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World Environmental History

DUST BOWL

*Depression America to World
War Two Australia*



Janette-Susan Bailey



Palgrave Studies in World Environmental History

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Janette-Susan Bailey

Dust Bowl

Depression America to World War Two Australia

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For Jean Bailey, née Russell, a deserving and truly remarkable Australian woman of great intelligence, integrity, and imagination, with love, always.

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It takes perseverance, strength, and love to support someone through the writing of a book like this. First and foremost, I thank Mrs. Jean Bailey (née Russell), my mother, for everything. Outside of myself, Jean Bailey is a real expert on the transnational idea of a “dust bowl”! No doubt about it. For learning and creating this with me, I thank her with all I have, from the bottom of my heart and forever. For the silence (five-and-a-half years of it whenever required!), for reading and listening to my work, and for talking to me about growing up with American culture during the 1930s, 1940s, and 1950s in Sydney—Glenn Miller, Hollywood films, newsreel films, the whole thing, again, I can never thank her enough. For her wonderful imagination which set her on course as a dressmaker and designer and got me started too, with fabric, color, shape—and finally, stories like this one, I am grateful. I thank my twin brother Ray Bailey, musician, producer, and artist, who has taught me from our very first day at school to hanging out on Sunset Strip, FM Station in the Valley, and the Mason Jar, to his studio today, to always write every letter of every word in a different color—to see music, to hear color. I thank Ray, Lily, and Fluffy for letting me take over their house and picking me up late at night from University of California, Los Angeles (UCLA) or from Los Angeles International Airport (LAX) after long and short research trips—and for the flowers. I thank Fluffy, the little green bird I miss, whose endless chatter kept me company in the studio while I was preparing early drafts. For so much inspiration, I thank my beloved friend, the late, and very highly regarded Sydney actor and accent and dialect coach George Leppard who shared with me a love of storytelling, character transformation, film, voice,

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break and focus my attention on the beauty in the world—this enriched my work and I will *always always remember*.

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Last but not least, I want to pay tribute to two of my ancestors. One of the last and treasured conversations I ever had with my father, Kenneth John Bailey, was about Jack Bailey. Dad had told me stories of Jack Bailey all my life and now in the last days of my father's life, I found myself telling them back to him as he lay quietly. Jack was my paternal great-grandfather, Labor politician, and an Australian Workers Union (AWU) man; John (Jack) Bailey, (1871–1947), whose story I tell in the coming chapters in order to introduce some important aspects of Australian national myth.¹ He is well placed to tell that story and I thank him for speaking to me in such a personal voice as I finally trawled through his memoirs at the Mitchell Library, Sydney, thinking of my father, Ken. I could have sworn his words were written just for me. And finally, our shared great-grandfather, Thomas Boyd (1798–1885), who brought us to Australia from Dublin arriving on the “Isabella” in 1821 and who crossed many borders. Today, he is buried in the Tumut Pioneer Cemetery, along the Snowy Mountains

Highway. Thomas was selected to travel with the Hume and Hovell expedition in 1824 and became one of the first Europeans to enter what is now known as Victoria, and to see and settle in Tumut. Sixty years later, he was invited to turn “the first sod of the construction bridge across the Murray River,” at Albury and was invited to the bridge opening. Here, when the Governors of New South Wales and Victoria introduced him and made tribute to him, they described Thomas as:

the only survivor of the Hume and Hovell exploration party who crossed the Murray near Albury in 1824 and made their way to Port Phillip, thus opening up the magnificent Riverina country, and laying the foundation for the future colony of Victoria.

...When sixty years ago, Mr Boyd stood on what is now the Victorian side of the Murray, being the first white man that ever planted his feet there...

Old as he is, he may yet live to participate at the federal city the consummation of this great political event towards which the Australian colonies are thought to be rapidly tendering – Federation.²

Thomas missed Federation by only twenty-five years. I wonder what he would think of this story. I thank him for bringing me here and I am sorry for him that he was forced to leave his family, and come to Australia, and that it was so very hard for a young Irish ploughman.

NOTES

1. The spelling (Labour or Labor) has varied over time. This spelling was common in his time.
2. From an original address by Lord Augustus Loftus, *The Diplomatic Reminiscences of Lord Augustus Loftus*, 1862–1879 (London: Cassell and company, 1894) quoted in John (Jack) Bailey “Reminiscences of John Bailey,” (1947). State Library of New South Wales. Item: A2595.

CONTENTS

1	Introduction: The World Is a Dust Bowl	1
Part 1	New Deal era storytelling: a rich blend of ideas that converged in US Dust Bowl imagery	25
2	Ideas: American Exceptionalism, Social Realism, Women, Deserts, Documentary, Soil, and Civilization	27
3	Three Dust Bowl Narratives: Farmer Attitudes, Human Erosion, Women, and Natural Disaster	59
Part 2	Soil and the US Dust Bowl: American imagery converges with the Australian	103
4	Battlefields of the South-West Pacific: Australian Soil Erosion, Enemies, Graziers, and Traitors in “Dust Bowl” Imagery	105

5	The Australian Constitution and State Politics: Creeping Deserts and Human Extinction in “Dust Bowl” Warnings of Impending Doom	155
6	Dust Storms and “the Despair of the Housewife”: War-Time Wind Erosion as “Natural Disaster”	203
Part 3	Water and ‘Dust Bowls’: American imagery converges with the Australian	235
7	“Battle of the Rivers,” Battle of the Stories: Dust Bowls, Dams, TVAs, and a Snowy Mountains Scheme	237
8	Conclusion: “Just a ‘Bloody Duststorm’?”	285
	Bibliography	291
	Index	341



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ABBREVIATIONS

USA

AAA	Agricultural Adjustment Administration
CCC	Civilian Conservation Corps
FDR	Franklin Delano Roosevelt
FERA	Federal Emergency Relief Administration
FSA	Farm Security Administration
LOC	Library of Congress
NARA	National Archives and Records Administration
RA	Resettlement Administration
SCS	Soil Conservation Service
USDA	United States Department of Agriculture

AUSTRALIA: STATES AND TERRITORIES

NSW	New South Wales
NT	Northern Territory
Qld.	Queensland
SA	South Australia
Tas.	Tasmania
Vic.	Victoria
WA	Western Australia

AUSTRALIA: OTHER

ABC	Australian Broadcasting Commission
ADB	Australian Dictionary of Biography
AGNSW	Art Gallery of New South Wales
ANFB	Australian National Film Board
AWM	Australian War Memorial
CP	Country Party
CPA	Communist Party of Australia
CSIR	Council for Scientific and Industrial Research
CSIRO	Commonwealth Scientific and Industrial Research Organisation
CWA	Country Women's Association
MDBA	Murray Darling Basin Authority
MIA	Murrumbidgee Irrigation Area
MLA	Member of the Legislative Assembly
MVDL	Murray Valley Development League
MVWUA	Murrumbidgee Valley Water User's Association
NAA	National Archives of Australia
NFSA	National Film and Sound Archive, Australia
NGA	National Gallery of Australia
NLA	National Library of Australia
NSWSCS	New South Wales Soil Conservation Service
SLNSW	State Library of New South Wales
SLV	State Library of Victoria
SMH	Sydney Morning Herald
UAP	United Australia Party
VCP	Victorian Country Party

MEASUREMENTS

1000 ft is equivalent to 304.80 m
 100 miles is equivalent to 160.93400 km
 1000 acres is equivalent to 404.6863 ha

LIST OF FIGURES

Fig. 3.1	Tractors are juxtaposed against shots of army tanks in <i>The Plow that Broke the Plains</i> (Farm Security Administration, 1936). As this sequence unfolds, Lorentz' army of tractors are obscured by the dust they raise	68
Fig. 3.2	Sand drift in <i>The Plow that Broke the Plains</i> (Farm Security Administration, 1936)	68
Fig. 3.3	From Jack Glenn's short film, <i>US Dust Bowl</i> (Time Inc., 1937)	74
Fig. 3.4	Arthur Rothstein, <i>Steer Skull, South Dakota Badlands</i> (1936). Library of Congress	77
Fig. 3.5	Arthur Rothstein, <i>Farmer and Sons Walking in the Face of a Dust Storm</i>	78
Fig. 3.6	Dorothea Lange, <i>Destitute pea-pickers in California; a 32 year old mother of seven children</i>	80
Fig. 3.7	Desert contradictions. Dust Bowl refugees portrayed in Pare Lorentz' <i>The Plow that Broke the Plains</i>	87
Fig. 3.8	In <i>US Dust Bowl</i> . Once signs of American progress, "rusted and sand-blocked farm implements" are "now scrap iron in a new American Desert." Jack Glenn, <i>US Dust Bowl</i> (Time Inc., 1937) (Image, HBO Archives)	89
Fig. 3.9	A mother in tidy frock and heels picks up her child to take him in from an approaching storm as blowing sand sweeps around the corner of the house in Jack Glenn, <i>US Dust Bowl</i> (Time Inc., 1937) (Image, HBO Archives)	90
Fig. 3.10	As "new dust storms sweep Dalhart" the camera captures the figure of a man. He appears tiny as he races toward a house—away from the camera—for shelter	92

Fig. 4.1	Janette-Susan Bailey, "Australian Dust Storm locations 1943 and New South Wales land divisions based on the NSW Crown Lands Acts"	110
Fig. 4.2	"When the Soil Dies," <i>Western Mail</i> (Perth, WA), December 31, 1942	125
Fig. 4.3	Grant McIntyre, Beralli Station (J. M. Leonard image, <i>Sydney Morning Herald</i> , December 20, 1944)	128
Fig. 4.4	John B. Davies, "Prosperity can return to tragic dust-bowl," <i>Australian Women's Weekly</i> December 9, 1944	128
Fig. 4.5	<i>Drought Grips Riverina</i> (1943), National Film and Sound Archive, Australia	130
Fig. 4.6	"The nation riding on the sheeps back"? Turning national myth on its head	131
Fig. 4.7	"Ants in his Eyes." Suffering a cruel and lonely death on Australia's other "battlefield." The viewer is forced to look into the living eyes of the dying	132
Fig. 4.8	The expert portrayed as facing an erosion problem of massive proportions (J.M. Leonard image. <i>Sydney Morning Herald</i> , December 20, 1944)	133
Fig. 4.9	A review of Jock Pick's <i>Australia's Dying Heart</i> showed the painting, <i>Dust Bowl</i> (1933) by Texan artist, Alexandre Hogue in "A MAN-MADE DESERT," <i>Western Mail</i> (Perth, WA), February 4, 1943	136
Fig. 5.1	<i>Above</i> : Taking Part in the modern American exodus. <i>Below</i> : Migrants from Oklahoma to California. Images by Dorothea Lange in Fred Alexander, "Human Erosion," <i>West Australian</i> , March 1940	164
Fig. 5.2	The banks of the Darling River in western New South Wales	168
Fig. 5.3	"Landscape of death," in "Need we fall as Rome Did?" <i>Pix</i> , July 27, 1946	169
Fig. 5.4	Almost identical to the US imagery (Fig. 3.3). Australian "dust bowl" refugees in Cinesound Productions, <i>Drought Grips Riverina</i> (1943), National Film and Sound Archive, Australia	174
Fig. 5.5	Almost identical to US Dust Bowl imagery (Fig. 3.3). Australian "dust bowl" refugees in Cinesound Productions, <i>Drought Grips Riverina</i> (1943), National Film and Sound Archive, Australia	174
Fig. 5.6	<i>Above</i> : "The desert has come up from the good earth and stands at the settler's door." <i>Below</i> : "Death is in the air."	176

