

*Genesee Fire Mitigation
And
Southern Emergency Access Route (SEAR)
Community Update*

**Virtual Meeting
April 20, 2023
6:30 – 8:00 pm**

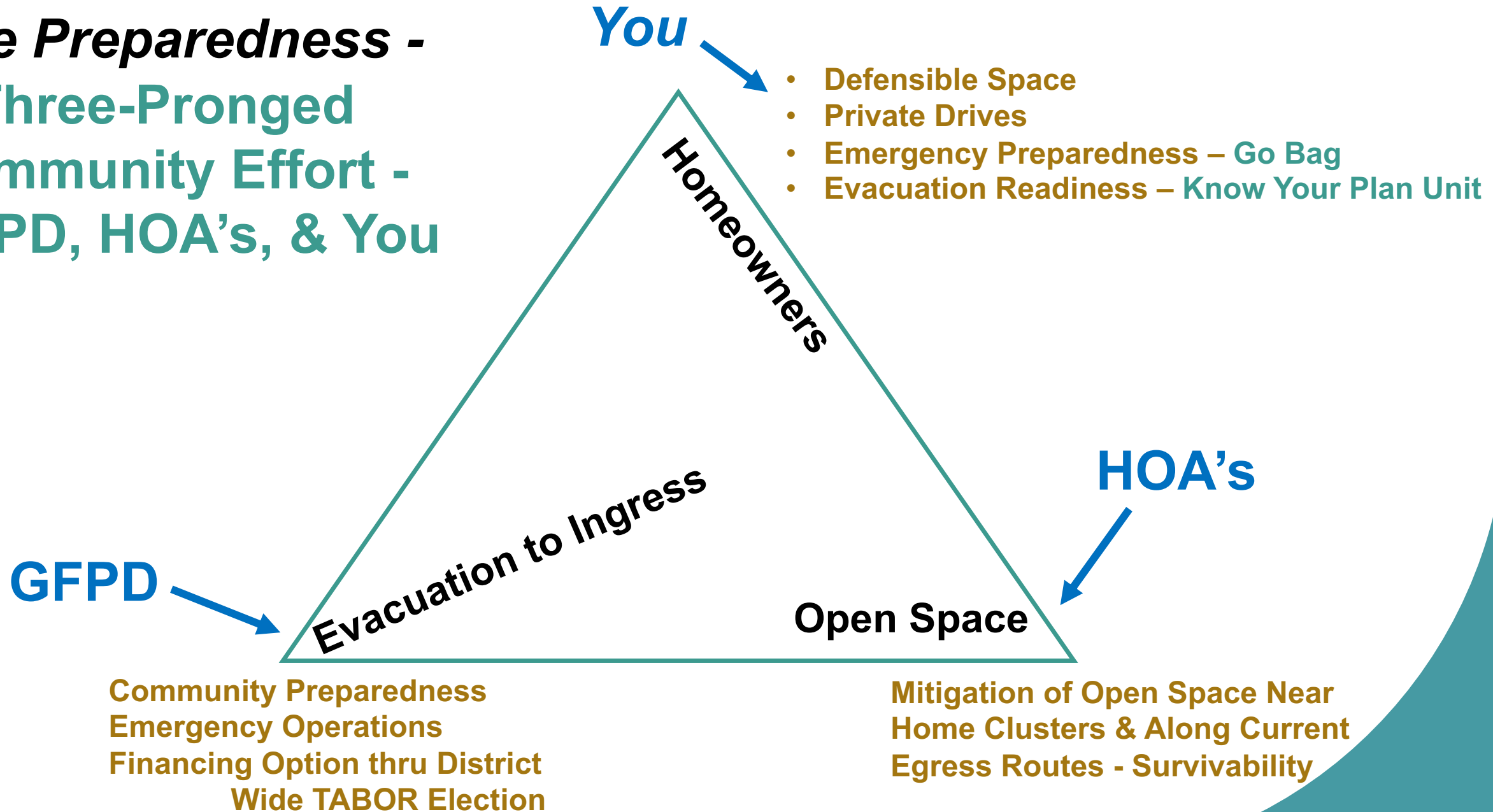
Meeting Objectives

- Provide information on Genesee Fire Mitigation Efforts
- Provide Background on a potential Southern Emergency Access Route (SEAR)
- Provide a status report from the SEAR Working Group
- Answer Your Questions

