Groundtruthing Helps protect public wildlands for future generations by documenting what a logging plan looks like on the ground.

You have the legal right to access public lands and have meaningful participation in planning and reviewing proposals that have the potential to negatively affect the environment. For any process that includes the federal government, the lead agency must use the National Environmental Policy Act to guide their process and disclose all impacts that a project may have, and similarly, California Environmental Quality Act applies to all state projects. If documented properly, groundtruthing can reveal new information that is not included in planning documents that can be used to halt or change a project.

**Groundtruthing Steps**

- **Obtain maps:** of the proposed project and any other maps you may need to orient yourself with the area including: topographical maps of the area, recreation and road maps, State Historical Preservation Office maps, and google earth birds eye view of the landscape. If the agency’s maps are cryptic and you need additional information to make sense, for example if road names are not included, then request a new map.

- **Request additional information:** If you need more information to clarify an agency’s project, state that you are making a “Freedom of Information Act” request. Keep records of your participation, requests and correspondences. Emails are best because they cannot be lost and provide a time stamp. Always ask the agency to confirm that they have received your request, when they plan to fulfill it, and to keep you updated on new developments of the project.

- **Orient yourself with the area:** locate the project on the map and plan your route.

- **Identify flagging:** record any markers, and request more information from the agency if you do not understand the marking system they have used.

- **Draw what you see:** if you do not have access to mapping software like Global Information System (GIS) or Global Positioning System (GPS) then you can draw your maps by hand and scan them as electronic files. Photocopying and drawing on an existing map can also be helpful. Use symbols and color coding to illustrate information and use a number system that connects to photo locations.

- **Take videos and photos:** videos are very helpful because you can freeze a screenshot of something later that you did not think of when you are in the field. Capture images that document your concerns as well as capturing heartbreaker photos that are useful for outreach. Use people or animals to show perspective.

- **Organize photos:** using an online program such as Flickr, where you can direct people to view them, name, tag, and note your photos as soon as you return from the field, before you forget details. Use people or objects to give perspective and size relativity.

**Document What You See**

**Take notes on waterways & land features:**

- Types, ages and sizes of trees in overstory and understory.
- Measure Diameter at Breast Height (dbh) 4.5 feet from ground.
- Amount, diameter, height, and age of downed trees and snags. Document animal holes.
- Document distinctive vegetation, mushrooms, flowers, grasses, lichens, mosses etc.
- Elevation, slope, steepness, signs of landslides.
- Aspect: direction slope is facing.
- Signs of past logging and regrowth.
- Potential for blowdown – prevalent on clearcut edges and ridge tops.
- Signs of fire/ blackened trees.
- Roads in the area – condition and use. Gated? Closed? Are culverts plugged?
- Identify areas of proposed road construction and affected slope and vegetation.
- Wildlife, habitat, and animal prints present.
- Soil conditions: wet, dry, rocky, etc.
- Other resources: trails, campgrounds, historical sites, etc.
- Identify riparian areas on the map in advance noting anywhere there is water - streams, lakes, and wet areas.
- Look for fish or suitable fish habitat within, near or downslope from project.
- Condition of streams: flow, clarity, sedimentation, woody debris, pools & are they seasonal or year-around?

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Groundtruthing Survey Form

Date: ____________________ Surveyed by: __________________________ Forest & District: _____________________________________

Timber sale name and unit:_________________________________________________________________________________________
Surrounding area:_________________________________________________________________________________________________

Check all that apply:
- contiguous forest [F]
- never logged area [V]
- previous thin [T]
- clear cut [C]
- tree plantation [P]
- Regrowth rate: __________
- riparian areas [Ri]
- roads [Rd]
- other (specify): [O] ______________________

MapUnit (above): Include magnitude/aspect of slope \[\] ; streams  \[\] ; and roads . Mark items mentioned below: campsites, wildlife sightings or habitat, plants, trails etc. Identify blow-down risk areas \[\] , and geologic areas of interest.

Describe the quality of available surrounding forest habitat and species evident: _____________________________________________

Geography/Geology:
Elevation: ___________________________________________ Dominant Aspect: ________________________________________
Steepest slope: __________________ Frequency: __________________ Dominant Slope: ________________________________________
Soil conditions [all that apply] (dry, wet, rocky ...):
Micro-climate [all that apply] (dry, moist, wet, cool ...):
Signs of landslides:
Rock outcroppings or other unique characteristics:

Trees:
- old-growth (180+ years) Percent of unit: __________________________
- mature forest (80-180 years) Percent of unit: __________________________
- never logged Percent of unit: __________________________
- previously logged – approx. age range of trees: Percent of unit: __________________________
Describe evidence of former logging (skid trails, stumps, lack of regeneration in area):
Measurement/frequency/species of large-diameter trees:
Species and average d.b.h. (include overstory and understory): ______________________________________________________________________ Average % Canopy Coverage: __________
Amount/size/age of downed trees: __________________________ Amount/size/age of snags: __________________________
Signs of fire on trees: __________________________ Blowdown and blowdown potential: __________________________
Other:

Riparian Areas: (springs, seeps, seasonal runoff, creeks) describe and mark on unit map:
Fish-bearing streams (quantity): __________________________ Buffers (Yes/No/both): __________________________ Width(s): __________________________
Non fish-bearing streams: __________________________ Buffers (Yes/No/both): __________________________ Width(s): __________________________
Intermittent streams or seeps: __________________________ Buffers (Yes/No/both): __________________________ Width(s): __________________________

Roads: Number of roads accessing the unit and approximate density:
Open roads (describe condition/ surface type/ apparent use):
Closed roads with signs of motorized use (condition & road number or approximate location):

Wildlife: Species using area for habitat (scat, tracks, sightings, calls, burrows):

Other Vegetation:
Unusual/sensitive plants – describe, photograph and mark location on map:

Recreation: Trails (trail number, location, apparent use):
Campsites:
Timber Sale Markings:
Is the sale marked? Yes ____ No ____ If yes, is it marked as leave tree ____ or take tree ____?
Marked name and unit:
Other markings (survey transects, etc.): __________________________________________________________________________