Fig. 5.7	Communist Party of Australia, <i>Victoria in Peril from Drought, Fires and Premier Dunstan</i> (Image courtesy Monash University Library, Rare Books Collection)	187
Fig. 6.1	“Women’s courage shines in stark film,” <i>Australian Women’s Weekly</i> , 1940. Ma Joad is seen in the foreground in a scene from Zanuck’s film version of <i>The Grapes of Wrath</i>	205
Fig. 6.2	The print in this 1945 newspaper story is very dark, but shows an Australian housewife in her “very best heels,” broom in hand, from “AUSTRALIA’S DUST BOWL,” Agricultural Section, Western Mail (Perth, WA), August 2, 1945	213
Fig. 6.3	George. D. Butterworth, President, Hay (NSW) Chamber of Commerce, A dust storm descends upon Hay, in the New South Wales Riverina	214
Fig. 6.4	Janette-Susan Bailey, “‘Dust Bowl’ imagery: wind erosion events [dust storms, sand drift] generated offsite and onsite: as located in New South Wales and Victoria by the Australian media, 1939–1947,” Sydney, 2012	215
Fig. 7.1	Janette Susan Bailey, “Snowy, Murrumbidgee, Murray 1946	238
Fig. 7.2	“Now it is part of a potential dust bowl.” Airborne dust captured on film creates a bleak grey haze in imagery suggesting salvation urgently needed for the nation’s Riverina food-bowl	248
Fig. 7.3	Ken Hall’s image of a scaled-down model of Woronora Dam as seen in Cinesound Productions, <i>Australia is Developing a Dust Bowl</i> (1943). National Film and Sound Archive, Australia	249
Fig. 7.4	Contrasting images in Mervyn Weston, “The ‘River Authorities’ Issue Comes to a Head in USA,” <i>Argus</i> , February 9, 1946.	257
Fig. 7.5	The Tennessee and the Murray Valleys in the Melbourne <i>Argus</i> , 1945	258
Fig. 7.6	“These are the problems of the Valley.” In John Heyer’s <i>The Valley is Ours</i> , long shadows and the skull of an Australian merino ram create a visual reference to Lorentz and to Arthur Rothstein’s Steer Skull (Fig. 3.4) and suggest quite a problem. National Film and Sound Archive, Australia	263
Fig. 7.7	<i>Top</i> : Industrial sounds are part of this imagery suggesting an organic machine-like nature in Heyer’s <i>The Valley is Ours</i>	

	1948, National Film and Sound Archive, Australia. Echoes of Lorentz' TVA imagery seen at <i>bottom</i> in <i>The River</i> (Farm Security Administration, 1937), NARA	265
Fig. 7.8	Closing imagery from John Heyer's <i>The Valley is Ours</i> , 1948, National Film and Sound Archive, Australia (<i>top</i>) is almost identical to imagery to that seen at <i>bottom</i> in Lorentz' <i>The River</i> , Farm Security Administration, 1937 (NARA)	266

Introduction: The World Is a Dust Bowl

The world is a “dust bowl.” Or so it seemed in the 1930s and 1940s, when official and unofficial reports, films, photographs, newspaper stories, illustrated books and magazines, and radio programs around the world described wind erosion and water erosion of the soil as a menace to civilization creating “dust bowls” that could bring national downfall, even human extinction without effective conservation programs in place. This was not the first time there had ever been heightened concern over severe soil erosion. However, “dust bowl” stories were inspired by the ecological catastrophe of the US Dust Bowl, which during the 1930s, produced some of the worst dust storms in recorded history. With it came an increasing concern over the problem of accelerated soil erosion and “dust bowl” stories. These were generated by New Deal federal agencies focused on innovative social reform under the leadership of Franklin D. Roosevelt (FDR), President from 1933 to 1945.¹ It was from 1931 that economic, environmental, social, and technological forces combined to create severe soil erosion, leading to frequent severe dust storms across 97 million acres (over 39 million hectares) of the US Great Plains. The time, the place, and the phenomenon have been described as the Dust Bowl. The Soil Conservation Service (SCS) defined the Dust Bowl as the most persistent area of dust storms, which after 1934 was on the southern Great Plains, including areas of south-eastern Colorado, north-eastern New Mexico, the northern two-thirds of the Texas Panhandle, the western third of Kansas, and the Oklahoma Panhandle. Dust storms in this region

continued until 1941, peaking between 1934 and 1938 with “Black Sunday,” occurring on April 14, 1935.² These kinds of drought and erosion conditions have colored both America and Australia’s histories. And while the Dust Bowl describes a time, a place, and a phenomenon, severe drought and wind erosion events of the Depression era on the southern Great Plains, the aim here is not a comparative analysis of these kinds of environmental conditions, nor is the focus on science, technology, or policy-making.³ As historians such as Linda Gordon have explained, the Dust Bowl is a defining US national mythology.⁴ In light of this, the focus of the coming chapters is cultural and transnational, with attention paid to the political forces behind the construction of stories. These chapters describe the “dust bowl” as an idea, iconic, and born of a time and place in the American experience that generated a major media event: its print, film, and broadcast media storytelling endures, filling the archives, museums, and libraries of the USA. This Dust Bowl imagery was adopted and adapted around the world, including in Australia.

“Dust bowl” storytelling was part of a broader concern about the threat of a “soil menace” voiced during the early twentieth century. The “soil menace” idea described the rapid loss of soil resources being washed away by water or blown away by the wind at an accelerated rate. As early as 1928, US soil conservationist Hugh Bennett sounded a warning. In a pamphlet for the US Department of Agriculture (USDA), he described soil erosion as “a national menace,” while stories of the time also described it as a menace to the planet and all of civilization.⁵

Stories describing the US Dust Bowl warned of a threat around the world of similar “dust bowls” (or “Saharas”) due to soil neglect. They formed part of a group of soil menace stories describing conditions in countries including the USA, Australia, Russia, Scotland, Canada, South Africa, East Africa, New Zealand, and China. The soil menace narrative described a condition but it did not grow out of the story of a specific place and time. US Dust Bowl narratives were different. They grew out of events located specifically in one place—a region of the USA—they usually described wind and not water erosion, they most often attributed wind erosion to human action, and they described a time in history—the Depression decade of the 1930s.

The US Dust Bowl generated particularly powerful imagery portraying wind erosion, and as a result, an enduring American story. While government reports described the Dust Bowl on the southern Great Plains, they illustrated their stories with dramatic images of gigantic dust clouds

engulfing homesteads in the region while unofficial reports of the time often located “dust bowls” well beyond these borders. “Dust Bowls” might be described in the Dakotas to the north, farther east in the Midwest, or any area stricken by drought or severe wind erosion—a wide-ranging area where in the first half of the decade all but two US states had suffered from a period of drought.⁶ At the same time, a “dust bowl” might be described as any region within the USA where not only wind but also water had eroded the land leaving behind deep gullies, while “dust bowls” soon came to be described in places beyond US borders. Dust Bowl imagery circulated around the world and found currency beyond the Depression decade, including in Australia. “Dust bowls” became an early twentieth-century environmental narrative in some ways similar in nature, and in scope, to that of climate change storytelling produced by the print, film, Internet, and broadcast radio media of today⁷: there were grave warnings of a time limit with commentators giving the USA only “twenty years grace.”⁸ There was a “bewildering mass of data” available on the topic.⁹ And the soil menace and “dust bowls” had their believers and non-believers. Either you had “realized” its existence or you had not—yet.¹⁰

The Dust Bowl triggered a major national and international media event bolstered by the New Deal’s innovative social reform and conservation agenda from 1935 to 1938. The vast body of print, film, and broadcast media imagery generated endures in the USA because it is an expression of ideas about American identity—the national myth of American exceptionalism and its narratives of the frontier, the yeoman dream, American optimism, rugged individualism, the American West, westward migration, and a Great American Desert. Dust Bowl stories have endured due to the impacts of American social realism, concepts such as the photo-story, documentary films, broadcast radio forums, and documentary photography, all of which helped to circulate Dust Bowl imagery through the mass media to the nation and around the world, including to Australia. The focus here will be where in Dust Bowl imagery, national myth converged with Western ideas of progress, Western conceptualizations of deserts, gardens, and technology, gendered ideas about civilization and nature, along with New Deal era ideas about social reform, the conservation of natural resources and ecology, and finally, beliefs about photographic truth and the role of the mass media in contributing to democracy and public education. Converging in various combinations, these ideas took form as a popular film, print, broadcast radio, rhetorical, artistic, and photographic product of the American imagination.

The bulk of existing American historiography on the US Dust Bowl decade does not give the impression that Americans (later Australians) constructed and fortified their national story about soil conservation with intergenerational and intra-generational narratives that spanned centuries, the globe, even the Universe.¹¹ But they did.¹² In the early stages of this project in the first months of 2010, I encountered a huge collection of just this kind of imagery. I started writing about “Deserts, Old World civilizations and New World Dust Bowls,” when I found that in their soil menace narratives American storytellers described ancient civilizations, blending stories of Old-World soil erosion with those of floods and dust storms washing or blowing away topsoil across the New World—Canada, South Africa, and, particularly relevant to this study, Australia.¹³ This group of stories demonstrated cultural connections linking Australia with a group of US, British, and Canadian narratives on international soil erosion, the fall of ancient civilizations to desert, and the contemporary international concern over “dust bowls”—among this group of authors, film-makers, and artists were Britons G.V. Jacks and Robert O. Whyte, authors of a 1939 international survey of soil erosion, and E.P. Stebbing. The Australians in this group included popular writer Ion L. Idriess, New South Wales SCS director Sam Clayton, New South Wales politician William McKell, and film-makers John Heyer and Ken Hall, while the Canadians included documentary film-makers J. Booth Scott and Evelyn Spice Cherry. Among the Americans who created often beautifully crafted, intergenerational and intra-generational imagery were US film-makers Pare Lorentz, Hugh Bennett, Walter Clay Lowdermilk, Texan artist Alexandre Hogue, and American writers such as Stuart Chase, Russell Lord, and Paul Sears. Their imagery described human impacts upon the soil. They contrasted the short lifetime of Western civilizations, particularly in the New World, against the long stretch of Earth’s geological time. They did this to portray the soil menace as a contemporary global threat and their stories described the US Dust Bowl.¹⁴

LOOKING AT DUST BOWL IMAGERY THROUGH A TRANSNATIONAL AND A CULTURAL LENS

To investigate the transfer of “dust bowl” imagery between the USA and Australia, a combined cultural and transnational approach was much needed. The cultural perspective was needed because the “dust bowl” stories of both nations were constructed and circulated right across a range of

media and by using the power of aesthetic—a knowledge of character, color, voice, verse, light, sound, space, music, framing, and costume to do so. New Dealer storytellers understood the power of aesthetic and symbolism particularly well. They used this knowledge to develop a storytelling strategy to promote their national soil conservation program.¹⁵ The stories they created described soil erosion in terms of world history as well as the past, present, and future of civilizations, while to create them they drew together a wide range of ideas often expressed through the use of symbolism.