Meeting Agenda

- Introduction & Meeting Objectives – Rick Sarg (5 mins.)
- Update of GF Open Space Mitigation Efforts – Brian Maillet (15 mins.)
- Background & History of SEAR – Rick Sarg (10 mins.)
- SEAR Project Update – Diane Davies (10 mins)
 - Feasibility Study Results
 - Financing Options
 - Forward Plans
- Questions and Answers – Peter Wajda Moderator
 - Genesee Fire Protection District
 - Jefferson County Sheriff
 - Genesee Foundation SEAR Working Group
 - Genesee Foundation Open Space Manager

Fire Preparedness - A Three-Pronged Community Effort - GFPD, HOA's, & You



Genesee Foundation Open Space

- Priority is mitigating evacuation route
 - Removing trees along the roads that could prevent timely and safe evacuation
- Annually, completing 40 – 50 acres of forest restoration & wildfire mitigation
 - Recommendations are based on best available science and the Colorado State Forest Service
 - Supported by grant funding
 - This is often in residents' "backyard"
- Hope for the best (*Elephant Butte Fire*) but plan for the worst (*Cameron Peak Fire & Marshall Fire*).
- *"If its going to burn, why should I do anything?"*
 - Emergency Response, Evacuation, & Preventing home ignition

Non-survivable Roadways

Non-survivable road: Portions of roads adjacent to areas with predicted **flame lengths greater than 8 feet*** under severe fire weather conditions. *Drivers stopped or trapped on these roadways would have a low chance of surviving radiant heat from fires of this intensity.* Non-survivable conditions are more common along roads that are lined with thick forests, particularly with trees that have limbs all the way to the ground and/or abundant saplings and seedlings.

* Flame lengths are typically 2 – 3 times the height of the fuel source

Road side Thinning

- What are we trying to avoid?



