

REBUILDING BETTER

Workshop Series

Workshop #3

Maximizing Rebuilding Incentives

Provide your feedback at
<https://bit.ly/RebuildSurveyAugust>



Tonight's Agenda

Welcome | 6:00 - 6:10 p.m.

Overview of Rebuilding Timeline | 6:10 - 6:20 p.m.

How Rebates, Loans and Grants Fit Into Rebuilding Timeline | 6:20 - 6:35 p.m.

Q&A on Presentations | 6:35 - 6:50 p.m.

Energy Rater Basics | 6:50 – 7:00 p.m.

Energy Rater Panel (Q&A) | 7:00 – 7:15 p.m.

Additional Questions | 7:15 – 7:30 p.m.

Networking | 7:30 – 8:00 p.m.

Overview of Rebuilding

Timeline



Colin Bunker

Project Manager

Kiewit Infrastructure Co.

Home Building Schedule and Process Planner

Thank you to Colin Bunker at Kiewit Infrastructure Co. For producing this valuable tool

Marshall Fire Recovery

Schedule Worksheet

Topics for Consideration:

- 5 Build a Construction Team: Architect, builder, engineer, and energy consultant are the key players but the builder's trade partners will also become important and the builder will need to involve them in planning before construction begins. For a successful build there must be a goal. In the Marshall Fire rebuild the goal will revolve around speed of construction and the incentive program that is chosen. The design and specifications for how to build the house come from these goals and from conversations with the people on this core team. Look at the Rebuildingbetter.org website for questions you can ask builder's and architects when choosing who to work with.
- 6 The Builder that is selected will ultimately drive the time line of construction and duration refinement of tasks for the rest of the scheduling sheet. You will primarily work with the builder to nail down start dates and duration of tasks to populate this projected time line. One questions to ask is do they need a contract to start pre-planning (survey, design, etc..) effort, or is an LOI good for action?
- 8 Geotech resources (soils testing before foundation design and installation can occur) are not readily available for small projects, nor do they regularly guarantee report production timeline. Research if there is an existing report for your property that structural and permitting would accept? the Fire did not affect each property in the same way. Some foundations can be reused and some soils do not need to be retested.
- 9 Question to get answered: Can the plans be finalized off an assumption and only confirmed when the Geotech report is received?
- 11 Questions to get answered: Is a building site specific drainage plan needed for a rebuild, can the existing plan on record be recycled from previous build effort? How does the community drainage plan affect the specific building site and will anything need to be amended to comply with community needs.
- 12 Questions to get answered: Can the existing building site survey on record be recycled from previous build effort? This could save time?
- 13 Homebuilder reliant on neighborhood plan to define connection points. Good communication will be needed if new house has shifted its location on the buildable lot. The builder will need to know if the wet utility will be replacing or updating underground infrastructure due to the fire.
- 14 Homebuilder reliant on neighborhood plan to define connection points. Good communication will be needed if new house has shifted its location on the buildable lot. The builder will need to know if the dry utility will be replacing or updating infrastructure due to the fire. In some areas, for example, electrical infrastructure may be going underground.
- 17 Plan review, although expedited still takes time. You will wan to see if you can submit and get plan review started as soon as possible. Remember that many others are submitting as well and there will be a Queue. Go to the specific jurisdictions website and download the submittal checklists. If submittal is not complete ask if construction can start with notes like "Accepted as Noted" and a requirement to resubmit specified details?
- 18 Duration will likely be longer for custom homes or the first submission of each typical plan for production homebuilder. Remember the jurisdiction will need to review each plan and there will be a point when they are flooded with submittals. Get your building permit submittal in the QUEUE as soon as possible.
- 19 Duration of Procurement of building materials and Mobilization of trade partners to build the house, can vary widely. Bigger builders will often only start a certain number of houses a month and smaller builders may not have the capacity to start more than a few at one time. You need to determine when construction will start and how you will fit into the builders construction schedule. When will they commit to starting construction. Due to supply chain issues you may need to begin thinking about ordering mechanicals, appliances, and/or building materials now so that the construction schedule is not pushed back. Consult with your builder about the Duration of this task as it is likely going to me multiple tasks lines rather than just one. Construction should be able to start without full procurement of materials for example. That being said construction happens in a sequenced methodical way and scheduling and procurement of building materials needs to be thought our well, especially in our current economy.
- 20 The actual construction cycle on average is around 270 days. Work with your builder to understand how long they project construction to take.
- 21 Note that most insurance companies will stop paying for "Temporary Living" after 24 months, meaning most people will stop receiving this benefit if they do not move in before **January 2024!!** As stated above, you might use your desired move in date as the starting point for creating this HOME BUILDING SCHEDULE AND PROCESS PLANNER. Remember it might not be set in stone but after you and your builder agree that you have a good plan both sides will feel better.

