

Special FEMA Region 1 Environmental and Historic Preservation (EHP) Considerations for the Treatment of Root Balls

It is not unusual for trees to become upended during powerful storm events, tipping over and exposing the mass of roots at the base of a tree, otherwise known as a root ball. The following guidance is offered to help our applicants have a smoother and more efficient EHP compliance review process whenever root balls are encountered.

Why are root balls of potential concern to EHP?

- The measures taken to deal with upended trees and root ball removal are considered “ground disturbing activity.”
- Any type of ground disturbing activity has the potential to affect archaeological resources. Therefore, EHP staff must review this work, and sometimes that requires EHP to complete consultation with other partners, including the State Historic Preservation Office (SHPO).



Whenever possible, tip the root ball back into its hole.

- The preferred treatment for upended trees with exposed root balls is to cut the tree at the base of the trunk and tip the root ball back into place.
- This method is preferred because it presents the least potential for EHP concerns and therefore the fastest review. Tipping the root ball back into the ground very infrequently requires EHP to undertake any special review scrutiny or consultation with SHPO.

If a root ball must be entirely removed:

- Some cases of root ball removal are exempt from additional review by the SHPO, including many trees located within 10 feet of the roadway or sidewalk; however, FEMA EHP requires documentation of each tree location – as described below – to help determine if the exemption applies.
- It is always best to wait to do any ground disturbing work until after FEMA has the opportunity to complete its full EHP review process. If at all possible, wait before taking action and seek guidance from FEMA EHP staff. Seeking EHP assistance before removing a root ball can help ensure the project’s compliance with EHP laws and regulations and prevent potential frustrations and delays down the road.
- However, in those instances where root balls may represent risks to life, health, and safety and must be removed quickly, be sure to **fully document the damage area by recording** the tree(s) latitude and longitude location(s), and take clear digital photographs of the tree(s) from all angles prior to removing the root ball(s). Be sure to submit the location information and photos to FEMA with your application materials.

Upended trees in cemeteries can present especially sensitive issues.

- Whenever possible, wait before taking action of any kind when considering upended trees in cemeteries. These special circumstances frequently present EHP concerns. Again, seeking assistance from EHP early in the process can help ensure the project’s compliance with EHP laws and regulations and help prevent potential frustrations and delays down the road.
- Always **thoroughly document the damage area** by recording the tree(s) latitude and longitude location(s) and take clear digital photographs from all angles prior to initiating any work.
- If waiting is not possible, refrain from operating heavy machinery (excavators, backhoes, etc.) within or near cemeteries; heavy equipment can compress or crush graves and unintentionally damage markers and monuments. Instead, use hand tools to reduce and clear debris.

**QUESTIONS? Contact Mary Shanks, Deputy Regional Environmental Officer, FEMA Region 1, at:
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