

FLOOD-PRONE CARAVAN PARKS – CHALLENGES FACED BY THE CARAVAN PARK INDUSTRY IN VICTORIA, AUSTRALIA.

KUSAL NANAYAKKARA, DULANI HALVITIGALA and JUDITH CALLANAN
RMIT University, Melbourne, Australia

ABSTRACT

The caravan park industry is a vital part of the Australian tourism sector, with over 2,500 parks located across the country. As of 2023, the market size for caravan parks, holiday houses, and other types of accommodation reached \$4.2 billion, supporting more than 20,000 jobs. Many caravan parks are situated in open space zones, public reserves, and near natural attractions, which makes them vulnerable to various natural disasters, particularly flooding. Current flood planning controls may not have fully adapted to the changing nature of caravan parks. The traditional construction of caravans typically involves aluminium cladding on a timber frame, along with veneer chipboard or veneer plywood furniture, making them particularly vulnerable to severe damage from floods.

This paper contributes to a broader research project focused on the future trajectory of the caravan park industry in Victoria, Australia, with a specific emphasis on the industry's vulnerabilities to natural disasters, particularly flooding. Caravan parks, frequently situated in picturesque yet flood-sensitive locales encounter several economic, environmental, social, and operational challenges as a result of flood events. This literature review systematically assesses the magnitude of these challenges and their impacts on the industry. The subsequent phase of this research project entails conducting qualitative interviews with caravan park proprietors, pertinent local council representatives, and other stakeholders, aimed at developing a robust environmental, social, and governance strategy designed to protect both the caravan parks and the surrounding communities vulnerable to flood risks.

Keywords: Caravan park industry, Natural disasters, Floods, Challenges faced by caravan parks, Victoria

INTRODUCTION

The caravan park industry plays a crucial role in the Australian economy, particularly within the realm of regional tourism. They provide cost-effective lodging options for travellers, facilitating a significant economic impact on local communities. Recent trends, as reported by the Caravan Industry Association of Australia (CIAA), indicate that the industry has witnessed robust growth, largely attributed to rising cost-of-living pressures that have prompted families to pursue more budget-friendly travel alternatives (CIAA, 2021). According to Tourism Research Australia (2022), the caravan and camping market ranks among the largest sectors in domestic tourism, with caravan parks serving as economical accommodations that foster direct engagement with natural environments and regional cultures. The flow of expenditure on lodging, transportation, food, and various local services is critical for sustaining rural economies, generating employment opportunities, and stimulating tourism-related businesses.

Before the mid-1970s, caravan parks were primarily designed as basic recreational facilities, characterised by extensive camping areas and minimal amenities suitable for open space zones and reserves, reflecting their temporary and leisure-oriented purpose. However, from the 1980s onward, there was a notable shift driven by economic challenges such as rising interest rates and escalating property prices (Wensing et al., 2003). This economic pressure led to an increasing number of individuals opting for caravan parks as a long-term housing alternative, despite the formal prohibition of permanent residency in such parks prior to 1986. Consequently, in recent decades, caravan parks have evolved into critical components of both recreational infrastructure and affordable housing strategies, particularly for those grappling with the housing crisis in various regions across Australia (Wensing et al., 2003).

Australia is frequently exposed to natural disasters, resulting in numerous caravan parks being situated in areas susceptible to such events. A significant proportion of these parks is located in low-lying open space zones and public reserves, typically near natural features such as beaches and rivers, and often within floodplains. The hazardous positioning of these parks, combined with the high vulnerability of caravans and their occupants to flooding, presents a considerable risk. Anecdotal evidence indicates that flooding incidents are prevalent in many caravan parks, with approximately three-quarters of these establishments situated in flood-prone regions (Yeo, 2003). It is argued that existing flood planning regulations have failed to adequately account for the evolving characteristics and dynamics of caravan parks.

Flood events can lead to substantial damage to the infrastructure of caravan parks, including buildings, cabins, amenities blocks, and recreational facilities. Such damage not only disrupts operational activities but also incurs significant costs for repairs. The temporary closure or disruption of services can result in considerable revenue losses for caravan parks, as well as for the local economies that depend on tourism. Following the reopening of these facilities, caravan parks may continue to experience reduced demand and increased cancellations from travellers wary of visiting areas that have been affected by floods. This scenario poses a threat to their financial sustainability and may lead to enduring economic challenges. Furthermore, the impact of floods on property values is significant. The recovery processes can be complex, often involving the navigation of insurance claims, the procurement of funding for repairs, and the implementation of measures designed to mitigate future risks. Post-disaster conditions can result in increased insurance premiums, while some insurers may impose exclusions or limitations on coverage concerning particular types of damage, thereby complicating the recovery efforts further.

As part of a comprehensive research project examining the future of the caravan park industry in Victoria, Australia, this conceptual paper investigates the various challenges that arise within this sector due to increasing flood risks. In light of the growing frequency and severity of flood events, it aims to explore the vulnerabilities facing the sector, which has not been extensively researched in academic literature. The paper reviews existing knowledge on this underexplored area within property by analysing a diverse array of scholarly articles and grey literature. This work contributes to a more nuanced understanding of the risks inherent in the caravan park industry and serves as a foundation for future research and policy formulation in response to the challenges presented by climate change and flood risks.