REBUILDING BETTER

How Rebates, Loans and Grants fit Into Rebuilding Timeline



Rob Buchanan

Portfolio Product Manager
Xcel Energy



Robby Schwarz

New Homes Advisor
Boulder County EnergySmart



COLORADO
Department of Local Affairs

Natasha Albert

Resilient Recovery Manager
Colorado Department of
Local Affairs

Chris La May

Regional Manager, North
Central Region
Colorado Department of
Local Affairs

Xcel Homeowner Incentives for Marshall Fire



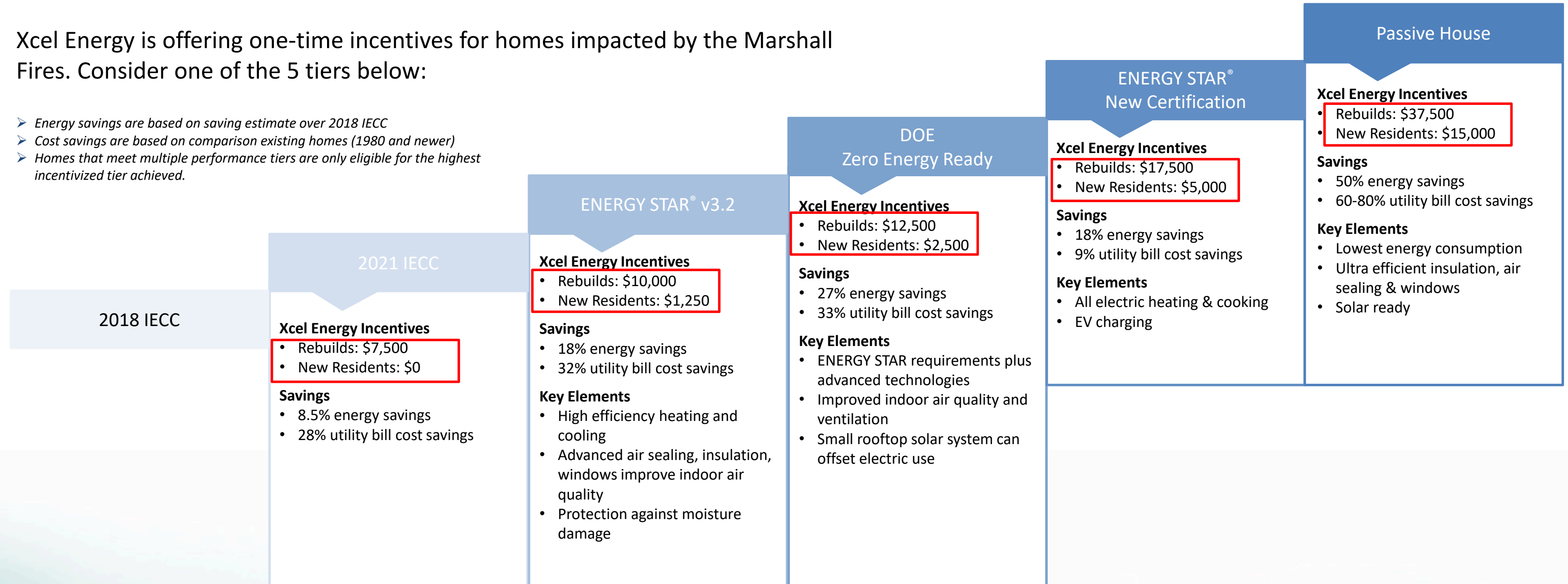
PARTNERS IN ENERGY
An Xcel Energy Community Collaboration



MARSHALL FIRE REBUILDING REBATES

Xcel Energy is offering one-time incentives for homes impacted by the Marshall Fires. Consider one of the 5 tiers below:

- Energy savings are based on saving estimate over 2018 IECC
- Cost savings are based on comparison existing homes (1980 and newer)
- Homes that meet multiple performance tiers are only eligible for the highest incentivized tier achieved.