Images from recent California wildfires

Bluestem Roadside Thinning

BEFORE



AFTER



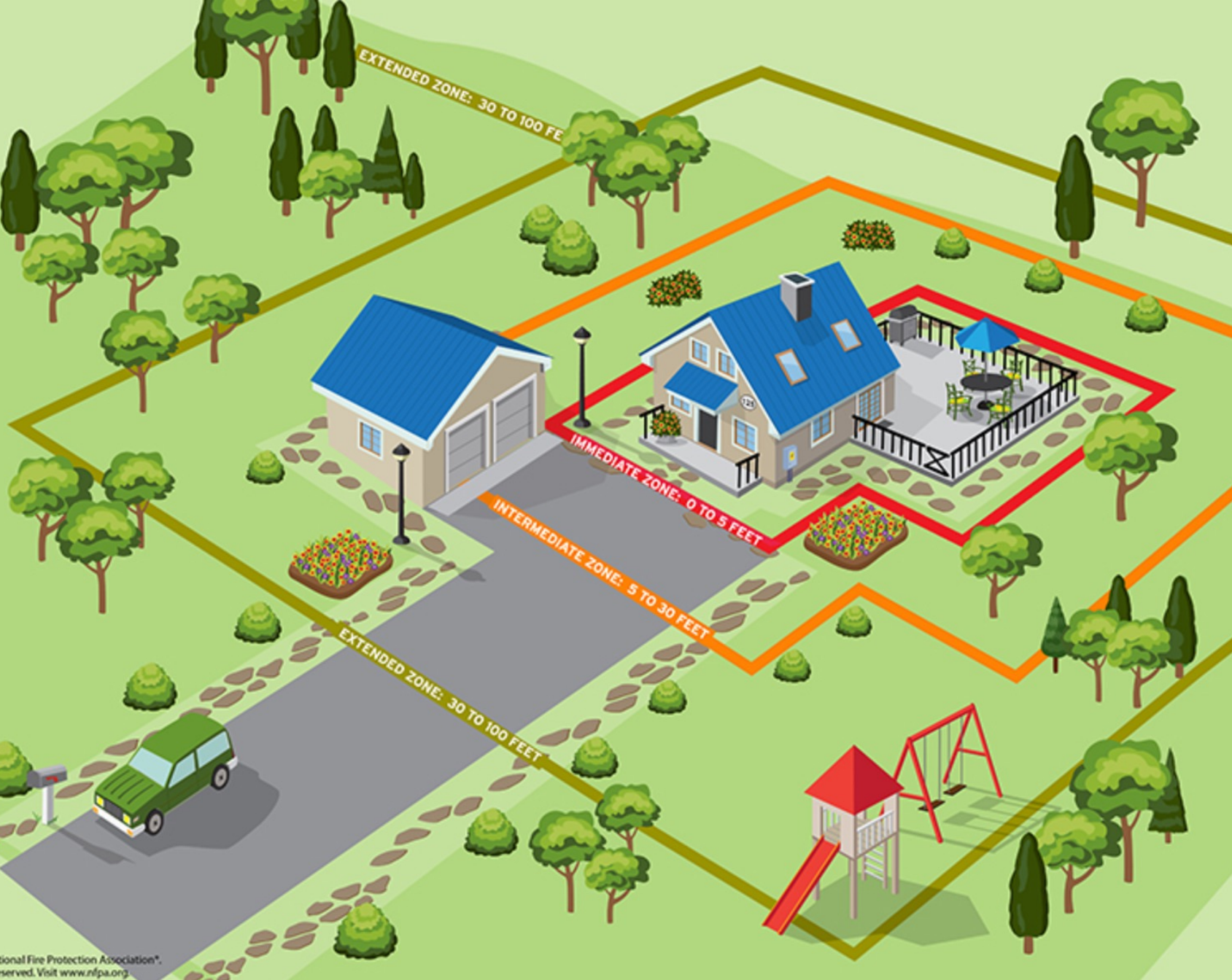
Genesee Trail Rd Roadside Thinning

BEFORE



AFTER





Home Hardening and Defensible Space

- 5-foot perimeter with no vegetation
- Remove pine needles from roof valleys & gutters
- Remove flammable materials from beneath decks
- Fire resistant exterior materials
- Treetops should be separated by 10-15 feet to prevent crown fire reaching your house

CWPP (Community Wildfire Protection Plan)

- **GFPD is at high risk for high-severity wildfires** due to dense forest conditions, dry and hot weather, and strong, gusty winds. **Increasing drought and warming temperatures exacerbate wildfire risk** in GFPD area.
- **Ecological restoration and fuel treatments across GFPD help create fire-resilient forests,** reduce likelihood of high-severity wildfires, and address roadside survivability.
- There are **no areas within GFPD that could serve as a fully safe area** for wildfire evacuation emergencies **due to steep slopes and heavy fuel loads,** and under conditions of greater than 10 mph winds.
- **GFPD has limited egress routes and potential for extreme congestion,** and dangerous conditions along many roadways. Models suggest that under our present egress structure (two routes to I-70), estimated evacuation times are 3.5 to 4 hours for most of Genesee, while impeding access from neighboring Fire and Rescue departments. **If our current evacuation routes are closed, we have no option but to shelter in place with no safe areas, and no way for other fire departments to come to our rescue.**