CARAVAN PARK INDUSTRY IN AUSTRALIA

The caravan park sector, which primarily encompasses caravan parks as well as camping and cabin accommodations, constitutes a vital element of the Australian tourism landscape. According to the latest data from IBIS (2024), the market value of caravan parks, holiday homes, and other types of accommodation is approximately \$4.5 billion. In 2022, the industry experienced a significant market size increase of 13.9% and recorded an annualised growth rate of 1.5% from 2017 to 2022. The Caravan Industry Association of Australia (CIAA) reports that this growth was largely due to a rise in domestic tourism and the attractiveness of cost-effective travel alternatives (CIAA, 2021). Additionally, data from Tourism Research Australia (2022) indicates that the caravan and camping market ranks among the largest segments within domestic tourism, offering affordable lodging options that enable travellers to closely connect with natural environments and local communities.

In the year ending December 2023, the number of domestic overnight trips in Australia amounted to 15.3 million (Australian Trade and Investment Commission, 2024). Travellers dedicated a total of 60.7 million nights to these activities, with 90% of these nights spent in regional Australia. The total expenditure for caravan and camping travel reached \$14.3 billion, of which \$10.9 billion was spent during the trips themselves. Significantly, 87%, equating to \$9.5 billion, was allocated to regional areas. Nearly 20% of all domestic overnight trips were categorised as caravan and camping excursions (Australian Trade and Investment Commission, 2024). The number of caravan and campervan registrations throughout the nation has demonstrated steady growth over the past decade. By 2023, the total of registered caravans and campervans approached 859,000, reflecting a 21% increase since 2019 (Australian Trade and Investment Commission, 2024).

**31ST ANNUAL PACIFIC RIM REAL ESTATE SOCIETY CONFERENCE
HOBART, TASMANIA, AUSTRALIA 12TH – 15TH JANUARY 2025**

The caravan park sector across all states has observed a significant increase in revenue in the year ending December 2023. Notably, Western Australia and the Northern Territory experienced the most substantial growth (See Table 1).

Table 1: Caravan park industry revenue in the year ending December 31, 2023

State	Annual revenue (\$)	Annual revenue increase (%)
New South Wales	328,579,232	12.1%
Queensland	207,009,233	4.1%
Western Australia	146,529,017	28.8%
Victoria	103,415,217	17%
South Australia	81,031,359	14.9%
Northern Territory	22,079,940	22.3%
Tasmania	19,391,560	15.3%

(Source: Australian Trade and Investment Commission, 2024)

Caravan parks provide a diverse range of accommodation options, which include ‘permanents’ (residential sites), ‘annuals’ (where a caravan or cabin is permanently located within a caravan park but used primarily for occasional holiday purposes), and tourist accommodations (including cabins, on-site vans, as well as powered and unpowered sites) (Yeo, 2007). While there are numerous advantages associated with a mixed offering of permanent, annual, and tourist sites, there has been a notable increase in demand for exclusively lifestyle community parks (Opteon, 2022). These parks are primarily designed for retirees who are attracted to the combination of affordable housing, desirable locations, and the immediate sense of community. However, relocating long-term retirees from caravan parks following flood events poses several distinct challenges, as many of them operate on fixed incomes, thereby making it financially difficult to move or find alternative accommodations.

Traditionally, caravan parks have proven to be profitable income-generating assets, with many achieving profit margins of 50% to 60% on a going concern basis (Opteon, 2022). More importantly for investors, these parks offer an opportunity to acquire land in desirable locations while simultaneously yielding substantial returns. Most large caravan parks are situated in premium locations, exhibit robust and positive cash flow, and possess the potential for growth and expansion. This combination of attributes positions caravan parks as an attractive alternative asset class, particularly appealing to institutional investors (Opteon, 2022).

Caravan park industry in Victoria

In alignment with the national trend, caravan parks in Victoria serve as significant social and economic assets within the regional communities in which they are situated. The sector constitutes a vital component of both regional tourism and residential accommodation, operating on private freehold land, leased freehold land, and Crown land throughout the state.

Caravan parks account for over 54 percent of all tourist accommodation capacity in Victoria, accommodating approximately 3.8 million affordable holidays annually. They represent the largest provider of holiday accommodation in the state and offer affordable housing for up to 12,000 Victorians (Victorian Caravan Park Association, 2023). The industry significantly contributes to the economic vitality of regional cities and towns in Victoria, employing nearly 15,000 individuals and generating an annual Gross State Product of \$2 billion (Victorian Caravan Park Association, 2023). For numerous councils, caravan parks serve as an essential revenue source while simultaneously providing benefits to local economies through the patronage they attract (Yeo et al., 2016). Furthermore, the sector possesses the potential to play a critical role in Victoria’s emergency management initiatives by offering emergency support and facilitating access to affordable relief housing and crisis accommodation in the aftermath of natural disasters (Victorian Caravan Park Association, 2023).

Caravan parks’ increasing exposure to floods in Victoria

The caravan park industry is particularly vulnerable to environmental threats, with climate change exacerbating the frequency and intensity of natural disasters, including floods. A significant number of caravan parks in Victoria are situated in aesthetically appealing yet ecologically sensitive areas, thereby increasing their exposure to such risks. An expanding body of research indicates that many caravan parks are established on flood-prone terrains, presenting tangible dangers to both life and property (Yeo, 2003; Yeo & Grech, 2006; Bewsher Consulting, 2007; Yeo & Bewsher, 2007).

