

Mitigating fire risk

JD Marshall and Gordon Mansfield

Smart strategies for mitigating fire risk

New Forests employs proven market-leading strategies in forestry and land management. This includes cutting edge techniques and tools to prevent fires from starting as well as limiting their impacts.

Fire is an omnipresent risk and growing concern for timber plantations around the world. In recent years, climate change has caused an increase to summer daylight temperatures and a shift in annual rainfall distributions. These changes are raising concerns for investors and landowners.

“We factor fire risk into our investment thesis,” says New Forests’ US Director of Operations JD Marshall. “In a long-term investment like forestry, there are ups-and-downs in any cycle. It’s part of the natural growth cycle of the forest – and the investment.”

“While there is evidence the frequency of forest fires are increasing globally, the impacts we’re seeing in our assets certainly hasn’t increased,” says New Forests’ Australia and New Zealand Manager of Operations, Gordon Mansfield. “Part of our approach to managing fire risk includes how we collaborate with other forest owners and state fire agencies to prevent fires as well as putting them out.”

Using technology to better manage fire risk

New Forests takes advantage of the vast array of data to help support fire prevention and, as needed, firefighting. From a site selection perspective, we use a fire risk application called FlamMap, and other geospatial tools to analyse potential fire behaviour and review factors such as climate and future vegetation dynamics.

Our calculations around fire risk also incorporate proximity to fire stations. We’ve improved our communication with the various agencies that manage firefighting. “These agencies use real-time satellite imagery to find hotspots and issues, giving them an edge to catching fires while they are small and before they grow out of control,” says Marshall.

New Forests continues to refine its coordination of fuel reduction efforts across property lines, working with other owners to manage landscaping issues to help reduce the effects of fires.

Investment in infrastructure

New Forests maintains access roads and fire breaks, but also invests in green firebreaks, water dip tanks, and fast response technologies to quickly respond to, and slow the spread of wildfire events.

A green firebreak is an area of forest, typically along a high fire risk corridor such as a public road, where the forest has been heavily thinned, and maintained in that condition to enable air-dropped fire retardant to reach the forest floor level.

Specialised helicopters are one of the most effective fire-fighting tools in the western United States and Australia, but they must have a water source nearby their “drop-zone” to reduce turn-around times and maximise their efficiency. Fixed or portable water dip tanks are often situated on top of hills, contain 7,000 to 50, 000 litres of water, and are designed to allow a helicopter to quickly refill their water buckets during a forest fire.

Another relatively new technology that is distributed to logging and road contractors along New Forests' US managed estates is a Compressed Air Foam Fire Suppression Unit. These units contain a 30-meter hose and 545 litres of compressed air foam, that can be loaded onto the back of a truck to quickly respond to spot fires.

Working closely with fire fighters

We also work to ensure that our clients' interests are understood among fire fighters when an incident breaks out. Fires in California in 2021, for example, resulted in international crews coming in to help battle the blazes. But with different objectives for different landowners, it can be difficult to clearly communicate what needs to be done. "Federal lands, for example, may be okay with letting the fire burn as a management tool," says Marshall.

"Private lands, however, want to get the fire out as quickly as possible and don't want to risk the possibility of a 'red flag event' before making a move to put it out."

"The key is that these formal agreements with land managers, state agencies and industry partners are a risk mitigation strategy," says Mansfield. "We have formal agreements between the many different funds we operate to improve our collaboration – well above what you would expect from industry partners."

Managing rising insurance costs

Insurance helps to protect our assets, but even minor increases in insurance costs can be a drag on returns. Due to increases in risks and consolidation in the insurance industry, the options available have shrunk.

"The size and scale of New Forest's global investments make us a more attractive prospect to insurers and investors, because a single loss would not be as significant as for a smaller provider, says Marshall.

"Insurance is getting harder to come by as is, in certain US geographies, getting coverage against certain events like fires and hurricanes. We are focusing on using our global scale to manage these issues. Without that scale, insurers may not be willing to take on the risk."

The future for fire prevention

Surveillance improvements will greatly enhance fire mitigation over the next few years. "There's the potential for machine learning to be incorporated, to evaluate what a camera is seeing to help us pick up on fires sooner," says Marshall. "This will help us put fires out before they get out of control."

The steady stream of data and imagery supplements the on-the-ground knowledge of our experienced team of forestry management professionals.

"We are incorporating Task Force on Climate-Related Financial Disclosures (TCFD)-aligned framework and reporting into our strategic planning process," says Mansfield. "This includes more climate change scenarios in our planning – not just for fire seasons but shifting our planting seasons and the locations we acquire. The framework also encourages New Forests' teams to develop new strategic projects that can help assets adapt to climate change, such as increasing the use of drought-tolerant species in relevant areas."

Externally, we work on educating the public on precautions to prevent people starting fires – either intentionally or accidentally. This includes managing when people are camping and help them understand the dangers of leaving fires unattended or failing to extinguish them properly.

Ends

We are happy to answer any questions you have about what we're doing to protect our investments and mitigate risk associated with climate change. Please get in touch with ir-team@newforests.com.au