An emergency access/egress route increases GFPD survivability



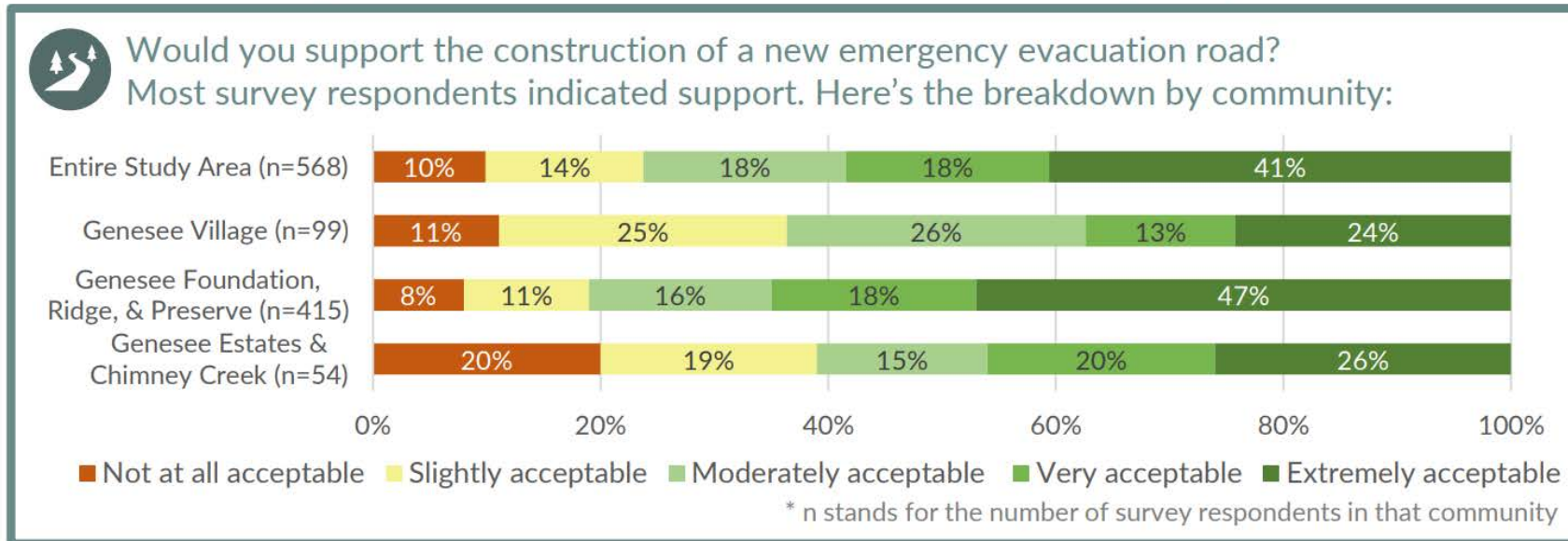
CU WiRe (Wildfire Research) Survey



In 2021, Genesee Fire Protection District sent out a survey on wildfire risk.

- 584 households responded (45%). Here's what you told us in 2021:
- Even though homeowners' evaluations of wildfire risk were much lower than professionals' evaluations (84% of professional firefighters rate GFPD risk as **Very High** or **Extreme**)
- 77% of the entire survey (and 81% of Genesee Foundation homeowners) supported a new emergency route

What we might do in the future: Build an emergency road!



Emergency Access Route

Emergency Access Route (EAR) – A route for the purpose of:

- Emergency response ingress of emergency vehicles into Genesee
- Evacuation of residents
- A tool for fire fighting (e.g., fire break)

April 2022 EAR Analysis

Genesee Fire and Safety Committee, aided by 3 Fire Professionals*, evaluated seven corridors for:

- **Resident Evacuation Route Value** (Capacity, avoiding bottlenecks, reduce exposure to loss of key path, avoid direction of prevailing winds, and areas with increased accident potential)
- **Fire Protection Value** (Response time, Strategic Fire Protection value, Fire Breaks)
- **Probability of Success** (easements required, private property owners to mitigate to keep EAR safe)

Highest Rated: GWSD (Corridor between Bitterroot and Daisy), and Daisy Lane, both to Highway 74

* Paul Admundson – Battalion Chief, Denver Fire with 20 years wildland fire experience, including Evergreen

