

WILDFIRE SUPPRESSION TECHNIQUES



CITIZEN ENGAGEMENT



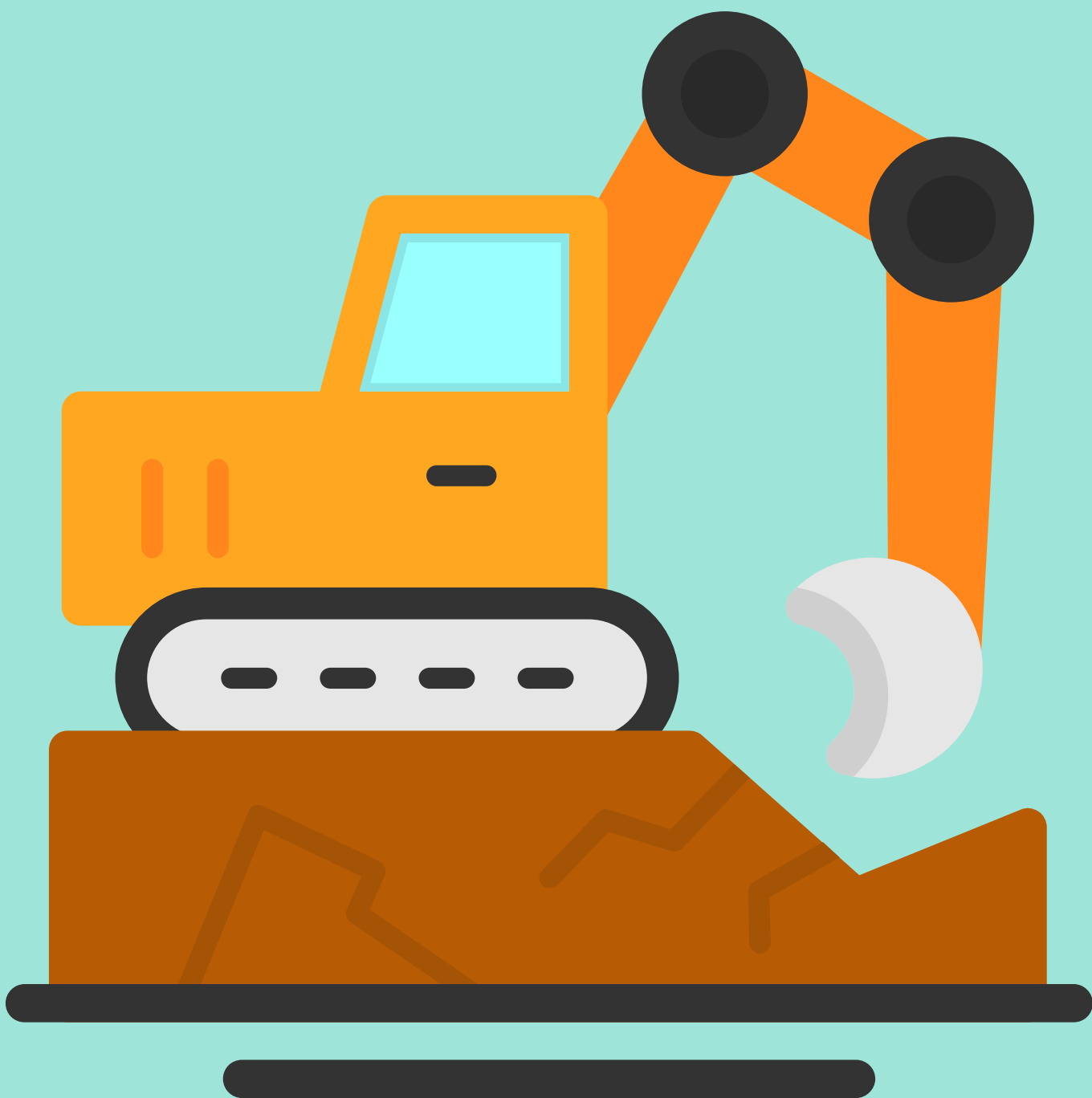
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DIRECT ATTACK

Fireline Construction

Creating a firebreak by removing vegetation and digging trenches to stop the spread of the fire.



Hand Crews

Deploying teams of firefighters to use hand tools, such as shovels and chainsaws, to cut firelines and clear vegetation.



