Assistance (IA)-equivalent program that provides direct assistance to individuals who have experienced catastrophic losses.