The financial impact of extreme weather events has escalated markedly nationwide, averaging \$4.5 billion annually over the last five years, predominantly driven by flood events (Insurance Council of Australia, 2024). In Victoria, a series of significant flooding incidents has highlighted the urgent necessity for enhanced flood resilience strategies and improved emergency response mechanisms. Historically, the state has experienced major flood events approximately every decade, with notable occurrences recorded in 2007, 2010, 2011, 2021, and 2022 (see Table 2). Each of these events has inflicted substantial damage across multiple sectors, including agriculture, infrastructure, housing, tourism, and local businesses, highlighting the persistent vulnerabilities and economic repercussions associated with such natural disasters.

Table 2: Significant flood events in Victoria since 2000

Year	Main areas affected	Total damage
2007	Gippsland, Bairnsdale, Sale, Lakes Entrance	\$15 million (Insurance Council of Australia)
2011	Nearly 60 towns were affected, with towns like Rochester, Kerang, Horsham, Charlton, Bridgewater, Carisbrook, Echuca were particularly impacted.	\$126 million (Insurance Council of Australia).
2012	Northern Country, East Gippsland and North East forecast districts.	\$108.2 million (Insurance Council of Australia).
2021	3.3 million hectares across the state were impacted.	\$313 million (Insurance Council of Australia).
2022	Impacted 81% of local government areas across Victoria, particularly in Northern Victoria	\$432 million (Deloitte)

(Source: Insurance Council of Australia (2022); Australian Disaster Resilient Knowledge Hub (2007); Australian Disaster Resilient Knowledge Hub (2011); Australian Disaster Resilient Knowledge Hub (2012))

As detailed in Table 2, there is a marked escalation in the financial losses of flood events, driven by both their increased intensity and the broader geographical scope of their impacts. For instance, the total costs associated with flood events in 2022 reached a staggering \$432 million, a sharp contrast to the relatively minor loss of \$15 million recorded in 2007. The major flood event in October 2022, which affected approximately 81% of local government areas in Victoria, highlighted the inadequacies of current infrastructure in managing such crises. These flood events have revealed critical economic and social vulnerabilities, with rural areas – particularly those dependent on agriculture and tourism – being disproportionately affected.

CHALLENGES FACED BY CARAVAN PARK INDUSTRY IN VICTORIA

Despite recent growth within the sector, the caravan park industry is confronted with several critical challenges that significantly affect its long-term viability. Natural disasters, particularly flooding, have increasingly influenced the caravan park industry in Australia, resulting in substantial financial, operational, and social difficulties stemming from these recurrent flood events. This section provides an analysis of the various challenges encountered by the industry in Victoria as a consequence of flooding.

Damages to caravan park property and infrastructure

Flood events have consistently resulted in substantial infrastructural damage within caravan parks, affecting key components such as cabins, roadways, and recreational amenities. Research indicates that parks situated in flood-prone regions are prone to both structural impairment and the degradation of landscaping features. This dual impact can significantly diminish the aesthetic appeal and operational viability of these parks, ultimately affecting guest satisfaction and occupancy rates.

Traditional caravans have typically been constructed with aluminium cladding mounted on timber frames, complemented by veneer chipboard or veneer plywood furniture (Smith et al., 1990). This construction choice inherently reduces their resilience to flooding. Consequently, even minor inundation events can result in significant damage to both caravans and cabins (Hall et al., 2000). These structures are also prone to buoyancy, which can elevate flood levels by obstructing drainage systems, increase damage through collisions with other debris, and create dangers during emergency response operations. The damage to interior contents can be catastrophic, as floor coverings can be easily compromised at minimal water depths. Additionally, the capacity to elevate belongings above floodwaters is markedly limited (Smith et al., 1990). Recent industry trends indicate a shift over the past decade from on-site caravans, power sites, and unpowered sites—typically occupied by movable structures – a to a predominance of tourist cabins, which are generally not designed for rapid relocation (Yeo & Bewsher, 2016). This reduced mobility significantly increases the amount and capital value of property that is vulnerable to flood risks. Floods also inflict significant damage upon the facilities and amenities located within caravan parks. This encompasses challenges such as waterlogged grounds, disconnection of utility services, and extensive damage to amenity blocks, including showers, restrooms, playgrounds, and communal areas (Modern Campground, 2023).

Flooding can result in significant financial repercussions due to the extensive damage sustained by large park areas. For instance, during the 2022 Victorian Floods, seventy caravan parks in Victoria suffered asset and property damage, while numerous others were rendered isolated or affected by road closures and service interruptions (Victorian Caravan Park Association, 2023). It is estimated that the thirty caravan parks in Victoria and bordering communities that were most severely impacted incurred combined asset repair and replacement costs exceeding \$45 million. This situation is particularly challenging as rebuilding efforts often do not encompass substantial upgrades, thereby leaving parks vulnerable to future flooding incidents. Although immediate repairs are essential for the restoration of parks following floods whenever possible, comprehensive restoration and resilience planning – such as the construction of levees or the elevation of buildings – are critical to safeguarding against future flooding and mitigating the impact on these vital tourism and residential facilities situated in flood-prone areas of Victoria.

Revenue losses for caravan parks and communities

Flooding incurs substantial economic losses for caravan parks, encompassing damage to infrastructure, revenue declines, and increased operational costs. Such disruptions adversely impact tourism revenue and exert a ripple effect on local economies that depend on tourist expenditure. For instance, the 2022 floods in Victoria resulted in the damage or destruction of over 1,800 caravan park residential and holiday units, as documented by the Victorian Caravan Park Association (2023). A majority of these properties were operated by businesses housing vulnerable residents, temporary workers, and tourists. Consequently, these operators experienced a staggering \$38 million in lost accommodation revenue due to enforced closures or restricted trading conditions in the twelve months following the flood event (Victorian Caravan Park Association, 2023). Prior to the flooding, these businesses supported approximately 620 full-time equivalent jobs and generated around \$105 million in Gross State Product, predominantly benefiting the regional communities in which the caravan parks are situated (Victorian Caravan Park Association, 2023). Therefore, the economic ramifications of such flooding extend beyond individual businesses, significantly impacting the broader community's financial health.