INDIRECT ATTACK

Backfiring

Intentionally setting controlled fires ahead of an advancing wildfire to consume fuel and create a barrier.



Firebreaks

Larger pre-established or created firebreaks—clear zones with no vegetation—are used to contain the fire. Roads, rivers, or other natural barriers can also serve as firebreaks.



Aerial Firefighting

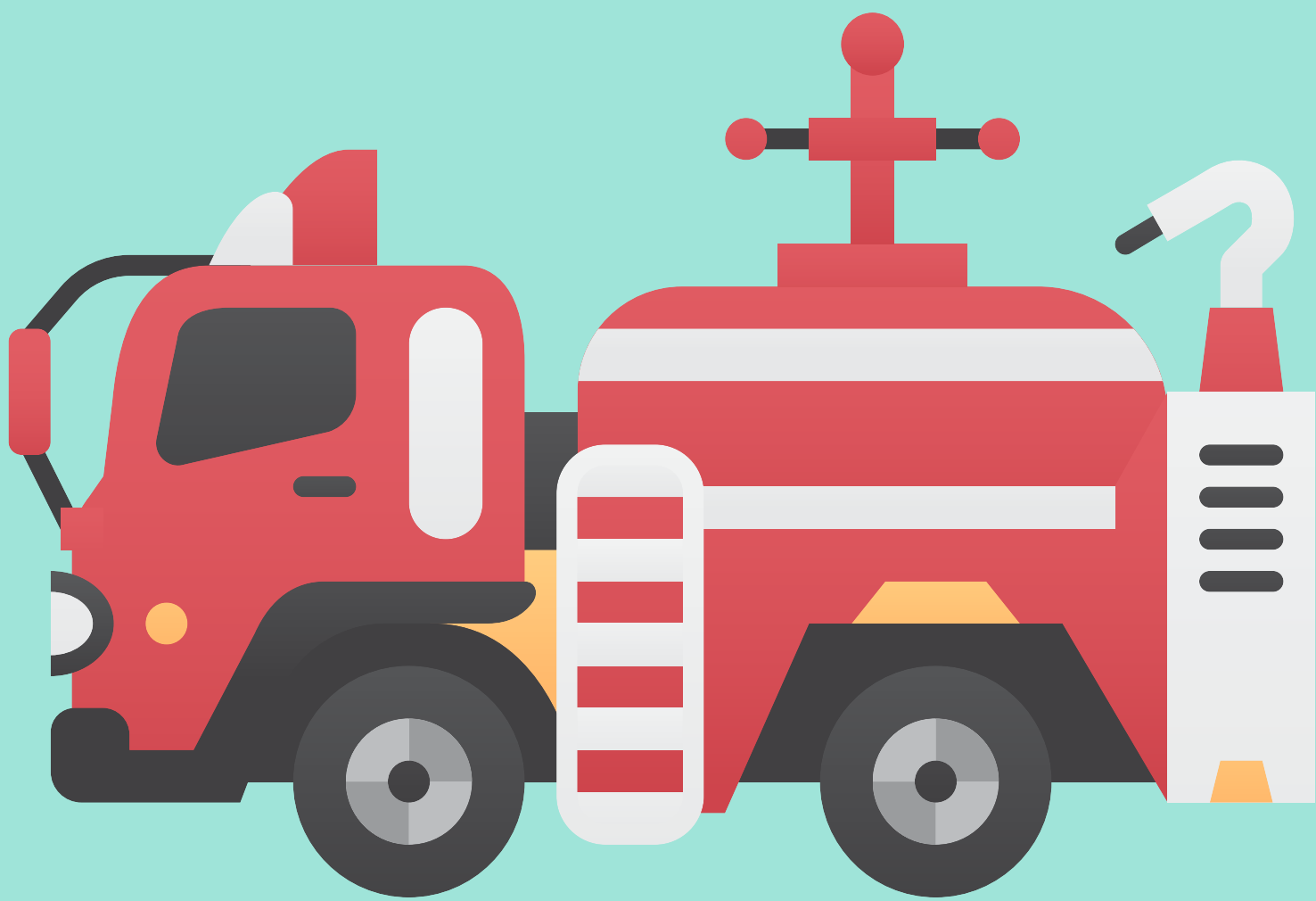
Using helicopters and air tankers to drop water or fire retardant on active fires to slow their progression and reduce intensity.