In turn, this imagery was taken up by Australians during World War Two (1939–1945) and the early post-war years. Australian journalists, photographers, artists, broadcasters, and popular authors also used “dust bowl” imagery to describe soil erosion in terms of world history. They were equally passionate about the power of aesthetic and symbolism to raise the alarm about soil erosion, while many also recognized the power of “dust bowl” imagery to draw attention to other issues.

In the course of this research on the Australian side, I recovered a vast collection of images, as well as film, literary, and broadcast media imagery describing a “dust bowl.” To investigate this collection, not only a broad cultural perspective but also a transnational approach was needed.¹⁶ The transnational perspective was essential because camera, sound, and other technologies allowed audiences of “dust bowl” stories to imagine crossing both physical boundaries and decades. This created “different emotional experiences of time,” particularly relevant in the Australian case where the “dust bowl” idea evolved after the American experience.¹⁷

A transnational approach was also important because the meanings drawn from, and invested in the “dust bowl” concept were often very different in Australia and this was not only because of drought and environmental conditions unique to the Australian continent. The production of “dust bowl” imagery in Australia was influenced by that nation’s own national myths, stories, and ideas, and by war-time and early post-war contexts. It was particularly influenced by state and federal politics. And unlike the US case, there were state programs but there was no national soil conservation program, nor any corresponding media storytelling strategy to support such a vision.

Reflecting this, the focus in the following chapters will be not only on American ideas but also on the Australian Commonwealth Government, the Australian states of New South Wales and Victoria located in south-eastern Australia, and the border between these two states.¹⁸ As a colony,

New South Wales was established at Sydney Cove in Port Jackson (Sydney Harbour) in 1788. At its southern border was the Port Phillip District (later the Colony and then state of Victoria), governed by New South Wales until 1851. In 1851 it separated from New South Wales, a Victorian constitution was formed in 1854 and its Parliament in 1855, with the new colony named after Queen Victoria. The move to separate did not come without controversy, while the state border, its corresponding colonial politics—and after federation in 1901—its state politics, have been the center of much environmental debate since. This was the case during World War Two and the early post-war period, when federation and the Australian constitution were just forty years old and “dust bowl” stories emerged in the print, film, and broadcast media.

Although a vast body of storytelling of “dust bowl” imagery was created by Australians during World War Two, a “dust bowl” has never been remembered as part of any Australian national narrative established in the memory of specific Australian places, times, or events. Unlike the US case, it has never been said to describe the character of the Australian nation. Australia has its own national mythologies. However, the “dust bowl” imagery created in the Australian popular media of this period is at least one place where US national narratives converged with Australian national myths during the 1940s. On the Australian side, this was very much a nationalistic use of transnational imagery. As the final chapter aims to show, US referents were used to bolster the meaning of Australian national myths and ideas in “dust bowl” stories set to an Australian nationalistic purpose. War-time politicians were determined to use transnational imagery as a storytelling strategy to drive debate, gain traction on political issues, and bolster their credentials in pursuit of a nation-building post-war conservation scheme for Australia. The historiography needed to locate, record, and explain the vast collection of “dust bowl” imagery I found buried in the Australian archives did not exist and this is partly to do with the puzzle this whole collection of transnational “dust bowl” imagery presented when I first encountered it.

The US Dust Bowl occurred in the 1930s. South-eastern Australians suffered severe drought and wind erosion conditions across a similar period. Soil conservationists were well aware of the US Dust Bowl problem, New Deal soil conservation initiatives, and the huge media event generated by both. The case of the US Dust Bowl was well known to Australian experts concerned with severe soil erosion in Australia during

the 1930s. The print, film, and broadcast media of that decade portrayed the Dust Bowl as an American tragedy and one Australians should take heed of. However, the idea of a specifically *Australian* “dust bowl” did not automatically gain currency in Australia. There was a time lapse in the transnational transfer of “dust bowl” imagery interpreted in this way. I found that it took hold in the print, film, and broadcast media of the following decade. The transfer of this imagery into the World War Two context raised political and cultural questions that could not be explained simply by comparing the severe drought and erosion conditions of both countries in the 1930s. Nor could it be explained by describing drought and erosion conditions that had taken hold in Australia by the beginning of the war.

Despite the long history of drought and erosion conditions in south-eastern Australia, and the strong US connections, no serious study had yet been achieved by scholars of the USA or Australia describing the vast collection I unearthed in early 2010, with many of these films and radio programs still in a preservation state. In addition, within this collection I found one image of a dam that had been cut and pasted, sometimes rather awkwardly, into “dust bowl” film footage of the 1940s. During those first few months of 2010 digging in the state and national archives, I found stories that centered squarely on the New South Wales/Victorian state border. I found narratives describing women that raised questions not only of gender perceptions but also of ideas about weather and natural and cultural disaster. And I discovered a collection of articles by a large group of Australian journalists, among them, Mervyn Weston, who traveled to the USA and wrote about the dams of the Bureau of Reclamation, the TVA, the Dust Bowl, Snowy River waters, and soil erosion. I began to trace the politics behind this entire set of imagery and the questions it raised.

The questions presented by this collection of imagery are a reflection of the fact that, as historian of the USA and Australia, Ian Tyrrell has observed: “American history has been given little attention in the vast and influential area of environmental history practiced in Australia,” where US developments have primarily been observed “casually and imperfectly from a distance.”¹⁹ By illuminating the place where Australian and US national narratives converged in “dust bowl” imagery, this work sets out to begin to address these questions and at the same time, make a contribution to the expansion of work on US/Australian transnational connections that traverse the Pacific.

The body of existing work in this area includes Stephen Powell's "Mothering, Husbandry and the State," a section of his doctoral thesis describing the 1930s establishment of soil conservation services within a US/Australian exchange of ideas, Donald Meinig's 1962 cultural landscape study, *On the Margins of the Good Earth*, Kirsty Douglas' "For the Sake of a Little Grass," and David Goodman's study of the Californian and the Australian goldfields of the 1850s, *Gold Seeking*.²⁰ Ian Tyrrell's *True Gardens of the Gods* is a transnational environmental history which investigates garden imagery—the circulating idea or dream of transforming deserts to irrigated landscapes. His focus is on activity both in and between the US state of California and Australia and takes this investigation up to the 1930s. Cultural studies that clearly show what transnational environmental imaginings of the past actually looked like or sounded like in Australian comparative or transnational contexts, however, are harder to find.

An exception is art historian Erika Esau's history of the circulation between California and Australia of commercial art, design, and architectural styles. In *Images of the Pacific Rim: Australia and California, 1850–1935*, Esau brilliantly illustrates how a transnational idea from the past can be seen today. She recovers a collection of images from posters to journals and fruit box labels that show Eucalypts and flowering gums in Californian scenes that look very much like they are set in Australia. She also shows Californian architecture in Australia (such as the Californian Bungalow which can be seen all around Sydney).²¹ We see images of the landscape that might be in California, or perhaps in Australia—with transnational images, as Esau makes perfectly clear, it is very hard to tell.²² Ian Tyrrell has described Esau's work as "the first to focus squarely on visual representations of Australian and Californian landscapes and culture in transnational perspective," adding that it contributes "to a growing understanding of these cultural connections."²³ To contribute to an expansion of this cultural/transnational perspective, I have recently published the journal articles "'Dust Bowls', TVAs and Snowy River Waters" and "War-time Political Ambition behind one Image of a Dam in *Australia is Developing a Dust Bowl* (1943)."²⁴ The aim of the coming chapters is to expand the exploration of these themes further still, into the World War Two and early post-war context. The cultural and transnational perspective simultaneously aims to highlight the fact that American ideas such as that of a "dust bowl" were not simply adopted whole in Australia. They were "adapted and employed at a certain time, and to suit local circumstances and ambitions."²⁵

CULTURAL HISTORY, ENVIRONMENTAL HISTORY, WOMEN, POLITICS, WAR, AND SOIL

To address the cultural, political, and transnational questions raised by the vast collection of “dust bowl” imagery I encountered in the Australian archives, the coming chapters needed to draw new insights from a wide range of areas of historical scholarship. Because of this, I can mention only the names of a few scholars whose knowledge helped to shape this approach. A full reference to every work consulted can be found in the bibliography, while the influence of individual scholars from cultural and environmental fields in the USA and Australia can also be understood by consulting the text, and the endnotes.²⁶

To address the questions this imagery raises, all chapters have engaged with, and are grounded in, existing scholarship on Western ideas, New Deal ideas and the US Dust Bowl, the American West, and conservation ideas in the US context. The final chapter equally draws on histories describing ideas about water conservation in the USA, the work of the US Bureau of Reclamation, and the concept of the TVA. Likewise, to address the puzzle presented by the Australian imagery, I consulted works that describe economic Depression in the USA, the history of the New Deal, and the presidential career of FDR. All of this work formed a strong and vital foundation upon which to build the study of US-born ideas that unfolds in all the coming chapters. A small selection from among the scholars who created this work includes William Cronon, Donald Worster, William Leuchtenburg and David Kennedy, Sarah Phillips, Paul Sutter, Neil Maher, Richard Lowitt, Patricia Limerick, Richard White, and Douglas Hurt.

To describe the “dust bowl” as an idea born of the American experience, in Chap. 2, I consulted widely histories describing national myth, environmental mythology and folklore, and ideas about women. Among historians whose work I consulted were Henry Nash Smith, Brad Lookingbill, Ian Tyrrell, Deborah L. Madsen, Wanda Corn, Nancy C. Unger, and Clarence Glacken. To understand the way the iconic “dust bowl” idea was brought to life through a major US media event, I surveyed works on American photography, popular literature, prints, painting, films, and radio generated by or associated with the New Deal, the US Dust Bowl, and Dust Bowl migration. From among a wide range of influential writing was that of David Goodman, Linda Gordon, Lisa Dorrill, Mark Andrew White, Lea Rosson-DeLong, Stu Cohen, Susie Kalil, Milton Meltzer, and, importantly, Finis Dunaway. Where Chap. 6 focuses on housewives and

natural or cultural disaster, I drew on the work of historians including Tom Griffiths, Christof Mauch, and Christian Pfister. Soil and ideas is an area of cultural–environmental history that has received very little attention and it is the UN International Year of Soils as I write and because of this I want to mention the influence of Kate B. Showers, Lydie Chapuis-Lardy, and Fiorenzo Ugolini on art and soil and N. Patzel’s captivating and rare account of the history of gendered ideas about soil.