Natural disasters frequently disrupt operations during peak tourism seasons, such as summer holidays, during which caravan parks typically enjoy their highest occupancy rates. Extended closures or reduced operational capacity not only result in direct revenue losses but also deter future bookings, as potential visitors may regard

**31ST ANNUAL PACIFIC RIM REAL ESTATE SOCIETY CONFERENCE
HOBART, TASMANIA, AUSTRALIA 12TH – 15TH JANUARY 2025**

these areas as unreliable travel destinations. This phenomenon was particularly evident following the 2022 floods in Victoria, where prolonged closures of caravan parks adversely affected not only park owners but also the local economies that depend on the spending of park visitors. As illustrated in Table 3, caravan parks in Victoria recorded the lowest occupancy rate in the year ending December 2023, primarily due to the enduring repercussions of the floods and the gradual recovery of the industry.

Table 3: National vacancies in caravan parks in the year ending December 2023

State	Sites available	Sites occupied	Occupancy rate
New South Wales	512,882	242,998	47%
Queensland	305,118	215,705	71%
Western Australia	198,911	125,830	63%
Victoria	175,353	71,201	41%
South Australia	143,344	67,340	47%
Northern Territory	39,228	18,028	46%
Tasmania			

(Source: Australian Trade and Investment Commission, 2024)

The impact of the floods was not isolated to those businesses directly impacted by them. Research undertaken by the Victorian Caravan Park Association (2023) in December 2022 identified that 51 per cent of regional Victorian caravan parks not directly impacted by the event had lost revenue as a result of the disruption caused by the floods. This cumulative financial impact has underscored the need for resilience measures and government support to mitigate future losses and help parks adapt to recurring extreme weather.

The flood recovery efforts initiated by the Victorian Government have provided some assistance to caravan parks; however, there remains a significant need for additional support to fully remediate their operations and achieve viability. In conjunction with the pressures stemming from rising business costs, failures within the insurance market, skills shortages, and evolving government legislation, the potential closure of certain flood-impacted caravan parks continues to pose a serious threat (Victorian Caravan Park Association, 2023).

Un-insurability and unaffordability of insurance

Insurance premiums for caravan parks located in disaster-prone regions have experienced a significant increase due to the rising frequency and intensity of natural disasters. This situation has exacerbated the ongoing insurance crisis within the caravan park sector, leading to numerous challenges as identified by Reyrob (2024). The issues arising from this crisis include:

- Underinsurance – Many caravan park owners have historically underinsured their properties, which has exacerbated the financial impact of claims.
- Global insurance market conditions – The global shortage of insurance capital has reduced insurers' capacity. This is particularly challenging in high-risk sectors like caravan parks.
- Lack of industry-specific data – Insufficient data on caravan park risks creates challenges for insurers. This makes it difficult for them to assess and price the risk accurately.

The repercussions of the current insurance crisis are extensive and ongoing, resulting in significant ramifications for the industry (Reyrob, 2024).

- Soaring premiums – Caravan park owners are facing excessive insurance costs, which can significantly impact their profitability.
- Limited coverage options – Many parks are struggling to find insurers willing to cover their risks. This struggle leaves them exposed to significant financial losses if a disaster occurs.
- Reduced investment – The uncertainty around insurance availability is discouraging investment in the caravan park sector, hindering growth and development of the sector.
- Potential park closures – Some caravan parks have to close their doors as they are unable to obtain affordable insurance. This can impact local economies and tourism.

Notably, insurance premiums have increased by more than 200 percent since the floods in Victoria in October 2022 (Clark & Bentley, 2023). Furthermore, Sheedy (2023) reported that an award-winning park in Queensland experienced a staggering increase in its premium, which increased from A\$150,000 to A\$980,000 in late 2022, attributed to the heightened frequency and severity of flooding events. This trend has rendered insurance unaffordable for smaller parks, placing some at imminent risk of closure, while larger operators grapple with the challenge of sustaining manageable premiums without substantially increasing prices for consumers. The significant escalation in insurance premiums is compelling an increasing number of caravan park owners situated in disaster-prone regions to forgo insurance altogether or to underinsure their properties. Some caravan park owners in Victoria, having endured the flood disaster in 2022, have chosen not to procure insurance, as they have accurately assessed the costs associated with relocating their assets during such disasters, finding it to be approximately 50 percent lower than the elevated insurance premiums they are now facing (Clark & Bentley, 2023).