PARTNERS IN ENERGY
An Xcel Energy Community Collaboration



Process

- Determine desired rebate tier and find builder
- Prequalification* – Handled by builder/rater/consultant
- Submission – Handled by builder/rater/consultant/code official

*For ENERGY STAR and ZERH – optional but highly recommended; required for Passive House



Answers to common questions

- Rebates do not stack
- Rebates may not cover the full cost of upgrades
- PHI and Phius standards cannot be met without additional designer & builder training

Useful Links

- ENERGY STAR v3.2 Draft
 - https://www.energystar.gov/partner_resources/residential_new/stakeholder_feedback#SFNH%20National%20Version%203.2%20Documents
- ZERH v2 Draft
 - <https://www.energy.gov/eere/buildings/us-doe-zero-energy-ready-home-national-program-requirements-single-family-homes>
- ENERGY STAR NextGen
 - https://www.energystar.gov/partner_resources/residential_new/stakeholder_feedback#New%20Certification%20Program%20Documents
- Passive House (PHI)
 - <https://passivehouse.com>
- Passive House US (PHIUS)
 - <https://www.phius.org>
- Xcel Energy Marshall Fire Recovery
 - <https://co.my.xcelenergy.com/s/outage-safety/marshall-fire-recovery>



PARTNERS IN ENERGY
An Xcel Energy Community Collaboration

Rebuilding your home after the Marshall Fire can feel overwhelming. There are lots of decisions to be made and it can be hard to know when and how to make them. The infographic below breaks down the homebuilding process, to help you understand the general timeline, roles, and available resources to get you started building the most energy-efficient home possible.

There are two primary "players" in the homebuilding process: the homeowner and the builder. **HOMEOWNER ROLES** and responsibilities are shown in **ORANGE** on the top of the chart. The numbered orange headers correspond with the orange circles on the timeline. **BUILDING TEAM ROLES** and responsibilities are shown in **BLUE** at the bottom. The numbered blue headers correspond with the blue circles on the timeline. As you can see, the homebuilding process is not perfectly linear, and some steps will overlap. Use the infographic below to help you understand what to expect along the way.

HOMEOWNER

1. ORGANIZE RESOURCES

- Join a Neighborhood Group
- Find Resources and Incentives at RebuildingBetter.org
- Contact info@EnergySmartYes.com with Questions

2. ARRANGE TEAM

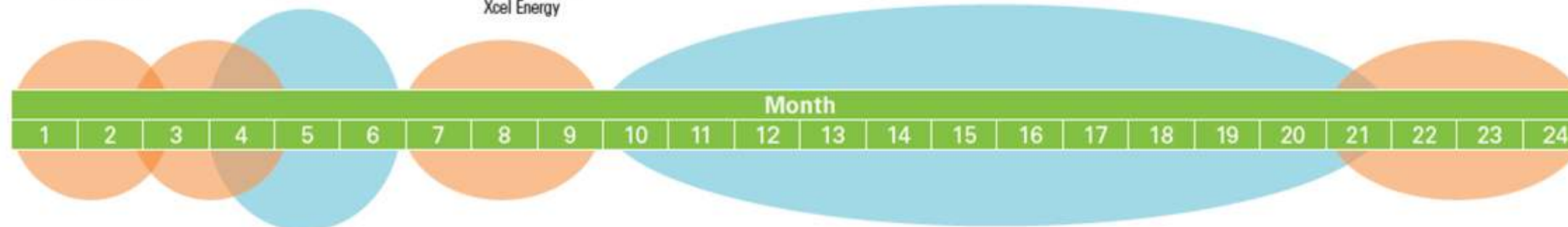
- Decide Level of Home Performance/Incentives
- Select Building Team and Begin House Design
- Letter of Intent Signed with Builder
- Contract Signed with Builder

3. FINALIZE PLANS

- Finalize Plans for Submittal
- Plan Submitted for Building Permit
- Plan Review and Approval
- Submit Rebate Registration to Xcel Energy

4. ENJOY

- Move-In Date (Certificate of Occupancy)
- Submit final rebate paperwork
- Receive rebate checks



BUILDING TEAM

1. MAKE PLANS

- Geotech Field Work
- Complete Geotech Report
- Develop Design Plans
- Building Site and Community Drainage Plan
- Survey and Document Creation
- Wet Utilities Design
- Dry Utilities Design
- Construction Parking / Staging