Archival research formed the foundation of the Australian side. But this being a transnational study, to understand the contexts that gave the “dust bowl” idea its potency, it was necessary to draw on political histories describing the nation and the states of New South Wales and Victoria as well as the Pacific war, and work on Australian nationalism by a range of authors such as Marilyn Lake, James Curran, Chris Dixon, and Sean Brawley. Some early but valuable comparative US/Australian works included those of University of Melbourne historians Brian Fitzpatrick and Fred Alexander, published in 1947, and Keith O. Campbell’s 1948 work describing the establishment of soil conservation agencies in the various Australian states.

To draw wind erosion to the center of this story, I drew on environmental histories dealing with soil, ecology, weather and climate, water conservation, and the Snowy River. The writing of a small group of historians making strong cultural connections included Neville Nicholls, Richard Grove, and Tim Sherratt. Importantly, Tim Bonyhady and John Mulvaney have made links between soil erosion of the period, the print media, and Australian modern art. To understand the transnational circulation of the “dust bowl” idea, it was necessary to survey cultural histories describing Australian modern art, radio, film, and print media imagery. Again I hate to leave so many important authors out here, but a handful of these influences included Geoffrey Serle, Joy Damousi, Ina Bertrand and Diane Collins, Deanne Williams, Ray Edmondson, and Helen Ennis. On water conservation, the land and ecology, they included Joseph M. Powell, Tim Sherratt, Tom Griffiths, Libby Robin, R. L. Heathcoate, Claire Miller, Lionel Wigmore and for transnational perspectives, Ian Tyrrell.

However, despite all of this work, the historical, political and cultural links between the USA and Australia and the influences of the “dust bowl” idea, neither US nor Australian historians have documented the story of “dust bowl” imagery, its creators, or the political forces driving its proliferation in media narratives of World War Two. This is most likely because one would expect to find the influence of the US Dust Bowl media event

to have been most potent during the same decade the Dust Bowl occurred. This was not the case. The Australian media adoption of the idea was not immediate or inevitable. It occurred instead in the following decade of the 1940s where not only environmental but also war-time political conditions gave “dust bowl” imagery its strongest currency. As a result of this, a few historians in Australia have taken a cursory glance in the direction of the Dust Bowl. But that is all. They have applied the idea retrospectively, momentarily attempting to draw parallels or comparisons to their continent’s own environmental history.²⁷ There is however a big difference between this retrospective application of the idea of a “dust bowl” to the Australian story, and the recovery of an authentic record of that idea from the past.

To attempt to impose the idea of a “dust bowl” retrospectively, outside of the cultural and political context that conceived of it and promoted it, is to risk misunderstanding the reality that brought that idea to life, and made it either powerful or impotent in its own time and beyond. To avoid this, a transnational focus was needed, one that could delve deep, look beyond a comparison of conditions, look beyond the 1930s, and locate the nation’s history within the context of “a range of processes that transcend national boundaries.”²⁸ A 2013 feature in *History Australia* called for this kind of writing, the broad consensus confirming that more historical writing was needed that placed the national and the transnational side by side. This was certainly true for a study of the “dust bowl” idea in Australia.

Not only this but a cultural approach was also needed to distinguish between the Dust Bowl (treated as wind erosion and drought conditions) and the idea of a “dust bowl”—a concept widely publicized through a major print, film, and broadcast media event. This approach was important because the Dust Bowl is a US national story. It is connected to ideas about the American West and pioneering on the Plains. In the 1940s, many Australians were familiar with the Dust Bowl concept. It was an idea with political currency, it received wide publicity across the film, print, and broadcast media, and was very influential at the time. But the powerful influence of Dust Bowl imagery during war-time Australia has largely been forgotten.

The US Dust Bowl story is not familiar to the wider general Australian public. There have been some media references to “dust bowls” in decades following the 1940s. There probably always will be, particularly in the rural press, now and then, when there is dryness, dust, severe drought, political debates over water or a folklore that embraces the memory of such events.²⁹ However, a “dust bowl” does not form part of

any Australian national mythology at all. On the other hand, the Snowy River and the Snowy Scheme have formed part of a powerful Australian national mythology, as has the Anzac story or sheep mythology. Grounded in the memory of specific people, places, events, and time frames, over and over again, these stories have been said to describe the character of the nation. Australians did employ American ideas during World War Two, including that of a “dust bowl.” But as the final chapter shows, they did this in order to restage a potent set of Australian myths, within the drama of post-war nation-building.

ENVIRONMENTAL IDEAS OF THE PAST: WHAT DO THEY LOOK LIKE?

The entire collection of print, film, and broadcast media “dust bowl” imagery unearthed in the process of this research suggested that not only a transnational perspective was needed. A cultural approach was also needed to identify, and prise apart ready for discussion, aspects of American and Australian myths and ideas that were locked together in “dust bowl” imagery—in one photograph, one newspaper article, one argument in a radio forum, or one film sequence.³⁰ The coming chapters describe the kinds of experiences Australian storytellers wanted to evoke with “dust bowl” imagery, and how they did this by blending a combination of US and Australian national myths and ideas into their stories. It aims to shed light on the political forces behind the making of that dramatic experience, and it aims to do this by retrieving from the archives, a material record of imagery that shows us what transnational environmental ideas looked like to political backers, producers, and audiences of the past.

The cultural approach taken here addresses the fact that audiences exposed to these stories witnessed much more than just the sight of “dust bowl” images. They experienced imagery in all of its possible manifestations. What is meant by imagery? Imagery is about meaning and it is shaped by an individual’s perspective as well as the wider social, political, and environmental contexts of their time. When I was a child, if I saw a picture of a polar bear, I thought about the familiar blue and white wrapper of a cool lemonade flavored ice-block with a polar bear pictured on it, and I thought of playing at the beach all day. Today, I think of climate change. The image is the same. The imagery and the experience evoked is totally different.

US and Australian storytellers knew this. To gain the attention of their publics, they used the aesthetic qualities of photography, music, film, or

literature to evoke an experience of “dust bowls.” To describe how they did this, as part of my research method I utilized some of the tools of rhetorical—or voice analysis, dramaturgical analysis, and poetic or literary analysis to examine all aspects of the dramaturgical sign system used to evoke “dust bowls.”³¹ I found that audiences experienced “dust bowls” through emotive music and dramatic sound effects. They saw photographic and cinematic lighting, the arrangement of images in relation to one another on the page or on screen, and color and black-and-white images. They experienced “dust bowls” through photographic and cinematic framing and composition—or “the viewpoint of the camera.”³² They were moved by poetic, dramatic, or literary device such as characterization, personification, or film narration in an American or Australian accent.³³ They experienced the power of syntax, and printed on the page, the visual patterns of words created by poets, to achieve tension and relief. Audiences experienced “dust bowls” through textual or rhetorical rhyme and repetition, the slow or fast tempo of a speech, or the adoption of literary genres, most commonly, tragedy. From the 1930s too, the “*vehicles of metaphor and similes*” had come to be treated as “a major factor in poetic meaning, structure and effect,” and these devices were also employed. Even the choice of environment in which to present a speech or a film or hold a meeting—such as in the middle of a dust storm—aimed to impact on the imagination. Like the image of a polar bear (and the coolness of temperature, lemonade taste, and summer days it evoked), these elements are said to invoke “mental pictures” in their audience and sometimes an imagined experience of sound, smell, touch, physical sensation—or a combination of these.³⁴

The many strategies described here, including the use of sound or framing in films, were born of the imaginations of storytellers—and they often turned to well-worn national symbols and trusted myths in the hope of invoking powerful responses. An image of a sandhill, the long shadow of a bleached skull, a thin woman or a fat woman, the repeated sound of a drum, or the sound of water, barbed wire, the clang of iron on iron, the face of a dying animal, the firm voice and gaze of a conservation farmer looking right down the barrel of a camera, or a word choice describing “despoiled” lands, or “the Jap” enemy—storytellers knew what all these signified to Australians and Americans of their day.³⁵

Some storytellers shocked audiences. Others used emotional pull to generate empathy for their subject, be that an ailing grassland, dying soil, or an impoverished woman, and most turned to aesthetic strategies.

The subject of a soil conservation propaganda film or painting might be tragic, but storytellers knew that if the portrayal or delivery was aesthetically pleasing, it would leave a lasting impression on the imagination of their audience. The aim of all of this imagery—not just images but all the elements I have described, including syntax or sound—was to capture and hold a nation’s attention, to convey to them a sense of the “truth” of a matter, to enlist their interest, and perhaps even inspire political action. However, there is more to “dust bowl” stories than the way they have been told. There are of course, the storytellers themselves.

During World War Two, Australian soil conservationists, broadcasters, writers, photographers, and artists borrowed from the work of Bennett, Lorentz, Steinbeck, and others to construct imagery that would gain them traction on political issues. Many of these storytellers tramped across Australia’s drought-stricken south-east recording the human experience of drought and soil erosion. They faced hostile locals, confronted farmers and graziers, satirized politicians who denied a “dust bowl,” celebrated those who did not, comforted housewives, or recorded their own trials with domestic dust, while some lobbied government representatives and many, such as Noel Adams, also served as war correspondents in locations around the world. Some among this group of storytellers are known. Very few are well remembered, if at all, and even fewer are known outside of Australia, while as a vast collection, the “dust bowl” storytelling they constructed has been forgotten, with much of it literally buried in the archives, still in a preservation state until now.

The following chapters recover a previously undocumented collection of war-time storytelling. At the same time they recover ‘at least’ a trace of the forgotten stories of the men and women who created it. Each one of this group of Australian reporters and their editors, photographers, and artists wrestled the idea of a “dust bowl,” and its complex, often contradictory narrative possibilities, into stories and many drew together “dust bowl” and water conservation imagery. Some lived and worked in eroded regions to create ground-breaking reports. Others traveled to the USA to witness the Dust Bowl, the TVA and Bureau of Reclamation dams for themselves, and for the nation. Some simply wrote of current conservation issues as they penned accounts of often very public lives. Either way, most knew of the US Dust Bowl and were inspired by the storytelling it had generated around the world. From among them, the coming chapters re-introduce artists, politicians, writers, and film-makers into the context of transnational “dust bowl” imagery, among them, Sam Clayton, Mary Gilmore, Russell Drysdale, Arthur Calwell, Fred Alexander, William

McKell, John (Jack) Bailey, Keith Newman, G. Vernon Lawrence, J.M. Leonard, Elyne Mitchell, Albert Dunstan, and John Heyer, and to recover some of his films, forgotten in the archives until now, Cinesound producer Ken G. Hall.