In recent years, some insurance providers have exited the caravan park market, resulting in increased difficulties in obtaining insurance for these properties (Caravan Industry Association of Australia, 2021). Furthermore, certain insurers have entirely stopped offering flood coverage within their policies. As the likelihood of severe weather events escalates, it is possible that more insurance companies will feel compelled to withdraw all forms of coverage for caravan parks in particular regions. At present, no area in Australia is classified as uninsurable; however, some regions may experience growing challenges in securing insurance as the risks associated with extreme weather intensify (Insurance Council of Australia, 2022). The Climate Council has developed a ranking identifying the ten electorates at the highest risk from climate change and extreme weather events. This ranking is based on the proportion of 'high risk' properties present in each federal electorate throughout Australia by the year 2030 (Climate Council, 2022). The electorates identified as most at risk include Nicholls (Victoria), Richmond (New South Wales), Maranoa (Queensland), Moncrieff (Queensland), Wright (Queensland), Brisbane (Queensland), Griffith (Queensland), Indi (Victoria), Page (New South Wales), and Hindmarsh (South Australia). Within these vulnerable electorates, it is projected that 15% of properties may become uninsurable within the forthcoming decade. On a national scale, the anticipated percentage of properties that could be uninsurable by 2030 varies across states and territories, with projections of 6.5% in Queensland, 3.3% in New South Wales, 3.2% in South Australia, 2.6% in Victoria, 2.5% in the Northern Territory, 2.4% in Western Australia, 2% in Tasmania, and 1.3% in the Australian Capital Territory (Climate Council, 2022). Caravan parks that are unable to secure or afford flood insurance face limited options, which may include self-insurance, seeking government assistance, or, in certain instances, contemplating relocation.

Difficulty in accessing recovery funds and lack of business support

State and federal governments frequently provide disaster relief following natural disasters; however, the process of accessing these funds can be intricate and protracted for caravan parks. Several park operators encounter difficulties in fulfilling the eligibility requirements for financial assistance, particularly those operating smaller establishments that may lack the necessary resources to navigate complex bureaucratic procedures. This delay in securing funds obstructs prompt recovery efforts and may even lead to the permanent closure of smaller businesses.

Following the floods in Victoria in 2022, the Small Business Immediate Flood Relief and Business Recovery Grants provided by the Victorian Government did not adequately address the essential clean-up, relief, and recovery costs incurred by many caravan parks. On average, businesses operating caravan parks that were impacted by the floods faced clean-up and asset repair and replacement expenses exceeding \$300,000, according to the Victorian Caravan Park Association (2023). Furthermore, several caravan parks were in need of multimillion-dollar remediation efforts. The criterion of business turnover was employed as the primary method for classifying eligibility for government support. Consequently, caravan parks were categorised as small businesses, limiting their access to a relief and recovery funding cap of \$50,000 (Victorian Caravan Park Association, 2023). For instance, an owner of a local coffee shop occupying a 50m² space, with expenses related to cleanup and minor repairs, received the same level of financial assistance as the owner of a caravan park situated on significantly larger parcels of land, which had often sustained extensive damage, leading to potential long-term ramifications or permanent closure. The only point of similarity between these two scenarios was their turnover figures.

To further illustrate the inequitable distribution of business support funds, the government provided substantial direct financial assistance to Committees of Management established under the Crown Land (Reserves) Act 1978. These Committees of Management were also eligible to receive up to \$50,000 through the Business Recovery Grants program (Victorian Caravan Park Association, 2023). In contrast, no such financial support was afforded to local Councils, often due to the erroneous presumption that council assets were insured against flood damage. It has been suggested that deficiencies in the government's application processes for business grants hindered caravan parks from obtaining timely funding necessary for essential repairs and reopening. Operators of caravan parks were compelled to submit multiple applications and to provide evidence of flood-related impacts on their businesses repeatedly.

Environmental damage and ecological considerations

Caravan parks are frequently located in ecologically sensitive regions, rendering them particularly susceptible to environmental degradation in the aftermath of natural disasters. Flood events can induce soil erosion, lead to contamination, and result in the loss of critical habitats within these parks. Floods often compromise water quality by contaminating local water sources, adversely affecting both biodiversity and operational capabilities of the parks. In regions prone to cyclones, the destruction of vegetation and accumulation of debris can profoundly alter park landscapes, necessitating extensive rehabilitation efforts (Keenan, 2021). Moreover, the cumulative environmental impacts from recurrent natural disasters present ongoing challenges for caravan parks, as the degradation of their natural settings diminishes their attractiveness to visitors who prioritise pristine ecological environments.

Floods contribute significantly to environmental and ecological damage, adversely impacting both natural landscapes and the functionality of caravan park sites. The presence of floodwaters often results in the introduction of debris, mud, and various contaminants, which can fundamentally alter the park environment and render certain areas unsafe for guests. Restoring these sites necessitates comprehensive cleanup efforts, including the removal of debris, soil remediation, and, in some instances, the replanting of vegetation (Yeo, 2003). This process of environmental restoration is crucial for preserving the caravan parks' aesthetic appeal, which frequently serves as a primary attraction for visitors.

Regulatory and compliance issues

Regulatory challenges present a significant concern for the caravan park industry. Parks must navigate multiple layers of local, state, and federal regulations, particularly in areas such as land use, environmental compliance, and public health and safety. Small, family-owned parks often face difficulties in meeting these requirements due to constrained resources. The costs associated with compliance, including those related to zoning, infrastructure upgrades, and accessibility standards, can be considerable, particularly for smaller parks striving to enhance their facilities. Additionally, flood damage can complicate compliance efforts, especially when essential infrastructure, such as utilities or fire safety systems, is compromised.