2. CONSTRUCTION

- Procurement of Materials and Mobilization Trades
- Construction

**Marshall Fire
Home Building Schedule**



energySMART

Your Efficiency Solutions

City of Louisville / Group14 Cost Estimate

For a 2,820 sq. ft. Home	2018 IECC (as amended in Louisville)	2021 IECC + Louisville Amendments (All-Electric)	Builder # 1 Price Premium Estimate	Builder # 2 Price Premium Estimate
Insulation	R-21 batt in wood framing, R-49 batt in attic, R-38 batt in floor cavity, R-10 for 2 ft below grade	R-38 batt in wood framing, R-60 batt in attic, R-38 batt in cavity, R-10 for 4 ft below grade	\$4,020	\$3,600
HVAC system	90% eff gas furnace with 14 SEER split condensing unit	Heat pump (20 SEER, 13.0 HSPF) with cold operation and electric back-up heating	\$16,650	\$16,500
Ventilation system	Natural	Mechanical, with ERV	\$4,680	\$2,500
DHW system	80% eff water heater	3.48 UEF Heat pump water heater (75gal)**	\$3,150	\$2,500
Blower Door Test	3 ACH @ 0.2 IWG	2 ACH @ 0.2 IWG	\$600	\$3,500
Lighting	90% high efficacy lamps	All high efficacy lamps	\$120	\$50
Appliances	Standard	All electric, Energy Star	\$420	\$500
EV Spaces	None	1 EV Ready space, 1 EV capable space	\$1,920	\$1,000
PV	Solar Ready	15 kW solar garden – first year ONLY, solar ready	\$2,940	\$2,940
Totals			\$34,500	\$33,090

Real Pricing from a Marshall Fire Builder

Total Residential Floor Area	2021 IECC Code All-Electric Post \$27,500 in Rebates	2018 IECC Code Gas Systems Earns No Rebates	Price Premium for the Better Home with Rebates	Price Premium with Rebates	Price Premium w/o Rebates	Price Premium w/o Rebates
2,280	\$628,800	\$638,300	(\$9,500)	-1.5%	\$18,000	2.8%
2,310	\$635,700	\$645,200	(\$9,500)	-1.5%	\$18,000	2.8%
2,715	\$666,900	\$676,400	(\$9,500)	-1.4%	\$18,000	2.7%
2,795	\$668,100	\$677,600	(\$9,500)	-1.4%	\$18,000	2.7%
3,086	\$770,000	\$759,500	\$10,500	1.4%	\$38,000	5.0%
3,110	\$775,100	\$764,600	\$10,500	1.4%	\$38,000	5.0%
3,146	\$771,100	\$760,600	\$10,500	1.4%	\$38,000	5.0%
3,195	\$780,400	\$769,900	\$10,500	1.4%	\$38,000	4.9%
3,295	\$794,300	\$783,800	\$10,500	1.3%	\$38,000	4.8%
3,610	\$845,600	\$835,100	\$10,500	1.3%	\$38,000	4.6%
3,799	\$897,900	\$887,400	\$10,500	1.2%	\$38,000	4.3%
4,049	\$928,600	\$918,100	\$10,500	1.1%	\$38,000	4.1%

The Louisville / Group14 study estimated a \$34,000 premium for a home in between these sizes

Builder Pricing Strategies are Variable

- Pricing is made up of a variety of factors
- Not as simple as materials + labor costs
- Factors that influence builder pricing
 - Experience building high-performance / electric homes
 - Interest in / willingness to build high-performance / electric homes
 - Perceptions of risks and market demand
 - Supply chain concerns
 - And more...
- Home performance is one of many factors to think about when choosing a builder



Disaster Resilience Rebuilding Program

August 3, 2022



COLORADO
Department of Local Affairs

DISASTER RESILIENCY REBUILDING PROGRAM (DRR)

- Colorado Senate Bill 22-206 - Disaster Preparedness and Recovery Resources
- Statewide loan and grant program to assist homeowners rebuild (or replace) their homes
- Rebuilding of disaster damaged/destroyed homes
 - Build to local standards
 - Includes replacement of significantly wind-damaged mobile homes
 - Includes costs associated with reducing risk to natural hazards



DRR GUIDELINES

- Funds available to fill the gap left of total rebuilding costs after using:
 - Insurance proceeds
 - FEMA and/or SBA* assistance (if a federally declared disaster and household received assistance)
 - Other grants or loans received specifically for rebuilding purposes
- Eligible applicants for the first phase of funding include persons who:
 - Are the current subject property owner and the owner of record on the disaster date
- Eligible homes located in the area of an eligible state-declared disaster (since 2018) on the date of that disaster