However fleetingly, the coming chapters also introduce and recover the stories of a number of researchers, popular or political writers, photographers, and journalists who contributed to this collection. They include Noel Beadle, Fred R.V. Timbury, Hazel Hogan, Howard S. Palmer, Noel Adams, Bruce Miller, Bill Moore, Crayton Burns, Mervyn Weston, Donald F. Thomson, Geoffrey Thompson, Arthur G. Lowndes, and among the subjects of these stories, Fred and Mrs. Hofmaier and Mr. and Mrs. Houen. In the limited space of the coming pages, I can offer only the briefest of glimpses into the lives and achievements of each. But what I have tried to do is to draw attention to the *collection* of environmental storytelling that together their work constitutes. I hope that this shows the relevance of the work undertaken by each. The collection of stories they created dramatized a long-term vision for Australia's soil, even during World War Two and the early post-war period when the long-term career goals, personal dreams, and visions of all had been put on hold indefinitely, never to be realized by some. I have brought their work together with the earnest hope that each of their talents and efforts will be investigated further, valued today for the way they bring transnational environmental ideas from the past to life, and above all remembered.

Chapter 2 is called, "Ideas: American exceptionalism, social realism, women, deserts, documentary, soil, and civilization." It describes how in the USA, New Deal era conservationists constructed Dust Bowl narratives to raise an urgent national alarm and promote soil conservation. It shows how, bolstered by a New Deal social reform agenda, their stories interpreted a group of ideas—these included national and environmental myths, theories, hopes, and dreams ranging from gender themes to perceptions of desert and social realism in the arts. Chapter 2, "Ideas: American Exceptionalism, Social Realism, Women, Deserts, Documentary, Soil, and Civilization," aims to provide the rich frame works needed as a base upon which to build discussion in the following chapters.

Chapter 3, "Three Dust Bowl narratives: farmer attitudes, human erosion, women, and natural disaster," describes how New Deal era conservationists brought this broad set of ideas to life in three US Dust Bowl narratives that endure as part of the national mythology. It shows how, strengthened by developments such as the photo-essay and documentary

film, Americans constructed three compelling narratives, centered on ideas about farmer immorality, soil, and human extinction and civilization—in terms of women coping with “natural disaster.” Described as central to all this is a narrative of once-mighty civilizations fallen to soil neglect. The chapter describes these three narratives because they were so strongly and persuasively developed in the USA and so widely circulating, that they found currency in Australia in the following decade.

Chapter 4 is entitled “Battlefields of the south-west Pacific: soil erosion, enemies, graziers, and traitors in Australian ‘dust bowl’ imagery.” This chapter introduces the Australian World War Two context. The focus is on soil conservation and erosion issues in the state of New South Wales. US Dust Bowl imagery was centered on the overplowing wheat farmer, not the overstocking sheep farmer (grazier). Nonetheless, this chapter shows how American referents were used to construct warnings of a US-style “dust bowl” in Australia. It describes how in their “dust bowl” narratives, Australian soil conservationists drew on US knowledge, New Deal rhetoric, and US Dust Bowl imagery to strengthen re-interpretations of Australian myths—such as the “nation rides on the sheep’s back” and Anzac. In turn, this imagery was used to attack the overstocking grazier of New South Wales in dire warnings of a “dust bowl” catastrophe awaiting the Australian nation. As do all the coming chapters, this one describes films, political speeches, radio broadcasts, and literature aiming to give some sense of the influence of those who encouraged, constructed, and circulated “dust bowl” imagery. It finally describes the backlash against these dire warnings, and the impacts of the “dust bowl” idea in encouraging new conservation attitudes.

Chapter 5 is called “The Australian constitution and state politics: creeping deserts and human extinction in ‘Dust bowl’ warnings of impending doom.” Beginning with *The Grapes of Wrath*, this chapter revisits the iconic US Dust Bowl images and texts, but this time through the eyes of Australian contemporaries. It shows how Australian storytellers drew on US experiences, knowledge, and arguments to construct a national “dust bowl” narrative for Australia and in turn a national soil service inspired by the achievements of the US SCS. In this imagery, repeated references to the US Dust Bowl and the Dust Bowl refugee converged with Australian ideas about “creeping deserts,” federalism, and state and rural politics. But as this chapter shows, particularly under the influence of Albert Dunstan, the Premier of the Australian state of Victoria, state politics frustrated this national vision.

Chapter 6, “Dust Storms and ‘the despair of the housewife’: war-time wind erosion as ‘natural disaster,’” explains how journalists responded to the Australian “dust bowl” stories that described impending doom and ascribed soil erosion to human culpability. It describes how writers constructed both negative and positive images of wind erosion’s impacts upon women, and how in turn, these struggled for dominance in popular narratives. Among the stories of other women, the chapter introduces Hazel Hogan who lived in the Mallee wheatlands of northern Victoria. Her widely published writing reflects the tensions that existed within Dust Bowl narratives at the time regarding soil erosion as natural disaster or a human-made disaster, and the place of women as enduring figures, as victims of soil erosion, or as both. The discussion examines these tensions. It investigates how storytellers combined ingrained ideas about women, with actual observations of environmental conditions, and describes the impact of this imagery on attempts to promote soil conservation.

Chapter 7, “‘Battle of the rivers,’ battle of the stories: dust bowls, dams, TVAs, and a Snowy Mountains Scheme,” introduces a fourth transnational narrative. This narrative emerged in Australia during a decade of fierce debate between New South Wales and Victoria over a post-war, nation-building water conservation scheme to utilize the waters of the iconic Snowy River. Constructed by journalists, popular writers, and filmmakers including Ken G. Hall and John Heyer, this imagery drew “dust bowls” into contrast with the nation-building grandeur of the dams of US Bureau of Reclamation and the iconic TVA again, defining US national narratives. As this chapter aims to show, this vast body of storytelling did not lead to an enduring national “dust bowl” story for Australia. Instead, “dust bowl” imagery contributed to national debate that re-interpreted Australia’s existing Snowy River mythology and changed the Australian landscape forever when construction work began on the Snowy Mountains Hydro-electric Scheme in 1949.

These chapters track the circulation of the “dust bowl” idea in World War Two and early post-war Australian narratives. They examine the political influences behind the proliferation of what can only be described as a vast collection of highly dramatic imagery and the impact and meaning of the idea is summed up in the Conclusion, entitled “Just a ‘Bloody Duststorm?’”

This study examines the “dust bowl” concept by illuminating the juncture where American and Australian national stories converge during World War Two. By shedding light on this juncture, it aims to begin to

recover an audible and visible record of a transnational exchange of ideas. It aims to illuminate how and why this set of ideas was shared between the US and Australia at this time, despite political and environmental differences, different national mythologies, and different decades. A primary aim is to explain why Dust Bowl mythology endured in the USA but not in Australia. In doing this, the study takes Australian history beyond the context of the nation and the Commonwealth. It takes the study of the Dust Bowl beyond the USA and into an Australian context, and it takes the focus beyond the 1930s to treat the “dust bowl” idea as a transnational phenomenon—and one that traversed decades. This story traces the evolution of US Dust Bowl imagery from the New Deal and the Depression decade to Australia’s war-time narratives of enemies, doom, housewives, and grand visions of nation-building post-war water conservation schemes and finally, in doing so, aspires to give soil stories a bit more of a prominent place in the narrative of World War Two. To my reader, welcome.

NOTES

1. Joachim Radkau, *Nature and Power: A Global History of the Environment* (New York: Cambridge University Press, 2002), 181.
2. On the Dust Bowl and its location, see Douglas Hurt, foreword to *Farming the Dust Bowl: A First Hand Account from Kansas*, by Lawrence Svobida (Kansas: University Press of Kansas, 1986); Donald Worster, *Dust Bowl: The Southern Plains in the 1930s* (New York: Oxford University Press, 1979), 12, 28–29; Vance Johnson, preface to *Heaven’s Tableland* (New York: Farrar, 1947).
3. The author also recognizes the importance of the work many are doing to bring indigenous history into Australian environmental histories. This is an important perspective. Experts in the field have created significant and highly regarded studies, a handful only of these scholars includes, Heather Goodall, Grace Karkens, Bill Gammage and Richard Broome, Tom Bonyhady, Tom Griffiths, and Libby Robin, while innovative recent work includes that of Cameron Muir, all to whom brief reference is made throughout coming chapters. While I recognize the value of this area of scholarship, my own area of expertise is in cultural fields, such as design, film, theater, voice, performance, and dramaturgy. Correspondingly, this research takes a transnational and political focus to address questions in environmental history raised by the cultural material I examined; in this case it was a vast collection of “dust bowl” imagery, much of it incorporating and adapting New Deal rhetoric, that I encountered in the Australian archives.

4. Linda Gordon, *Dorothea Lange: A Life Beyond Limits* (New York: W.W. Norton, 2009), 244; See also Worster, *Dust Bowl*, 4–5.
5. Hugh H. Bennett and W. R. Chapline, “Soil Erosion a National Menace,” Circular 33, Washington, DC: United States Department of Agriculture (April 1928); Russell Lord, *Behold our Land* (Boston: Houghton Mifflin, 1938), 305.
6. “Middle-West” was an historical term commonly used by the Australian media of the 1930s/1940s to describe accurately, the southern Great Plains location of the US Dust Bowl despite its suggestion of the Midwest region. It suggests a correct understanding of the Dust Bowl’s location even though it sounds very similar to “Midwest.” At times, “mid-west” was used in the same manner. These were not references to the Midwest region (which is to the north-east). The “Midwest” does not describe the Dust Bowl’s location. On the Dust Bowl’s location, and storms occurring pre-1934 in areas beyond the southern Plains, see Donald Worster, *Dust Bowl: The Southern Plains in the 1930s*, 25th Anniversary edition (New York: Oxford University Press, 2004), 13, 28–29, nation-wide drought, 11, the 1935 origin of the term, 28; On the geography of the mid-western states or “heartland” (including eastern parts of Kansas not in the Dust Bowl), the location of the 100th meridian, and on the significance of the Land Ordinance of 1785, the Northwest Ordinance of 1787, and the Louisiana Purchase of 1803 that helped to bring the states into being, see Andrew R. L. Cayton, Richard Sisson, and Christian Zacher, eds., *The American Midwest: An Interpretive Encyclopedia* (Bloomington: Indiana University Press, 2006).
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26. Every primary source consulted could be included.
27. Examples of efforts to draw attention to Australia's environmental or related rural/social or economic, policy-making or scientific parallels, similarities or differences: Neil Barr and John Cary, *Greening a Brown Land: The Australian Search for Sustainable Land Use* (Crows Nest: Macmillan Education Australia, 1992), 131–132; Libby Robin, "Paul Sears: Deserts on the March, 1935," in *The Future of Nature*, eds. Libby Robin, Sverker Sörlin and Paul Warde (New Haven; London: Yale University Press, 2013), 184; Cameron Muir, *The Broken Promise of Agricultural Progress: an environmental history* (Hoboken: Taylor and Francis, 2014), 128–132. On the terminology "dirty thirties" (describing the US Dust Bowl and the Canadian case), see Worster, *Dust Bowl*, 13; Bailey "'Dust bowls', TVAs."
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32. Arthur Rothstein, “Direction of the Picture Story,” *Complete Photographer* 4 (April 1944), 1360–1361, on directing and lighting, 1362.
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35. For use of “the Jap,” see Bruce Miller, “Australia's Dust Bowl,” 1, *Australia's Dust Bowl* – series of broadcasts (Australian Broadcasting Commission, 1945), National Archives of Australia, Series: SP300/3 Item: 750. For use of “despoiled,” see “A Grim Warning,” *Sydney Morning Herald*, November 21, 1944.