ENGINE-BASED SUPPRESSION

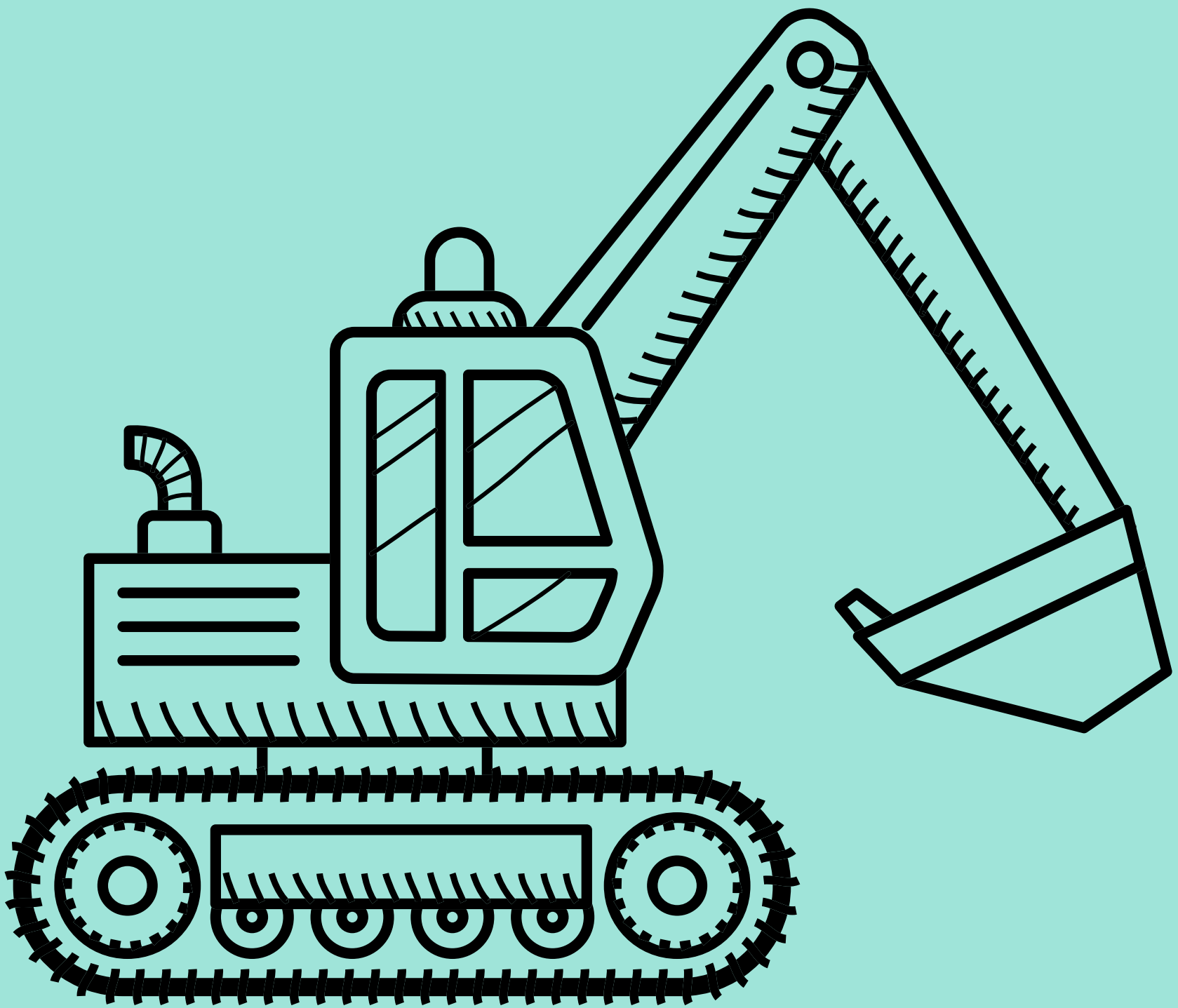
Fire Engines

Utilizing fire engines equipped with hoses and pumps to deliver water directly to the edge of the fire.



Dozer Lines

Bulldozers are used to clear wide paths around the fire to stop it from spreading. These containment lines are often built in conjunction with backburns to reinforce them.



Water Tenders and wetlines

Deploying water tenders to transport large quantities of water to the fire scene, supporting ground crews and engines.

