



## CASE STUDY – TEACHING NOTES

# Rebuilding Substantially Damaged Homes

TOWN OF LYONS, COLORADO: 2013 FLOODING

**Learning Objective:** Learn from the challenges experienced by a small town managing home reconstruction with the aims of expanding affordable housing and reducing future vulnerability after the devastating 2013 Colorado flood.

**Keywords:** Recovery, Flood, Local Government, Isolated Community, Housing, Leadership, Recovery Planning, Hazard Mitigation, Resilience, Affordable Housing, Partnerships

## Instructor's Introduction

This Teaching Note is intended to prepare an instructor to use this case study in a classroom (live or virtually). The note expands on the lessons learned in this case study, intended to help disaster management students learn from a real-world disaster recovery experience. Selection of learning objectives, discussion questions, and activities can be customized based on audience and time allowance. It is suggested that students read the Background and Challenges sections (Part One) and pause to discuss the scenario and complete part one activities, before moving on to read the Actions, Results, and Lessons Learned sections (Part Two).

This case study describes lessons learned by the administration of a small town after a catastrophic flooding event. The town faced the loss of a substantial portion of homes, including nearly all of the affordable homes in the area. The administration balanced competing desires to rebuild quickly and rebuild homes in a safer way, which would take longer and potentially have more upfront costs.

To become more familiar with relevant concepts before teaching the case, please review the following:

- [National Disaster Recovery Framework](#)
- [FACT SHEET: "Substantial Damage" – What Does it Mean? | FEMA.gov](#)
- [FEMA Planning Considerations: Disaster Housing](#)
- [Property Owners and the Hazard Mitigation Grant Program | FEMA.gov](#)

## Student Learning Outcomes:

- Consider how rebuilding affordable housing options and improving resilient building design requirements can be prioritized and messaged amid competing priorities to restore homes as fast as possible.
- Learn about the complexities involved with constructing affordable housing and rebuilding more resiliently.
- Examine technical resources available from federal, non-profit, and potentially state or academic sources can advance a local government's efforts to rebuild homes more safely after a catastrophic incident.

## Key Takeaways:

- The town was able to use this opportunity to become better prepared for future incidents by requiring new construction near the St. Vrain watershed to elevate foundations on six feet of concrete with flood fins, and regularly communicating with newer residents the importance of preparing for flash floods.
- Communicating the benefits of rebuilding more resiliently and setting realistic timeframes for each step are critical to gaining public support for strengthening building codes and floodplain ordinances.

## Part One Discussion Activities

### Discussion Questions:

1. What do you think the long-term cascading efforts of losing affordable housing options could be on a community?

*Teaching Note: Answers will vary. Some examples could include elevated real estate prices, culture change within the area if the artistic community is pushed out, potential tourism decline if artistic attractions are gone, economic impact and labor shortages, workers cannot find places to live within their means, traffic increases as people have to commute in from far away, or potential reduction in community cohesion.*

2. Consider this excerpt, “Most of the homes that flooded were not in a flood hazard area and did not have flood insurance”. What are some tactics emergency managers or community leaders could take to increase uptake of flood insurance in a community?

*Teaching Note: Officials can ensure that their community participates in the National Flood Insurance Program, and could collaborate with real estate professionals, local insurance providers, and others to communicate the importance of retaining flood insurance regardless of flood risk. Consider that the [average FEMA assistance](#) provided to survivors without flood insurance was around \$7,000, compared with over \$100,000 for those with flood insurance after Hurricane Harvey.*

## Part Two Discussion Activities

### Discussion Questions:

1. Why do you think the town put a six-month moratorium on issuing any building permits after the flood? What do you think were the benefits and drawbacks of this decision?

*Teaching Note: The moratorium helped the community plan out and communicate where and how it would be safest to rebuild to help ensure the event’s damage was not repeated in the future. The drawback was the delay of allowing displaced residents with damaged homes to return to the community and begin recovery of their homes and businesses.*

## Follow up with the FEMA Guidance Development Office

The Guidance Development Office (GDO) develops and distributes FEMA’s Interagency Recovery Coordination (IRC) case studies. Our team would appreciate your feedback on these case studies and accompanying teaching notes. Please let us know how you have used this case study for a learning experience and your thoughts on what went well or could have been improved. To get in contact with our team, email [FEMA-RECOVERY-ICD-GDO@fema.dhs.gov](mailto:FEMA-RECOVERY-ICD-GDO@fema.dhs.gov).