PART 1

New Deal Era Storytelling:
A Rich Blend of Ideas that
Converged in US Dust Bowl Imagery

Ideas: American Exceptionalism, Social Realism, Women, Deserts, Documentary, Soil, and Civilization

Almost every historian who has ever mentioned soil erosion, the Dust Bowl, or the US SCS has repeated a little anecdote about the US Congress and a dust storm reaching Washington, DC. I will repeat it too. Hugh Hammond Bennett was one in a long list of Americans who contributed to the construction of a “dust bowl” idea. Bennett was passionate about soil conservation. He began his career as a lab assistant for the US Bureau of Soils in 1903 and eventually became the head of the US SCS at its inception.¹ But first he felt he had to do something to convince Americans that they needed a national SCS. In April 1935, Bennett was due to testify before a US Senate enquiry into public lands. A huge dust cloud—so the story goes—was blowing from the west, across the continent toward Washington, DC. Bennett must have calculated that it would reach the Capitol by the April 2. He agreed to testify on that date. As the looming cloud darkened the city and senators questioned Bennett, he hoped such a dramatic visual effect would work to his advantage and it did. On April 27, 1935, his dreamt-of national SCS was brought into being by the passing of an act of Congress. Bennett knew the power of stories—not just the words—the emotional effect, the shock value, and most importantly, the context of a story and this wasn’t to be the only story he told about soil.²

Bennett became widely published and continued to bring the issue of erosion to the attention of the nation. His Assistant Chief was Walter Clay Lowdermilk. An international authority on soil erosion and forest hydrology, Lowdermilk traveled widely for the service in the late 1930s

including to Europe, North Africa, and the Middle East, and he brought back stories of Old-World erosion and the destruction of past civilizations. From the late 1930s, governments the world over concerned with their own soil erosion problems sought the expert advice of both Bennett and Lowdermilk.³

Others who penned often highly expressive reports and stories across the 1930s included the Secretary of Agriculture Henry A. Wallace, Arthur H. Hays Sulzer, head of the Western Field Office of conservation surveys for the SCS, ecologist and botanist Paul Sears, and economist Stuart Chase. Sears wrote the highly influential *Deserts on the March* (1935) and "Death from the Soil" (1937) while he took a role in establishing a soil conservation district law for Oklahoma. Chase, known as a member of FDR's "brain trust," contributed to economics and social policy. He authored works including *The Tragedy of Waste* (1925), *A New Deal* (1932), and *Rich Land Poor Land: A Study of Waste in the Natural Resources of America* (1936).⁴ In addition, the Nebraskan ecologist Frederic Clements' climax theory influenced many of the Dust Bowl narratives created at the time. Strongly influenced by the story of pioneer settlement on the Great Plains, his work influenced not only the work of writers but also that of artists who were also struggling to dramatize the issue of erosion. Among them was modernist artist Alexandre Hogue. Hogue's work was recognized internationally but born in Texas on the Great Plains, he chose to portray the Plains in a demise to dust in his erosion series of paintings created in the 1930s.⁵ Also influenced by Clements was the film-maker Pare Lorentz, who created ground-breaking documentary films for the US Resettlement Administration (RA), and *March of Time* senior film director Jack Glenn, celebrated for capturing ground-breaking documentary dust storm sequences.⁶ Meanwhile, not only Clements' theories but also the work of Lorentz influenced novelist John Steinbeck, photographer Dorothea Lange, and writer and radical poet Archibald MacLeish. MacLeish produced *Land of the Free* in 1937 and "The Grasslands" for Henry Luce's new illustrated magazine, *Fortune*, in 1935. He wrote for Luce until 1938 and was influenced by the belief that the writer should do more than simply provide an outpouring of personal thoughts. MacLeish believed that a writer's voice should be a public voice, involved in society. His radio and theatrical plays often reached a wide audience.⁷

Roy Stryker was another influence upon the construction of the "dust bowl" idea. He headed the Farm Security Administration (FSA) photographic project, having assembled a team of talented photographers.

His project created an enormous visual file of the lives of Americans during the Depression. Among his photographers who captured images of life on the southern Great Plains was Dorothea Lange. Hired by economist Paul Taylor at the State Emergency Relief Administration (SERA), Lange photographed the conditions of migrants across the winter of 1934–1935. By early 1935, Taylor had Lange photographing the pea harvest in Nipomo, California. That same year they married. The pair went on to create illustrated books and reports by utilizing Lange’s photography to try and bring the plight of migrant farm families or “dust bowl refugees” to the nation’s attention. By 1937, Lange was working for Stryker at the FSA, and along with photographers such as Arthur Rothstein created iconic images. When Rothstein visited Cimarron County in the Oklahoma Panhandle—the center of the Dust Bowl—he photographed some of the nation’s, and the world’s, most enduring expressions of the concept of a “dust bowl.”⁸ This list of storytellers is by no means exhaustive. But it is the group that had a major influence over the creation of Dust Bowl narratives, including some that circulated beyond US borders to Australia. Included of course in the latter case was John Steinbeck, who produced relevant work apart from the Pulitzer Prize-winning novel *The Grapes of Wrath* (1939).

During the 1930s, Steinbeck had already written political pamphlets and newspaper articles promoting the plight of “dust bowl migrants” who were suffering under poor conditions on the road to California, and in the squalor of labor camps in that state. Along with the bulk of conservation narratives of the time, Steinbeck’s novel aimed to question old assumptions about America and abundance by focusing on the lives of affected individuals.⁹

Personal accounts written by some of those affected individuals contributed to storytelling at the time, while oral history interviews corroborate their tales. Homer C. Beck of Wichita, Kansas, and Odalee Lowery Bohn from Boise City are two oral history interviewees who lived through the storms.¹⁰ Firsthand accounts were written at the time by Lawrence Svobida of Kansas, and Caroline A. Henderson whose letters to a friend were published in the *Atlantic Monthly*.¹¹ Among these storytellers, there was also Vance Johnson and Russell Lord. Johnson was a Dust Bowl farmer and a writer for the Amarillo *Daily News*. Later, in 1947, his *Dust Bowl Story* was published to describe “man’s struggle to control” what he called a “merciless section of our country known as the Southern Great Plains.”¹² Finally, there is Russell Lord. Lord wrote that “it all started with a telephone call to my place” from none other than Hugh Bennett who

had just been appointed as Chief of the newly established SCS. Bennett didn't like the idea of experts who "know too much about too little" trying to explain erosion to the general public. He preferred to hire a writer or reporter, as Lord recalled it, who was "healthily ignorant." Bennett wanted Lord to "look at the land, pump the specialists, talk with farmers, and then write the story objectively, independently, and in the large."¹³ He worked for the SCS for three years and this, he said, transformed him from a "smug" erosion denier to a believer. Lord's *To Hold this Soil* and his 1938 development of that government report, the book *Behold our Land*, proved that he not only believed in soil erosion and "soil-healing" but also believed in the power of storytelling.¹⁴

THE NEW DEAL

Russell Lord wrote in 1939 that dramatic imagery created by these storytellers was burning "into public consciousness the tragedy of poverty-stricken country people, homeless, dispossessed." When he stated this, Lord was making reference to more than just the problem of dispossession. He was making at least an indirect reference to, as Alexa Weik von Mossner has described it, "the historical conditions that allow for the emergence of a particular narrative." Lord was also referencing the "narrative tropes and conventions" and the "literary or film genres" used in the 1930s to bring ideas to life in the nation's imagination.¹⁵ We need to understand just how such narratives might have been "burning" imagery onto the American imagination. But to do so it will help to take a close look at the complex group of ideas influencing those storytellers striving for such dramatic impact. The response of the US government to soil erosion of the time is the place to start.

Where drought or dust storms had previously devastated areas of the Great Plains, US federal governments had taken a step back from assuming responsibility.¹⁶ But as a decade of Depression and dust storms developed, President Roosevelt's New Dealers stepped forward to take responsibility.¹⁷ They attempted to steer the nation to a solution. Early New Deal programs provided farm welfare, helped to reduce oversupply of produce, increased consumer demand, raised farm incomes, and conserved soil through wind erosion control projects, while \$5 million in emergency funding was provided for the Soil Erosion Service (SES). Later known as the SCS, it began wind erosion soil demonstration projects on private lands under five year co-operative agreements.¹⁸ In 1935, the SES

became the SCS, and was incorporated into the USDA along with a new Soil Conservation Act.¹⁹ Despite this activity prior to 1935, the purpose here is to discuss the Dust Bowl in terms of ideas, and the way they have been dramatized in stories and this means the period between 1935 and 1938 is of particular interest. It is commonly understood as the New Deal period when an innovative focus on social reform and conservation ideas developed together and with it, stories that circulated widely through the mass media. The economy became a farming issue, a social issue, and a conservation issue.

Agencies that worked directly to attack the problem of wind erosion on the Great Plains included the Department of Agriculture and the Forest Service that planted shelter belts of trees. The SCS oversaw the creation of soil conservation districts and soil conservation demonstration projects on private property in collaboration with the CCC, which provided labor. The message was that New Deal scientific experts would help to fix erosion.²⁰ Under the leadership of Hugh Hammond Bennett, the SCS approach was technical but non-coercive and aimed to improve the productivity of private croplands. Driven by a new idea that challenged the tradition of individualism, representatives trained farmers while spreading “the correct district philosophy that cooperatives could restore land better than individuals.” Central to the New Deal approach to resource conservation was the idea that the health of the national economy began with supporting farmers and a conservation approach to the use of the natural resources they depended upon. This would create prosperous farmers who would spend money on manufacturing and in turn contribute to sustainable economic recovery.²¹

The federal vision went further. New Dealers introduced the idea of soil conservation districts. By combining science with grassroots local representation, they believed the districts would transform “the exploitative, competitive, agriculture of the past.” The federal government did not hold jurisdiction over state matters needed to achieve these districts. Because of this, they encouraged the states by providing a model Standard Soil Conservation District Law. Attached was an encouraging letter from President Roosevelt to governors.²² The program promoted conservation on private property as a national effort, strengthening national greatness—hardly a reflection of an American faith in individually generated exceptional freedoms, abundance of free land and small government. Many saw themselves as pitted against the enemy in danger of losing individual liberties at the hands of a government armed with tricks to achieve a dictatorial

agenda.²³ Despite protestations, however, soil conservation districts came into being in February 1937. The program helped to achieve broad support across the region for a second Roosevelt term, and this led to the electoral defeat of presidential opponent, Governor Landon of Kansas, even in his home state.²⁴

But dealing with the problem of the Dust Bowl required more than government intervention. The US SCS' "conservation agronomy" treated farming methods as the problem and therefore the solution to soil erosion. They claimed "salvation through technique" and "recovery through scientific manipulation of the land." Their recommendations included new methods of cultivation such as strip-cropping, the wide spacing of crops with double-width rows and partial fallow, plowing to match the contours of the land, use of specialized equipment, and the planting of shelter belts. Conservation agronomy was all about employing scientific experts and their technologies.²⁵ But these kinds of soil conservation programs were not the only strategies New Dealers employed to achieve their conservation goals.