*SBA = Small Business Administration



DRR - WHAT YOU SHOULD KNOW

- Up to \$50,000 of assistance (per grant and/or per loan)
 - Not to exceed the gap left in the rebuilding cost after other sources.
- These funds are only available for homes that were used as a primary residence at the time of the disaster. (No second or vacation homes)
- Currently rental and multi-family properties are not eligible for assistance through this program
- Eligible property types include: single family, residences, duplexes, townhomes, and manufactured housing permanently affixed to permanent foundation and taxed as real property that sustained major or severe damage
- Eligible costs include, but are not limited to: Hard construction costs (e.g., materials and labor), use taxes and permit/inspection fees, fees for professional services (e.g., architect)



DRR GRANT AND LOAN ELIGIBILITY

- Eligible applicants for the **GRANT**:
 - Household income at/below 80% of the Area Median Income (AMI)

Boulder County Median Family Income = \$125,400								
Household Size	1	2	3	4	5	6	7	8
80% AMI	\$ 63,000	\$ 72,000	\$ 81,000	\$ 89,950	\$ 97,150	\$ 104,350	\$ 111,550	\$ 118,750
100% AMI	\$ 90,000	\$ 100,350	\$ 112,900	\$ 125,400	\$ 135,450	\$ 145,500	\$ 155,500	\$ 165,550
120% AMI	\$ 105,350	\$ 120,400	\$ 135,450	\$ 150,500	\$ 162,500	\$ 174,550	\$ 186,600	\$ 198,650
150% AMI	\$ 131,700	\$ 150,500	\$ 169,300	\$ 188,100	\$ 203,150	\$ 218,200	\$ 233,250	\$ 248,300

- Eligible applicants for the **LOAN**:
 - Households of any income level, including those eligible for grants
 - Per-applicant eligibility for the loan will be subject to standard loan underwriting procedures (capacity and debt)



DRR GRANT AND LOAN AMOUNTS

Area Median Income	Maximum Grant Amount	Maximum Loan Amount
< 80% AMI	Up to \$50,000	Up to \$50,000
81-100% AMI	Up to \$37,500	Up to \$50,000
101-120% AMI	Up to \$25,000	Up to \$50,000
121-150%	Up to \$12,000	Up to \$50,000
> 150% AMI	NA	Up to \$50,000

¹Area Median Income (AMI) varies by County. A limitation on available liquid assets also applies.



SAMPLE CALCULATIONS

Estimated Rebuild Cost	\$750,000
Insurance	(600,000)
Insurance Deductible	(5,000)
FEMA HA	(15,000)
Community Foundation	(30,000)
Other Sources	<u>(10,000)</u>
	\$660,000
Grant/Loan Determination	\$90,000

Estimated Rebuild Cost	\$750,000
Insurance	(500,000)
SBA Loan	(215,000)
Insurance Deductible	(5,000)
Community Foundation	<u>(30,000)</u>
	750,000
Grant/Loan Determination	\$0



DRR PROGRAM NEXT STEPS

- Policies and application being developed
- Anticipate the online application portal to be available late August to September
- Anticipate funds to be available by late September to October

More information:

cdola.colorado.gov/funding-programs/disaster-resilience-rebuilding-program



COLORADO
Department of Local Affairs



Q&A

**How Rebates, Loans and Grants Fit Into
Rebuilding Timeline**

Energy Rater Basics

Presented by Robby Schwarz

New Homes Advisor, EnergySmart



Thinking **ZERO** to 360°

BUILD Tank_{inc}

Energy Rater Panel



Andrew Michler

Certified Passive House Designer

Co-founder Passive House Rocky Mountains

Principal Hyperlocal Workshop



Rusty Buick

Director of Business Development

EnergyLogic



Colleen Fitz-Gerald

Energy Services Specialist

Green Your Home LLC



Contact EnergySmart

RebuildingBetter.org

info@EnergySmartYes.com

303-544-1000

Thank you! Questions?

**Mark your calendars for Workshop #4 –
Special screening of
Colorado Voices
Building Back Better After the Marshall Fire!**

Wednesday, September 7, 6:00 – 7:30 p.m.
Louisville Recreation Center
900 Via Appia Way

Let us know your thoughts!
Take the survey below

<https://bit.ly/RebuildSurveyAugust>

