Supplementary Table S2

Search strategy, relevance criteria and qualitative evidence framework

The review employed a purposive narrative literature-identification strategy across biomedical and interdisciplinary databases. The following formulations document the search concepts and database-specific expressions, together with source-eligibility and evidence-appraisal criteria. The framework is not a systematic search-execution log or a formal risk-of-bias grading instrument.

Component	Specification
Review type	Critical narrative review; purposive and iterative literature identification and thematic synthesis.
Databases	PubMed/MEDLINE, Scopus, Web of Science Core Collection and Google Scholar.
Core concepts	Wildfire/bushfire; older age; rural, remote or low-density settings; social, economic and psychological consequences.
Complementary search routes	Route A combines wildfire and older-age concepts. Route B combines wildfire, territorial context and outcome concepts, allowing identification of relevant mixed-age contextual studies.
PubMed/MEDLINE A	("Wildfires"[MeSH Terms] OR wildfire*[Title/Abstract] OR bushfire*[Title/Abstract] OR "forest fire"[Title/Abstract] OR "forest fires"[Title/Abstract] OR "wildland fire"[Title/Abstract] OR "wildland fires"[Title/Abstract]) AND ("Aged"[MeSH Terms] OR "Aged, 80 and over"[MeSH Terms] OR older[Title/Abstract] OR elderly[Title/Abstract] OR geriatric*[Title/Abstract] OR ageing[Title/Abstract] OR aging[Title/Abstract] OR "later life"[Title/Abstract])
PubMed/MEDLINE B	("Wildfires"[MeSH Terms] OR wildfire*[Title/Abstract] OR bushfire*[Title/Abstract] OR "forest fire"[Title/Abstract] OR "forest fires"[Title/Abstract] OR "wildland fire"[Title/Abstract] OR "wildland fires"[Title/Abstract]) AND ("Rural Population"[MeSH Terms] OR rural[Title/Abstract] OR remote[Title/Abstract] OR "low density"[Title/Abstract] OR "low-density"[Title/Abstract] OR "sparsely populated"[Title/Abstract] OR "wildland urban interface"[Title/Abstract] OR "wildland-urban interface"[Title/Abstract]) AND (social[Title/Abstract] OR isolation[Title/Abstract] OR loneliness[Title/Abstract] OR displac*[Title/Abstract] OR evacuat*[Title/Abstract] OR economic*[Title/Abstract] OR financ*[Title/Abstract] OR insurance[Title/Abstract] OR livelihood*[Title/Abstract] OR recover*[Title/Abstract] OR psycholog*[Title/Abstract] OR "mental health"[Title/Abstract] OR depress*[Title/Abstract] OR anxiety[Title/Abstract] OR PTSD[Title/Abstract] OR grief[Title/Abstract] OR wellbeing[Title/Abstract] OR

	"well-being"[Title/Abstract])
Scopus A	TITLE-ABS-KEY((wildfire* OR bushfire* OR "forest fire*" OR "wildland fire*" OR "landscape fire*") AND (older OR elderly OR geriatric* OR ageing OR aging OR "later life" OR senior*))
Scopus B	TITLE-ABS-KEY((wildfire* OR bushfire* OR "forest fire*" OR "wildland fire*" OR "landscape fire*") AND (rural OR remote OR "low density" OR "low-density" OR "sparsely populated" OR depopulat* OR "wildland urban interface" OR "wildland-urban interface") AND (social OR isolat* OR loneliness OR displac* OR evacuat* OR economic* OR financ* OR insurance OR livelihood* OR recover* OR psycholog* OR "mental health" OR depress* OR anxiety OR PTSD OR grief OR wellbeing OR "well-being"))
Web of Science Core Collection A	TS=((wildfire* OR bushfire* OR "forest fire*" OR "wildland fire*" OR "landscape fire*") AND (older OR elderly OR geriatric* OR ageing OR aging OR "later life" OR senior*))
Web of Science Core Collection B	TS=((wildfire* OR bushfire* OR "forest fire*" OR "wildland fire*" OR "landscape fire*") AND (rural OR remote OR "low density" OR "low-density" OR "sparsely populated" OR depopulat* OR "wildland urban interface" OR "wildland-urban interface") AND (social OR isolat* OR loneliness OR displac* OR evacuat* OR economic* OR financ* OR insurance OR livelihood* OR recover* OR psycholog* OR "mental health" OR depress* OR anxiety OR PTSD OR grief OR wellbeing OR "well-being"))
Google Scholar	Short complementary queries: wildfire "older adults"; bushfire "older people"; "forest fire" elderly rural; wildfire rural "social isolation"; wildfire "older adults" "economic recovery"; wildfire elderly "mental health"; "Fort McMurray" "older adults"; "Camp Fire" older recovery.
Supplementary identification	Reference lists of relevant primary studies and reviews, together with authoritative contextual reports.
Population and territory	Age thresholds are recorded as defined in each source, including 60+, 65+ and mixed-age samples. Relevance to rural and low-density territories is assessed from the reported setting, services and geographical context. Wildland–urban interface settings are identified separately.
Priority evidence	Peer-reviewed empirical studies addressing social, economic or psychological consequences. Older-adult wildfire evidence has greatest direct relevance; mixed-age studies, professional proxy accounts and cross-hazard studies are explicitly distinguished.
Relevance boundaries	Purely biomedical studies provide health context and are not treated as measurements of household economic loss. Reviews and demographic or

	environmental reports provide contextual support and are distinguished from primary outcome studies. Journalistic examples are not treated as equivalent to empirical studies.
Language	English-language sources and non-English sources where English abstracts or reliable translations were available, as described in the manuscript.
Qualitative appraisal	Directness to population, hazard and territory; sampling and study design; exposure and outcome measurement; temporal ordering; selection and confounding; consistency; transferability. No numerical quality score or formal certainty grade is assigned.
Evidence synthesis	Critical narrative synthesis of social, economic and psychological domains. Supplementary Table S5 records 17 purposively selected core primary studies, with contextual reviews treated separately. The count is not exhaustive and does not represent database screening totals.
Interpretive boundaries	Associations, qualitative accounts, conceptual interpretations and policy proposals are distinguished. Indirect evidence does not establish older-rural wildfire effect sizes. The national and regional indicators contextualise the review; the regional score is not a validated risk index.
Search period	April–July 2026; final database search on 12 July 2026. The search window refers to literature identification rather than a publication-date restriction.
Publication-date eligibility	Empirical publications from all available years were eligible if relevant to older adults, wildfires, geographical setting and the three outcome domains. Earlier and seminal studies were also identified through citation tracking.
Citation tracking and source identification	Targeted backward citation follow-up during revision drew on references in relevant primary studies and reviews, including Melton et al. (2023), to identify earlier work involving Indigenous Elders (Asfaw et al., 2019, 2020), older Australians (Halcomb et al., 2023; Thompson et al., 2024) and rebuilding studies (Mockrin et al., 2015; Alexandre et al., 2015). This was a focused narrative follow-up, not an exhaustive repeated database search or complete rescreening. The formulations above describe search concepts and database-specific expressions, not independently auditable execution counts.