For caravan parks that accommodate long-term residents, adherence to tenancy laws introduces an additional layer of complexity. Many operators are required to comply with rental regulations applicable to semi-permanent residents, which complicates operational processes and increases legal obligations. These regulations often exhibit inconsistencies across different states, further exacerbating the operational challenges faced by park operators situated near state borders (Victorian Caravan Park Association, 2023). The infrastructure damaged by flooding frequently necessitates a comprehensive reassessment of stringent safety compliance; authorities may demand updated safety reports prior to the reopening of caravan parks, thereby extending recovery timelines and escalating costs (Modern Campground, 2023). Caravan parks are governed by rigorous compliance requirements that encompass the development of emergency management plans, associated infrastructure, training, staffing, and on-ground support (Victorian Caravan Park Association, 2023). However, flooding events may reveal existing deficiencies, necessitating substantial updates to fulfill legal standards. These plans must also be aligned with evolving environmental risk profiles attributed to climate change. Additionally, when embarking on rebuilding efforts post-flood events, caravan parks are mandated to employ resilient construction methods that conform to newly established flood-proofing guidelines (Modern Campground, 2023). This includes the elevation of structures and enhancements to

drainage systems, which may incur significant costs and require navigation through complex regulatory approval processes. Navigating these numerous regulatory requirements, particularly in the aftermath of substantial physical and financial setbacks, poses a considerable strain on caravan park operators. Enhanced regulatory clarity and streamlined processes are vital for facilitating recovery and ensuring long-term viability in the sector.

Difficulty in obtaining finance for recovery

Caravan parks in Australia that have been affected by flooding are confronting substantial financial obstacles, particularly in securing funding for recovery initiatives. Many of these parks operate as small businesses with constrained financial resources, and the impact of flooding significantly intensifies their existing economic pressures.

Many caravan parks situated in regions vulnerable to natural disasters operate as leasehold businesses. These enterprises predominantly function on Crown land under leases governed by the Crown Land Reserves Act Section 17D. Leasehold businesses frequently encounter challenges in meeting the eligibility criteria for commercial loans necessary to finance significant reconstruction or repairs particularly when the lease tenure is less than 50 percent (Victorian Caravan Park Association, 2023). This limitation has resulted in many caravan parks lacking access to essential funding required for reconstruction efforts.

Caravan and holiday parks are regarded as specialised assets, crafted for specific market segments, consequently attracting a particular type of investors. This classification poses a significant risk in the event that a financial institution must sell the property due to borrower default on the caravan park commercial loan. Typically, the holder of a freehold interest (which encompasses the land and the property) may secure financing of up to 50% of the property's value. Conversely, a leasehold holder (associated with the business operation) may obtain financing of up to 35% of the going concern value of the business (Commercial Warehouse, 2022). In circumstances where the property has experienced flooding, securing loans from commercial banks and other financial institutions becomes increasingly challenging. Lenders often adopt a more conservative approach, given the increased risks associated with such properties.

As commercial loans are difficult to get for caravan parks, many caravan parks affected by the 2022 floods in Victoria had to rely on government-supported financial assistance. Although the state government provided concessional loans to business operators impacted by the floods, this support was not extended to leaseholders of Crown Land (Victorian Caravan Park Association, 2023). Given that a substantial number of caravan parks that sustained severe damage were Crown Land leaseholders, these park operators facing considerable losses were effectively excluded from accessing essential concessional loans. This gap in support has hindered the recovery efforts for many affected parks.

As commercial loans are difficult to get for caravan parks, many flood-affected parks had to rely on government-supported funding systems. However, while the state government of Victoria offered concessional loans to business owners and operated affected by floods in 2022, it did not provide finance to Crown Land leaseholders (Victorian Caravan Park Association, 2023). Given a significant proportion of caravan parks that suffered extensive damage were Crown Land leaseholders, park owners suffering significant damage to their caravan parks were not able to receive support with concessional loans from the government.

To effectively address these challenges, stakeholders from both the industry and government sectors have advocated for targeted interventions, including the renewal of Crown leases and the establishment of more accessible financial support programs. The recovery trajectory for caravan parks could remain slow-moving and inherently problematic without these measures. Notably, under the Victorian Government's Crown Land Leasing policy, the issuance of new 21-year 17D leases can be facilitated through direct negotiation (Victorian Caravan Park Association, 2023). It is imperative that the Victorian Government consistently promotes the direct negotiation framework among land managers, particularly during natural disaster events, to enable Crown land leaseholders to secure financing for asset repairs and business recovery initiatives (Victorian Caravan Park Association, 2023).

Social and psychological impacts on caravan park operators and residents

The social and psychological effects of natural disasters on caravan park operators, residents, and guests are substantial. Caravan parks often house long-term residents, including retirees or those seeking affordable living options, who face displacement and loss of property in disaster events. Studies show that natural disasters lead to significant psychological stress for both residents and park operators, who may experience anxiety, PTSD, and financial stress as a result of property losses and disruption to their way of life (Yeo, 2003). Furthermore, caravan park residents often face elevated incidences of violence, substance misuse, addiction, problem of gambling, mental health disorders, and poor physical health within inadequately supported environments (Lassa, 2021). The adverse effects of these issues may be exacerbated by the dislocation of their housing as a consequence of flood impacts.

Disasters tend to exacerbate social inequality, particularly among residents of caravan parks who are often low-income and elderly, and may lack the resources necessary to secure alternative housing. The demographic composition of caravan park residents includes a significant number of short-stay occupants who may be unaware of the associated risks. A considerable portion of these individuals are elderly and retired. Those who are employed typically occupy low-wage positions, and there is a notable prevalence of unemployment within this group. Research indicates a strong correlation between residing in a caravan park and experiencing low income (Hunter et al., 2006). These factors suggest that emergency evacuation may pose significant challenges due to the higher proportion of elderly residents, while recovery following flooding events may be hindered by limited financial resources and savings. Such vulnerabilities have been substantiated by various studies, particularly those focused on the aftermath of frequent flooding incidents in Australia. For example, White (2023) identified that the scarcity of affordable temporary housing options for displaced caravan park residents results in prolonged displacement, which exacerbates psychological distress and undermines community cohesion.