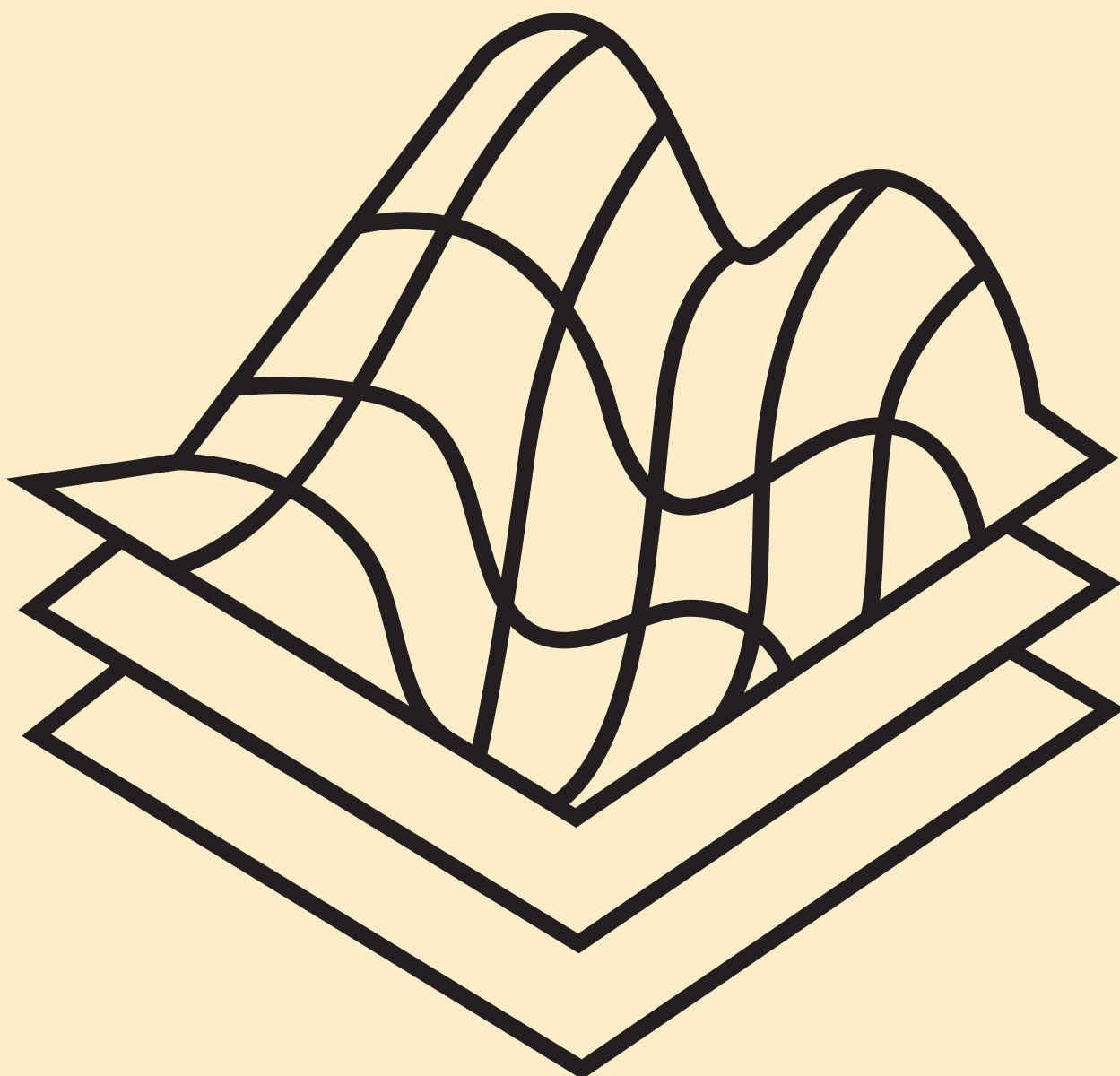
Firefighters may use hoses or water tanks to create wetlines around the fire, soaking vegetation so that it won't catch fire easily.



Challenges of Wildfire Suppression

Wind and Weather: Unpredictable winds and dry conditions can cause a fire to spread rapidly, complicating suppression efforts.

Terrain: Steep or rugged terrain can limit the ability of ground crews and machinery to create firelines or access hotspots.



Fire Intensity: Extremely hot and fast-moving fires may require aerial suppression or indirect methods like backburning and creating containment lines far from the fire's perimeter.