Jason Puffett – Genesee Fire Protection District Chief

Pete Anderson – Retired Chief, West Metro Fire Rescue

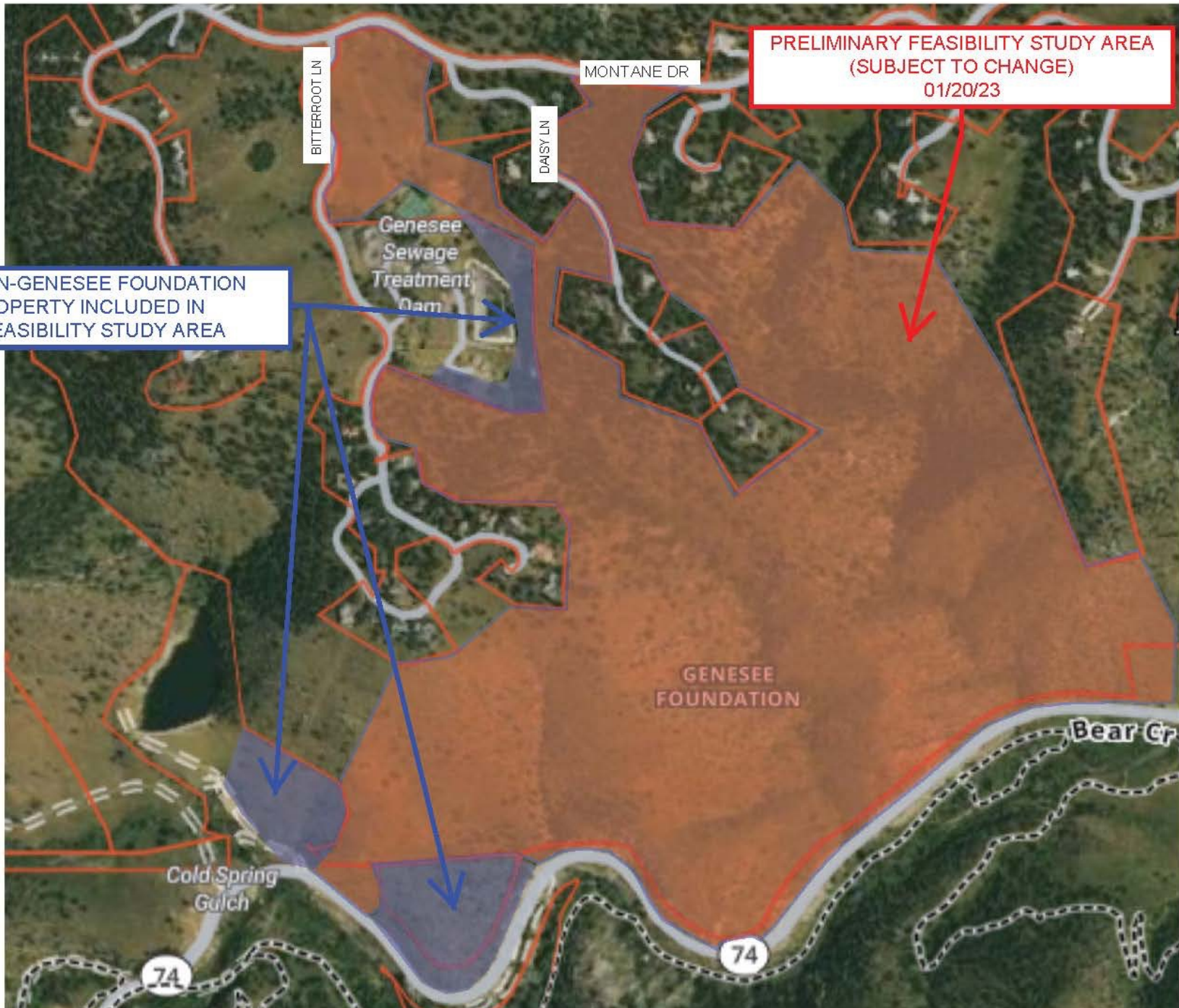
GF SEAR Working Group

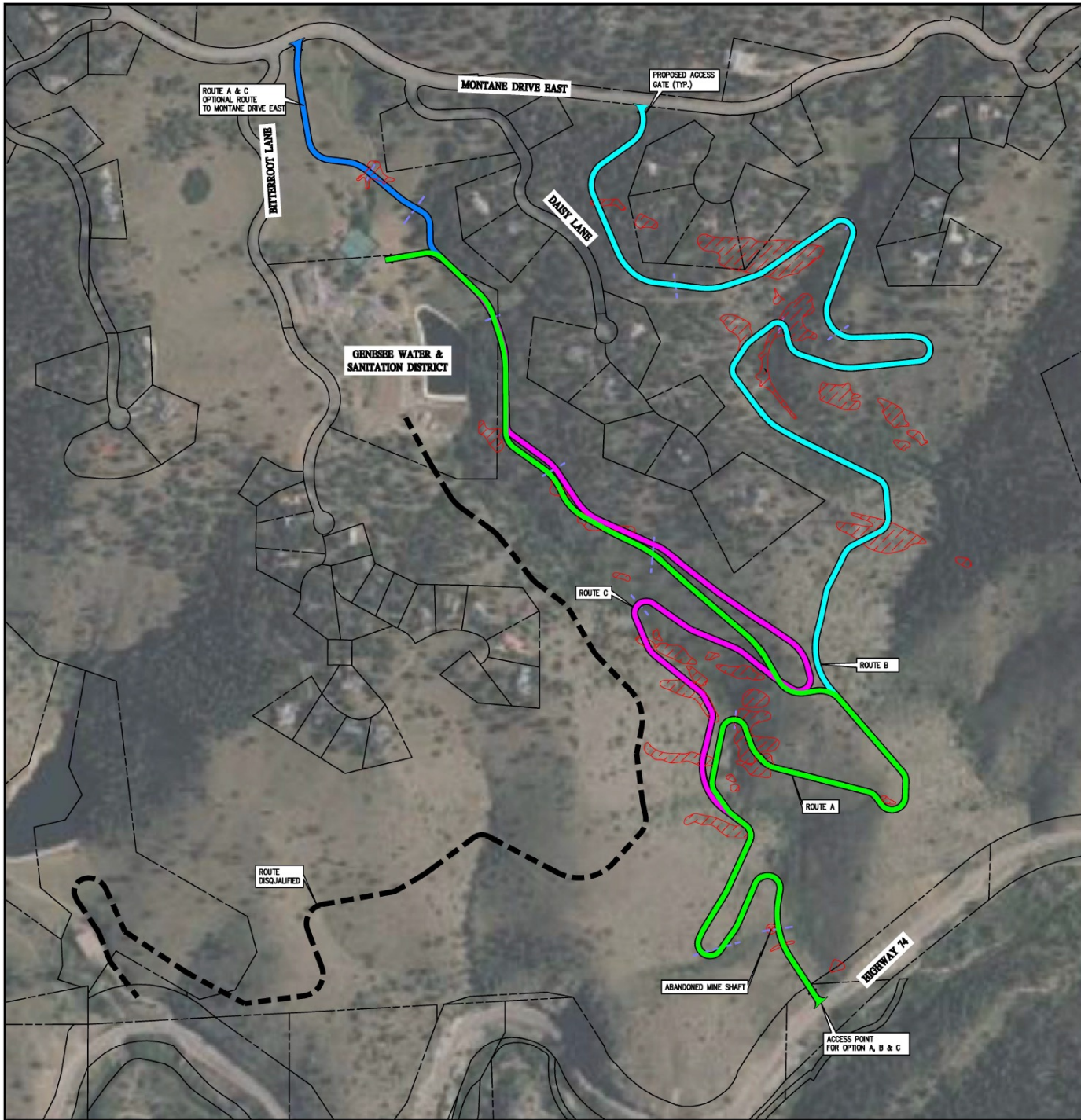
An outcome of the CWPP, F&S Committee, & Wildfire Survey

Goal: Investigate and facilitate the design, construction, and financing of a Southern EAR, designed to be safely navigated by passenger vehicles, law enforcement vehicles, and fire apparatus during a fire emergency.

Southern EAR Project Update

- Engineering Feasibility Study Complete
 - Three routes identified that meet Genesee Fire's specifications
 - Preferred route identified (Tennis courts at GWSD to Highway 74)
 - Preliminary costs estimates in \$4M to \$8M range
 - Final cost estimates will depend on exact alignment, more comprehensive Geotechnical investigation, technical specifications, and JeffCo permitting requirements --- and construction timing
- Project funding: currently working with Genesee Fire District and Genesee Foundation Finance Committee to develop plan which may include a combination of public funding, loans, grants, and/or bond financing.





Way Forward

- SEAR Project: Financing Plan, Detailed Design, & Final Cost Estimate, Possible Construction/Execution Plan
- Next Community Meeting to Provide More Information:
 - ❖ Final Route Selection, Delivery Strategy & Cost
 - ❖ Financing Plan Proposal

Community Questions, Comments, & Answers

GENESEE FIRE PROTECTION DISTRICT

JEFFERSON COUNTY SHERIFF

GENESEE FOUNDATION SEAR WORKING GROUP

GENESEE FOUNDATION OPEN SPACE MANAGER