CONCLUSION

The increasing frequency of extreme weather events has intensified concerns regarding flooding's impact on caravan parks in Victoria, Australia. These establishments are frequently situated in attractive yet vulnerable locations, such as riverbanks, coastal areas, and low-lying zones, rendering them susceptible to the adverse effects of flooding. This paper is part of a comprehensive research project focused on the future of the caravan park sector in Victoria. It delves into the multifaceted challenges – economic, environmental, social, and operational – confronting caravan parks that have experienced flooding events. Through this examination, we aim to highlight the critical vulnerabilities and challenges that need to be addressed to enhance resilience in the face of an evolving climate.

The caravan park that were affected by floods grapple with several challenges, including infrastructure damage, financial instability, and uninsurability of properties. Insurers are increasingly imposing unaffordable premiums, which exacerbates the financial strain on operators. Additionally, environmental degradation, difficulties in securing financing, complex regulatory landscapes, and the social and psychological repercussions of these issues further complicate the sector's viability. In response to the escalating impacts of climate change, investment in sustainable practices and resilient infrastructure is expected to gain traction, particularly as parks aim to attract eco-conscious travellers. To navigate these pressures, park operators are mandated to enhance their infrastructure resilience, ensure compliance with evolving regulations, and adapt strategically to market fluctuations.

These challenges pose a significant threat to the economic sustainability of the caravan park industry, which plays a crucial role in regional tourism and the broader economies of Australia, notably in flood-prone regions such as Victoria and Queensland. If effective solutions are not implemented, we may witness a trend of park closures and diminishing accessibility, subsequently limiting affordable travel options for Australians.

In certain areas, notably in Victoria, some parks are proactively mitigating flood risks by elevating cabins and reinforcing structures. However, these upgrades entail substantial financial investment, creating a burdensome scenario for many operators – particularly smaller ones. Without sufficient financial aid, such as grants aimed

**31ST ANNUAL PACIFIC RIM REAL ESTATE SOCIETY CONFERENCE
HOBART, TASMANIA, AUSTRALIA 12TH – 15TH JANUARY 2025**

at enhancing disaster resilience and regulatory support from the government, adapting to these pervasive challenges could prove exceedingly difficult, jeopardising the industry's long-term sustainability.

This paper represents the initial phase of a research project focused on enhancing flood risk management specifically for caravan parks in Victoria. The findings from this research will equip caravan park owners and managers with essential strategies and insights, enabling them to better recognise and effectively mitigate flood-related risks. By fostering greater awareness and implementing proactive measures, the aim of the project is to ensure the safety and sustainability of these communities in the face of potential flooding events.

REFERENCES

Australian Trade and Investment Commission, (2024), “Caravan and camping data”, <https://www.tra.gov.au/en/domestic/caravan-and-camping-data> (Retrieved 1 September 2024).

Australian Disaster Resilient Knowledge Hub (2007), “Flood – Gippsland”, <https://knowledge.aidr.org.au/resources/flood-gippsland-victoria-2007/> (Retrieved 1 September 2024).

Australian Disaster Resilient Knowledge Hub (2011), “Flood – Victoria”, <https://knowledge.aidr.org.au/resources/flood-victoria-2011/> (Retrieved 1 September 2024).

Australian Disaster Resilient Knowledge Hub (2012), “Flood – Victoria”, <https://knowledge.aidr.org.au/resources/flood-victoria-2012/> (Retrieved 1 September 2024).

Bewsher Consulting (2007), “Victoria Caravan Parks Flood Risk Survey: Final Report (April 2007)”, prepared for the Department of Sustainability and Environment, the Victoria CMAs and Melbourne Water.

Caravan Industry Association (2023), “Insuring caravan parks: A strategic blueprint to improve industry wide insurance affordability and accessibility”, https://www.ausleisure.com.au/images/ausleisure/files/Caravan_Insurance_Industry_Roadmap_July_2023_pt1.pdf (Retrieved 1 September 2024).

Caravan Industry Association of Australia (2021), “Cyclone & Related Flood Damage Reinsurance Pool – Submission”, <https://treasury.gov.au/sites/default/files/2022-02/c2021-226351-ciaa.pdf> (Retrieved 1 September 2024).

Clark, T. & Bentley, P. (2023), “Caravan park owners operate without insurance during fires and floods as premiums rise”, <https://www.abc.net.au/news/2023-12-07/caravan-park-insurance-cost-soars-natural-disasters/103194636> (Retrieved 1 September 2024).

Climate Council (2022), “Uninsurable nation: Australia’s most climate-vulnerable places”, https://www.climatecouncil.org.au/wp-content/uploads/2022/05/CC_Report-Uninsurable-Nation_V5-FA_Low_Res_Single.pdf (Retrieved 1 September 2024).

Commercial Warehouse (2022), “Understanding a Caravan commercial loan”, <https://www.cwh.com.au/commercial-property-loans/understanding-a-caravan-commercial-loan/> (Retrieved 1 September 2024).

Hall, T., Harrison, M., McEwen, L. & Dempsey, M. (2000), “Danger – caravans afloat”, *Town & Country Planning*, Vol. 69, pp. 226–227.

