Town of Paradise Wildfire Mitigation Projects

The U.S. Department of Homeland Security's Federal Emergency Management Agency (FEMA) is proposing to fund four wildfire mitigation projects in the Town of Paradise. FEMA is inviting public input on issues that should be examined in the environmental analysis of these projects.

The Town of Paradise, in Butte County, California, is proposing wildfire mitigation activities to enhance fire safety and mitigate the threat of wildfire. The purpose of the proposed HMGP grants is to protect people and property by reducing wildfire-related hazards within Paradise. Per Paradise, the Projects would implement wildfire mitigation measures throughout the town, through a combination of enhanced enforcement, education, and incentives to help property owners reduce hazards on their own lands and reduce hazardous fuels on town rights-of-way.

Most of Paradise is in a "very high fire hazard" zone as mapped in the Butte County Local Hazard Mitigation Plan (2019) (**Figure 1**). The four projects (collectively referred to as "the Projects") include the following: (1) refining building codes and standards, improving awareness about defensible space requirements, and code enforcement; (2) providing incentives for homeowners to apply ignition-resistant materials to existing houses and create defensible space; (3) reducing hazardous fuels along road rights-of-way; and (4) removing standing burnt trees on private property left from the 2018 Camp Fire.

Paradise has applied to FEMA through the California Office of Emergency Services (Cal OES) for four grants under FEMA's Hazard Mitigation Grant Program (HMGP) Post-Fire Assistance. Cal OES is the direct applicant for the grant, and Paradise is the Subapplicant. Section 20602 of the Bipartisan Budget Act of 2018 authorized the HMGP Post-Fire Assistance. The HMGP is authorized by Section 404 of the Robert T. Stafford Disaster Relief and Emergency Assistance Act. The funding would assist Paradise in implementing the Projects, which would reduce the risk of wildfire spread.

Why is an Environmental Assessment Required?

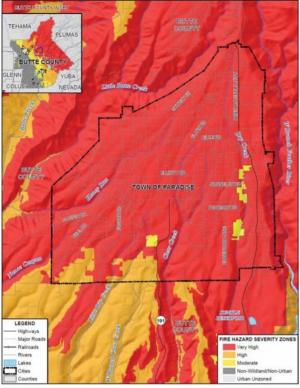
The National Environmental Policy Act (NEPA) requires federal agencies to review impacts on the natural and human environment prior to undertaking a federal action and to inform decision-making. Because the four grants would occur during the same time and would address wildfire hazards in complementary ways, there is the potential for effects on the natural and human environment. One Environmental Assessment (EA) would be prepared to cover all four projects per DHS Instruction 023-01 and FEMA Instruction 108-01-1, which implement NEPA.





What is an Environmental Assessment?

An EA is completed to determine environmental impacts of the Projects' alternatives and to determine if the Projects require further in-depth analysis. The EA describes the existing environment, analyzes the environmental effects of the Projects and alternative actions, and identifies mitigation measures to avoid significant impacts on the human or natural environment. The EA may conclude that the Projects do not significantly impact the environment or that it may require more detailed analysis that would be described in an Environmental Impact Statement.



Source: Butte County Local Hazard Mitigation Plan, 2019

Figure 1. Town of Paradise Fire Hazard Severity Zones



Figure 2. Standing Burnt Tree Threatening Existing Home

What Key Issues are Associated with these Projects?

Paradise has experienced fires in the past that have both required mandatory evacuations and damaged property. In 2018, the Camp Fire, the deadliest and most destructive wildfire in California history, ravaged through Paradise and the surrounding area, resulting in at least 85 fatalities and destroying 18,804 structures, over an area of 153,336 acres. Paradise also experienced significant wildfires in 2016 and 2017 (Saddle Fire and Honey Fire, respectively) and has been threatened again in 2020 and 2021 with the North Complex and Dixie Fires, respectively.

- Fuel on roofs and in eaves of homes was a significant contributor to the destructive nature of the 2018 Camp
 Fire.
- Thousands of burnt trees were left in the wake of the Camp Fire that Paradise notes are now hazardous (Figure 2).
- Paradise has a risk of wildfire spread because of hazardous fuel loads along the town's rights-of-way. A wildfire could overtake the town's roads, making evacuation difficult or impossible for residents.

Alternatives Considered

Under NEPA, FEMA must evaluate a range of reasonable alternatives that address the purpose and need for the Projects. The no action alternative is included as a comparison with the other action alternative options.

Proposed Action

Paradise proposes four projects with each project proposed to be funded under a separate FEMA grant. The four projects include the following: (1) enhancing code enforcement activities to manage hazardous fuels and defensible space, (2) introducing a residential ignition-resistant improvement and defensible space program, (3) hazardous fuel reduction along town rights-of way, and (4) removing hazardous dead or dying trees on private properties.

1. Code enforcement activities. The National Wildfire Coordinating Group, which provides national leadership to enable interoperable wildland fire operations among federal, state, local, tribal and territorial partners, provides in its Wildland Urban Interface Wildfire Mitigation Desk Reference Guide a range of actions communities can undertake to become more fire adapted. These actions include adopting or updating codes, covenants, and ordinances to foster development in the Wildland-Urban Interface (WUI) that minimizes fire risk through mitigation measures such as managing vegetation, increasing ignition resistance of structures, and ensuring safe evacuation routes. For this project, Paradise proposes to enhance existing code enforcement activities and review inspection protocols and criteria to minimize community wildfire risk through increased compliance. In addition, Paradise will assess defensible space around standing structures (private, public, and commercial properties) based on the updated inspection protocols and criteria to develop an action plan to clear and mitigate vegetative growth. The project will require two code inspectors, who will conduct inspections, check whether properties are meeting defensible space requirements, investigate vegetative growth complaints, and ensure code compliance. The code enforcement program will also include contacting property owners to expand the reduced fuel zone around roads to meet defensible space code requirements and ensure safe wildfire evacuation routes. Lastly, Paradise will develop a public education and outreach plan to be presented at community meetings, Town Council meetings, and other community events about wildfire mitigation. The enhanced code compliance activities will last approximately 33 months and cover over 11,500 parcels. Overall, given the apparent efficacy of this measure, FEMA determined to move forward with an environmental assessment.