Under the leadership of agricultural economist Rexford Tugwell, the US RA focused on buying up degraded lands and resettling farmers rather than keeping them on the land while it was rehabilitated. There was a great deal of organized farmer resistance to these policies. As a result, in 1937 the Bankhead-Jones Farm Tenant Act influenced a shift in policy focus to that of keeping the family on the farm—both soil and people were to be "rehabilitated" together. The Act sought to establish a stronger foundation for sustainable rural living, while the SCS' influence was extended in 1938, when they took over land utilization projects. The change in focus to the family farm coincided with the RA being replaced by the FSA. But whatever the focus, the work of the film and photographic divisions of the RA and FSA in constructing text, sound, and visual Dust Bowl imagery is of particular relevance here.²⁶

NEW DEAL SOIL CONSERVATION IDEAS: A SOUND BASIS FOR AN EPIC DUST BOWL STORY

New Dealers did not only create soil programs and the RA and FSA did not simply buy and sell land, move people around through resettlement programs, or help to keep them on the farm. As William Cronon has explained in "A Place for Stories," New Dealers also created an epic Dust Bowl narrative.²⁷ Both the RA and its successor, the FSA, were active in

constructing powerful visual, sound, and textual interpretations that promoted a set of ideas about soil erosion, soil conservation, farming, technology, and farmers. To create these narratives, New Dealers re-interpreted a set of established ideas—such as the national myth of American exceptionalism. They also re-arranged those ideas so that they could include concepts such as ecology, along with them.

The first reason for this epic narrative was that New Dealers believed ideas or “attitudes” were a contributor to wind erosion on the Plains. Tradition and ideas long-ingrained in the mind of the farmer had to change, they argued. Otherwise, anything close to sustainable conservation practices could not be achieved on the Plains. Land-use traditions driven by the yeoman myth could be literally transplanted from Europe to the soils and the climate of humid eastern states. But New Dealers were telling Americans that due to the different soil and climate conditions of one part of America, the semi-arid Great Plains, the tradition of turning to yeoman myth could not apply. American national myth was fit for some places in America and not for others.²⁸ At the same time that Americans on other parts of the continent were being encouraged to uphold a faith in agrarian myth, the arid environment of the Plains was dictating its re-interpretation, and the policy-making it was designed to promote.²⁹

The second reason for the publicity campaign was that conservationists believed Americans had the right to be informed of wind erosion as a national threat. They wanted all Americans to believe that erosion could soon become a problem of catastrophic proportions. It was a problem so serious, they believed, it demanded the full facts be promoted through a national publicity campaign. The existing print media and the rising media of film and radio broadcasting were mobilized. But New Dealers did not simply wish to promote the problem and its technical solutions. They dreamt of a complete shift in land-use thinking. The way to focus the attention of Americans on the Dust Bowl then was with an epic re-telling of the American story.³⁰ Presented here is a set of ideas that these conservation narratives re-interpreted and re-arranged into expressions of a “dust bowl.”

“BAD” ATTITUDES OF MIND AND THE MYTH OF AMERICAN NATIONAL EXCEPTIONALISM

Dust Bowl narratives were used to try and capture the imagination of audiences and keep them emotionally engaged. In dramatizing various combinations of ideas—many already deeply meaningful to Americans—

storytellers aimed to change the public's attitudes and actions toward both the soil and each other. The place to begin, New Dealers believed, was with a re-interpretation of national myth.³¹

Ideas of frontier and the yeoman dream, American optimism, and rugged individualism, of a Great American Desert and the dream of a garden landscape all existed on the Great Plains, as did drought, cold, winds, and heat, before the Dust Bowl of the 1930s. Folklore describing sturdy pioneers and a "blood-bond" with the land existed before the Dust Bowl and so did the myth of American national exceptionalism.³² This myth describes American identity and has been explained by historian Ian Tyrrell as having three core interrelated aspects—religious, political, and material.³³ Its origins can be traced to late-seventeenth-century ideas about God's intention for the chosen people of New England (God's new Israel), to provide a model for English and European church reform. This exceptional national destiny was defined by a "difficult and painful" covenant, which in turn produced the "jeremiad." This narrative form was used to interpret signs, such as famine as either God's pleasure or fury, and to frighten New Englanders into adhering to the puritan mission.³⁴ Political exceptionalism, born of a Jeffersonian ideal, described a land of opportunity and democratic rights. Coupled with a belief in small government, it exaggerated the extent and effect of tyranny and socialism outside of America, as well as the importance of yeoman individualism.³⁵

The myth of exceptional material abundance embodies the idea of the frontier. Frontier myth describes Jefferson's "abundance of free land in the west" awaiting the self-reliant, pioneering individual, the character of the American nation having been forged through the process of the westward-moving frontier.³⁶ The "hero" of this myth is the independent yeoman farmer who cultivates a garden landscape, his pioneering spirit seen as the foundation of American democratic traditions.³⁷ In 1893, Frederick Jackson Turner's now famous thesis "The Significance of the Frontier in American History" built on these existing frontier beliefs. As William Cronon has explained, Turner described a nation "enlightened [and] democratic," forged through the process of changing a landscape from a so-called wilderness of "neutral or negative" value "to trading post to farm boom town."³⁸ And reflecting this dream, an expression of the call "land for the landless," the Homestead Act (1862) outlined an individual land holding as only 160 acres, creating very small farms, and plenty of them (opposed by John Wesley Powell).³⁹ Farms of 160 acres were later understood to be too small for the climate of the Great Plains, particularly

during drought and “a stimulus to over cultivation, and, for that matter, almost an obligatory vow of poverty.”⁴⁰

The belief that people of the Great Plains were “tough individuals” and the technologically optimistic belief that they could “make the land pay,” the optimism behind “waiting it out” for nature, innovation or God to bring rain—all these ideas existed too, before the Dust Bowl.⁴¹ And as Richard White has explained, on the eve of the Dust Bowl in 1930, the belief persisted among farmers that the land was in no way part of a complex ecological system.⁴² But during the drama of the Dust Bowl, something changed. The national story was ruptured, shifting to the left. William Cronon has described how that central figure, the individual yeoman farmer, so important to the American national story, now became central to a narrative of decline, conceived of by Roosevelt’s New Deal.⁴³

THE “GARDEN OF THE WORLD”: CONSERVATION NARRATIVES AND MYTHS ABOUT DESERTS AND GARDENS

A combination of national myth and folk-science grew out of a climate information deficit during periods of settlement on the Great Plains.⁴⁴ This produced a series of interconnected ideas. These ideas describe a transition showing how Americans’ perceptions of the West have shifted. Their perceptions moved through the epic saga of “a Great American Desert” to a “garden” myth (by denying the desert) and to application of the pseudoscientific theory that “rain follows the plough” in order to encourage that garden to grow.⁴⁵

The myth of the Great American Desert can be traced to Lieutenant Zebulon M. Pike who announced in his 1810 published expedition journal that the inland was uninhabitable “like the sandy deserts of Africa.”⁴⁶ In 1819, Major Stephen Long’s expedition was named the “Great Desert”—the term was used by cartographers, alongside pictures of camels and dunes until 1870 (in what is now the state of Kansas).⁴⁷ The idea received wider publicity after the 1830s. Western writers described a “burnt and arid desert,” and “hot, bare sand.” Ideas that re-emerged to empower Dust Bowl narratives, these early nineteenth-century writers described a “wilderness” scattered with “whitening bones of Buffalo.”⁴⁸ But by the 1860s, the desert had “disappeared.”⁴⁹ The end of the Civil War coincided with a wet period.⁵⁰ The dream of a garden landscape emerged. Along with this, a westward movement was encouraged by speculators claiming a “garden of the world” awaited settlers.⁵¹

Embodied within the 1862 Homestead Act, the yeoman dream now confronted the myth of the Great American “Sahara” with a conquest mentality.⁵² In 1878, the US Geological Survey recommended pastoralism as an alternative to agriculture, from the Dakotas to Texas. In 1850, the 97th Meridian was considered the “western limit of ordinary agriculture.”⁵³ At this stage, the frontier of agricultural settlement had not yet reached the 100th Meridian—but settlers continued westward, advancing onto the sub-humid plains. Railroad promotional material expanded popular acceptance of the myth that here, breaking the sod, would create rain and “heavy dews.”⁵⁴ After 1900, Hardy Webster Campbell’s “scientific” dryland farming doctrine was promoted to settle lands in much the same way.⁵⁵ The doctrine corresponded well to the Enlarged Homestead Act. This extended title to 320 acres over five years, encouraging migration beyond the 100th Meridian. And most damagingly, it specified “continuous cultivation.”⁵⁶ By the turn of the century, irrigation was a popularly touted solution for the prospective smaller landholders. The 1902 National Reclamation Act encouraged “the idea of reclaiming desert wastes” by just adding water.⁵⁷ In *The Conquest of Arid America* (1901), William E. Smythe described irrigation as a “policy of peaceful conquest over the resources of a virgin continent.” As a “national movement,” he claimed, irrigation would allow civilization to peacefully conquer the barren desert—and turn it into a green garden. Then the “economic greatness of the United States,” would be assured and another “important corner of the world” would be completed.⁵⁸

The idea of progress, however, became so established in Western views and popular culture by the late nineteenth century—during a global push for the expansion of empire—that almost any change was assumed to indicate progress. By the 1930s, this optimistic concept of civilization was being influenced particularly by ideas of the nation—and by the expansion of a federal regulatory state generated by the New Deal and their response to Depression.⁵⁹

SOIL AND CIVILIZATION

Many conservationists of the New Deal era feared the fall of permanent agricultural civilization due to soil infertility or soil erosion. They expressed the idea that the meaning of civilization was bound up with the condition of the soil. Among the New Dealers developing this point were Lowdermilk and Bennett. To explain, they turned to the myth of

fallen civilizations and to the histories of Greece, Rome, and North Africa. Their claims may have been exaggerated in narratives of the time, but they were based on real historical events. Soil loss was so severe in Athens in 590 BC that food shortages were a concern and the plowing of steep land was outlawed. Plato (427–347 BC) described severe soil loss leaving areas of Attica as bare as “skin and bone,” while ancient Greece is said to have suffered heavy losses of soil to Bronze Age agriculture. A combination of drought, storms, and plowing meant the Roman heartland and Middle Eastern provinces also suffered from accelerated soil erosion, while there is evidence that not only climate but also agricultural practices contributed to its abandonment in North Africa. In the USA, nineteenth-century narratives had also described the ruin of Old-World civilizations and warned of the same in the future for the New World. In his work as ambassador to Italy under President Lincoln, George Perkins Marsh had traveled extensively. He described seeing in Asia Minor, Northern Africa, Greece, and Alpine Europe evidence of how human-induced soil erosion had destroyed civilizations. He promoted the idea of finite resources in America.⁶⁰ And in the 1930s, soil conservationists too turned to the idea that the ruins of once great civilizations could be attributed to humans accelerating the soil erosion process to create man-made deserts. At the same time, they turned to ideas about women either to describe the actual soil that had been so neglected, to suggest a disaster for civilization due to erosion, or maybe to imply a solution.