Hunter, L., Haynes, K., Chen, K. & Leigh, R. (2006), “Are the poor more at risk in flood-prone communities?”, presented to 46th NSW Floodplain Management Authorities Conference, 28 February – 2 March 2006, Lismore.

**31ST ANNUAL PACIFIC RIM REAL ESTATE SOCIETY CONFERENCE
HOBART, TASMANIA, AUSTRALIA 12TH – 15TH JANUARY 2025**

IBIS (2024), “Caravan Parks, Holiday Houses and Other Accommodation in Australia industry analysis”, <https://www.ibisworld.com/au/market-size/caravan-parks-holiday-houses-other-accommodation/> (Retrieved 1 September 2024).

Insurance Council of Australia (2024), “Insurance Catastrophe Resilience Report 2023–24”, https://insurancecouncil.com.au/wp-content/uploads/2024/08/21100_ICA_Catastrophe-Report_Print-2024_Final-single-pages.pdf (Retrieved 1 September 2024).

Insurance Council of Australia (2022), “Three-year weather bill reaches \$12.3 billion”, <https://insurancecouncil.com.au/resource/three-year-weather-bill-reaches-12-3-billion/> (Retrieved 1 September 2024).

Insurance Council of Australia (2022), “Insurance Catastrophe Resilience Report 2021–22”, https://insurancecouncil.com.au/wp-content/uploads/2022/09/20683_ICA_Final_WebOptimised.pdf (Retrieved 1 September 2024).

Keenan, J. (2021), “Climate change and disaster risk in Australia’s tourism industry”, *Journal of Environmental Policy & Planning*, 23(2), 246-264.

Lassa, J.A. (2021), “Caravan communities: older, underinsured and overexposed to cyclones, storms and disasters”, <https://www.preventionweb.net/news/caravan-communities-older-underinsured-and-overexposed-cyclones-storms-and-disasters> (Retrieved 1 September 2024).

Modern Campground (2023), “Floods Damage Cripples Caravan Parks and National Parks in Australia”, <https://moderncampground.com/australia/flood-damage-cripples-caravan-parks-and-national-parks-in-australia/> (Retrieved 1 September 2024).

Opteon (2022), “The Call of the Caravan Park”, https://opteonsolutions.com/au/insights/caravan-park#_ftn2 (Retrieved 1 September 2024).

Reyrob (2024), “The Biggest Issue in Caravan Park Insurance in Australia”, <https://www.campgroundinsuranceau.com/the-biggest-issue-in-caravan-park-insurance-in-australia/> (Retrieved 1 September 2024).

Sheedy, C. (2023), “Guiding caravan parks through a hard market cycle”, <https://anziif.com/professional-development/articles/2023/10/guiding-caravan-parks-through-a-hard-market-cycle> (Retrieved 1 September 2024).

Smith, D.I., Handmer, J.W., Greenaway, M.A. & Lustig, T.L. (1990), “Losses and Lessons from the Sydney Floods of August 1986 (2 volumes)”, Centre for Resource and Environmental Studies, Australian National University, Canberra.

Tourism Research Australia (2022), “Caravan and camping data”, <https://www.tra.gov.au/en/domestic/caravan-and-camping-data> (Retrieved 1 September 2024).

Victorian Caravan Park Association (2023), https://www.parliament.vic.gov.au/49c17e/contentassets/5e2bf3ad7a7b40f695d3a22f6a954231/820.-victorian-caravan-parks-association-inc.-vicparks_redacted.pdf (Retrieved 1 September 2024).

Wensing, E., Holloway, D. and Wood, M. (2003), “On the margins? housing risk among caravan park residents”, https://www.ahuri.edu.au/sites/default/files/migration/documents/AHURI_Final_Report_No47_On_the_margins_housing_risk_among_caravan_park_residents.pdf (Retrieved 1 September 2024).

**31ST ANNUAL PACIFIC RIM REAL ESTATE SOCIETY CONFERENCE
HOBART, TASMANIA, AUSTRALIA 12TH – 15TH JANUARY 2025**

- White, L. (2023), “Concerns caravan park residents not 'treated equal' by flood recovery grant program”, <https://www.abc.net.au/news/2023-05-16/chinderah-caravan-park-residents-flood-recovery-grants/102320510> (Retrieved 1 September 2024).
- Yeo, S.W. (2003), “Flood risk management for caravan parks in New South Wales”, *Australian Geographer*, Vol. 34, pp. 195–209
- Yeo, S. & Grech, P. (2006), “Flood-prone caravan parks in NSW – is the system failing?”, *The Australian Journal of Emergency Management*, 21(3), 12-21.
- Yeo, S.W. (2007), “Flood Risk Management for Caravan Parks in Victoria”, https://www.researchgate.net/publication/237626395_Flood_Risk_Management_for_Caravan_Parks_in_Victoria (Retrieved 1 September 2024).
- Yeo, S. & Bewsher, D. (2007), “Flood risk management for caravan parks in Victoria”, paper presented at the 5th Victorian Flood Management Conference, Warrnambool, 9-12 October 2007.
- Yeo, S.W. (2008), “What are Acceptable Flood Risks in Caravan Parks?”, https://www.researchgate.net/publication/237555156_What_are_Acceptable_Flood_Risks_in_Caravan_Parks (Retrieved 1 September 2024).
- Yeo, S.W. & Bewsher, A. (2016), “Flood risk management for caravan parks in Victoria”, https://www.researchgate.net/publication/237626395_Flood_Risk_Management_for_Caravan_Parks_in_Victoria (Retrieved 1 September 2024).