- 2. Residential ignition-resistant improvement program. According to the National Fire Protection Association's (NFPA) Wildfire Research Fact Sheet on Roofing Materials (developed in partnership with the Insurance Institute for Business and Home Safety), residences ignite in one of three ways: embers/firebrands, radiant heat exposure or direct flame contact. An example of an ember ignition is when wind-blown embers accumulate on combustible materials such as a wood shake roof or wood deck. Ignition-resistant construction can mitigate against wildfire risk from embers through replacing these combustible materials with ignition-resistant materials. In addition, the NFPA's Fact Sheet "How to prepare your home for wildfire" recommends preforming defensible space treatments up to 100 feet from the building or to the property line to mitigate wildfire and home ignition risk. For this project, Paradise proposes to implement a Residential Ignition-Resistant Improvement Program that provides incentives to residents to improve their existing homes with ignition-resistant elements such as replacement roofs, siding and window improvements, deck replacement, and other similar improvements that refit components of the home to meet or exceed the updated California Building Code. Homeowners that receive benefits from this program will be required to create defensible space around their properties (creation of defensible space will not be covered by grant funds). This project will be limited to 100 approved residences and will be completed within three years. Homeowners participating in this project will have to pay up to 25 percent of the improvement costs. Overall, given the apparent efficacy of this measure, FEMA determined to move forward with an environmental assessment.
- 3. Hazardous fuel reduction. Wildfire hazard is a growing threat to communities around the United States. According to the NFPA's Wildfire Division, in 2018 more than 58,000 fires burned nearly nine million acres across the U.S., with California accounting for the highest number of structures lost that year. According to the U.S. Forest Service's Assessment of Spooner Hazardous Fuels Reduction and Healthy Forest Restoration, hazardous fuels reduction "provides heterogeneity that's been identified as a needed change in forest conditions, to improve ecological health, habitat, forest resilience, and otherwise diminish the undesirable impacts of future uncontrolled wildfires by creating "speed bumps'" for future large wildfires". Paradise proposes to reduce hazardous fuels within public rights-of-way along both sides of the 99 miles of public roads within the town limits. Approximately 275 acres will be treated. Hazardous fuel reduction will include chipping and mulching of grasses and bushes, as well as herbicide treatment to prevent weed growth. No trees will be removed as part of the project. Any waste material that cannot be chipped and broadcast in place, will be taken to the Green Waste Yard owned by Paradise. The hazardous fuel reduction actions under this project will take approximately 33 months. Overall, given the apparent efficacy of this measure, FEMA determined to move forward with an environmental assessment.
- 4. Removal of dead or dying trees. According to the U.S. Fire Administration's Creating a Community Wildfire Protection Plan, several of the risk factors that make an area susceptible to an interface fire can be mitigated to reduce the level of risk against fire. Such fuel control measures that mitigate fire risk include controlled burns, clearing of dead wood, cutting tall grass and brush, grazing to thin vegetation in particular areas and similar measures. In addition, the U.S. Forest Service states hazardous fuels reduction "provides heterogeneity that's been identified as a needed change in forest conditions, to improve ecological health, habitat, forest resilience, and otherwise diminish the undesirable impacts of future uncontrolled wildfires by creating "speed bumps" for future large wildfires". For this project, Paradise proposes to remove standing dead or dying trees on private properties within the Town limits to mitigate community wildfire risk. Properties and trees are currently being identified through surveys. Tree

removal activities are expected to last 22 months and will include hand and mechanical methods. Overall, given the apparent efficacy of this measure, FEMA determined to move forward with an environmental assessment.

Avoidance and minimization measures would be incorporated into the Projects to limit the potential for adverse impacts to resources and community members, such as noise and air quality.

No Action Alternative

Under the no action alternative, no FEMA-funded wildfire mitigation measures would be conducted in Paradise. Paradise would continue to participate in the Butte County Fire Safe Council and Butte County Community Wildfire Plan; however, these efforts would likely be implemented in a less coordinated manner than the proposed action. Therefore, the probability of loss of life and property in the event of a wildfire would not be reduced to the extent that it would be under the proposed action.

Opportunities for Public Comment

The public will have two opportunities to provide comments on the Projects. The first occurs during this scoping phase where the public is invited to comment on the scope of the EA, the proposed action, potential alternatives, and key issues to consider in the EA. After publication of the draft EA, there will be a 30-day comment period. The public will be invited to provide input on the information and analyses in the draft EA.

For more information contact:

FEMA Contact:	Town of Paradise Contact:
Michael Audin Environmental Officer (Acting) FEMA Region 9 1111 Broadway, Suite 1200 Oakland, CA 94607-4052 fema-rix-ehp-documents@fema.dhs.gov	Brian Solecki Project Manager Recovery and Economic Development 5555 Skyway Paradise, CA 95969 recovery@townofparadise.com 530-872-6291 x 165