WOMEN, WILD NATURE, CIVILIZATION

The idea of women domesticating nature has been wound into the American story of progress by the dominant culture. As Tyrrell has explained, “in traditional eighteenth and nineteenth century agrarian rhetoric and political economy,” already, the progress of women and of civilization was a familiar coupling. This meant that although “women were often associated with the idea of ‘something natural’ (like a river or a desert) to be suppressed in a male social order,” at the same time “contemporary social thought also powerfully associated women with nature’s nemesis, ‘civilisation.’”⁶¹

Carolyn Merchant has described the idea of women as “something natural.” She says the idea of a “mother goddess” existed in native American and ancient Mesopotamian, Egyptian, and Greek cultures as well as in renaissance Europe.⁶² The early twentieth century also produced a body of

work that evoked spiritual understandings of Mother Earth and “the living soil.” This work reflected the idea of “vitalism” from the nineteenth century that focused on the spiritual. Vitalism has been described as a counter-idea to that of “enlightened science” in the ideas of René Descartes and Francis Bacon. It was connected to “the ideas that the soul steers the body, and God makes the plants grow.” This could be seen in the “*living principle*” or “*wheel of life*” ideas which described the cycle of life and death. When writers and artists of the 1930s evoked Mother Earth, their imagery was connecting to “the classical idea of Mother Nature being the female master and teacher of scientists” a belief of many alchemists. But they were also connecting to the views of scientists such as F.A. Fallou (1794–1877) and organic farming founders such as Rudolph Steiner (1861–1925) who often expressed a strong emotional connection to her. A founder of modern soil science, Fallou lamented society’s lack of appreciation for “the Earth Mother.” He said she had been relegated to the level of dung, dirt, and dust that nobody wanted to touch—even walk on. Instead, he lamented, “*Everybody wishes to walk on flowers, nobody wants to know anything about the soil, without which no flower could grow.*” Steiner, a founder of organic farming, wrote that “*the earth is the flora’s mother, the heaven its father. That is really, literally the case*”—while in the 1940s the British organic farming pioneer Sir Albert Howard (1873–1947) expressed his emotional attachment by turning to Shakespeare. In his “Agricultural Testament,” he quoted from *Romeo and Juliet* when he wrote “*the Earth, that’s Nature’s Mother, is her tomb/What is her burying grave, that is her womb.*”⁶³

Alongside these expressions of women as “something natural,” and Earth as Mother, in the 1930s contrasting ideas about women were very much present. They reflected nineteenth-century beliefs about civilization, as Jefferson had expressed it, and the relationship between such a civilization, pioneering women, and wilderness. This group of ideas was clearly illustrated by artist John Gast in 1872 in his painting *American Progress*. Here was an image of nature’s nemesis. Gast comments on Manifest Destiny by personifying the idea of American progress as female, attractive, white, and as the agent of change. In this painting, technological progress is portrayed as an inevitable aspect of the pioneering process she embodies. In her left hand, she holds knowledge in the form of a book, said to be a common schoolbook and in her right, a telegraph wire she is laying—as she leads America west to domesticate and displace both indigenous people and wild nature through technological progress.

She brings a train of wagons, the plow, the homestead, fences, and telegraph poles to a westward-moving frontier, while steam trains speed west and modern ships dot the Mississippi river left behind her. Indigenous people, wild horses, and buffaloes run in her wake, and are seen receding into the shadows. Among them lie piles of bleached bones, indicating a desert wilderness waiting to be domesticated.⁶⁴

Through their work as agents of domestication and morality, women were often viewed as a measure of the condition of civilization, showing how well it was progressing and how stable it was. As Vera Norwood has explained, women, seen as civilized and civilizing, would domesticate wild nature and cultivate morality in the American character while remaining civilized themselves, protected from any “fall from grace,” by their morality and domesticity. This set of ideas is evident in Dust Bowl narratives.⁶⁵ When experts attempted to describe the impacts of wind erosion upon the progress of civilization in the 1930s, they turned to the experience of the housewife to explain it.⁶⁶ And it was the Judeo-Christian tradition of using “desert” to refer to “deserted place or wilderness” that was central.⁶⁷

In Depression-era America, the prevailing attitude was that the traditional family unit was the foundation of civilization. The domestic role of women in society was a moral one. All of this should be preserved. Although women had traditionally symbolized the taming of an uninhabitable wilderness or desert, a problem arose in the 1930s. The “Great American Desert” (the grasslands of the Plains) that had been civilized with wheat farms and gardens had turned into a Dust Bowl or “man-made desert,” yet civilization had created it.⁶⁸

TECHNOLOGICAL OPTIMISM AND THE “ORGANIC MACHINE”⁶⁹

In addition to all of these ideas, during the 1930s a technological optimism as seen in Gast’s telegraph-wire laying underpinned environmental thought generally. It affected New Deal conservation planning, during a period where, as Paul Sutter has expressed it, “the lines between nature and artifice were less tightly drawn.”⁷⁰ Nature in this relationship was to be subdued, tamed by the sublime—the machine—in an “annihilation of time and space.” In *The Machine in the Garden*, Leo Marx describes a belief in machines as visible evidence of “the sublime progress of the race”—they would put nature into the service of humans.⁷¹

Although the two might seem incompatible, to look, as Richard White has explained, for the “natural in the dams and the unnatural in the salmon” is to understand conceptualizations of nature at the time, as “organic machine.”⁷² In the context of the late nineteenth and early twentieth centuries, “preservation” meant “to preserve nature” and “conservation,” “to wisely develop its resources.” Sutter believes that a deeper study of New Deal conservation will show that the gap between preservationist and conservationist ideas was not necessarily as wide, nor as clear as has previously been thought. Preservationists and conservationists, he explains, rarely saw “any ideological inconsistencies in being both.”⁷³

Certainly, to treat nature as something separate from humans, machines, and their labor will not serve a study of the Dust Bowl idea. As White has described it, in the 1930s, American perceptions of nature reflected Ralph Waldo Emerson’s expressions of “how the human and the natural, the mechanical and the organic, had merged so that the two could never be ultimately distinguished.”⁷⁴ The focus was on this juncture and it is here, as White explains, that humans confronting “complex systems” sought through technology “to alter them to produce relatively simple ends.”⁷⁵ Leo Marx explained that in the New World of America, for the first time:

The full energies of advanced European civilization, stimulated by its artificial wants and guided by its accumulated intelligence, were brought to bear at once on a desert continent.⁷⁶

The myth of exceptionalism had been driven by the yeoman and his dreams of progress. That progress had occurred at incredible speed through the “conquering” and “improving” of nature. In contrast, as George Perkins Marsh puts it, “elsewhere the earth has been subdued slowly.”⁷⁷

DESERTS: FREDERIC CLEMENTS, ECOLOGY, AND CLIMATE

As Leo Marx described it in *The Machine in the Garden*, “the machine in a barbarous-nature” of the nineteenth century, now encountered an age of ecological thought.⁷⁸ And it was this conceptualization of nature which then collided with the actual physical force of the Dust Bowl. Describing this encounter, Donald Worster observes that the emerging science of ecology was “thrust boldly into” a relationship with the Dust Bowl and the political, social, and environmental impacts it brought in its wake.⁷⁹

While various ideas were emerging around the new science of ecology, the broader perception of a wide variety of scientists, politicians, and engineers, tended toward that of engineering as “like nature” as “bringing humans into nature” or “improving nature,” by making it a “better servant.”⁸⁰ Sutter has described an uneasy relationship between ecology and agricultural mechanization.⁸¹ He explains that:

scientists such as Paul Sears popularized an ecological critique of agricultural expansion and mechanization, while technocrats such as Hugh Hammond Bennett made soil conservation a technical pursuit and a central part of Roosevelt’s conservation agenda.⁸²

Among the work of early ecologists, that of Frederic Clements is important. His climax theory holds an important place in the history of ecological thought. For the native Nebraskan, ecology, in terms of his “climax theory,” was about change, a dynamic, evolving landscape leading to a final stable state “capable of perpetuating itself forever.” This, by 1939, included both plant and animal communities existing in a “biotic community” or “biome” such as the North American grassland, and also by the 1930s, included humans and their evolution. Climax theory indicated the limits to nature that humans would have to adapt to, certainly the farmers of the Great Plains.⁸³

Paul Sears explained the new concept of ecology as a landscape humans could be comfortable in, a landscape “under control,” beautiful to behold, while functional, where “man” was part of the ecology of the earth, the “landscape in which he abides” part of “an integrated whole.” At the same time, without shying away from a passion for the role of technology in nature, Sears attacked the use of “power machinery” which he called an “even more serious” source of the dust storm than drought. Influenced by Frederic Clements, in *Deserts on the March* (1935), Sears explained ecology as “natural history in a new guise.” When an ecologist enters a forest, he explained, “*he sees not merely what is there, but what is happening there.*”⁸⁴ Sears described the “delicate balance” of the “complex” substance, that is, soil. He was driven by fears that an American belief in soil “infinity”—the idea of an unchanging, permanent earth—would cause soil erosion to leave the Great Plains in a permanent desert state.⁸⁵ His whole book aimed to show the reader how ecologists saw nature as a group of living communities, and he warned all Americans to do the same. The environmental myth of an infinity of both soil and grass he claimed, was a reflection of

a “confusion” he had identified “in the American mind” where American democracy and private property were “inseparably associated.” This, he lamented, had put both in “grave danger” with the only solution a new “stewardship” attitude toward “improving nature.” At the same time, his sought-after “order” (as opposed to chaos) had been demonstrated, as he saw it, through “benevolent” dictatorship, fascism, and communism, which he added were “important questions in many minds today.”⁸⁶ Writing four years before the beginning of World War Two (1939), Sears was expressing ideas similar to many of his contemporaries concerned with conservation.

These ideas about ecology impacted not only on the conservation narratives of Stuart Chase and other conservation writers such as Paul Sears and the Britons Jacks and Whyte. They also influenced visual narratives including the work of Dust Bowl artist Alexandre Hogue. Their stories mirrored the fact that at the time, deserts sat at the heart of a Western understanding of the relationship between humans and nature.⁸⁷ For civilization to survive and prosper, it was “desert” that had to be either “overcome” or as some agreed, respected. But what of deserts made by humans?

“MAN-MADE DESERTS”: CONTROVERSY

A number of contradictory ideas surrounding “man-made deserts” were circulating during the 1930s. The first set of ideas stemmed from the sciences. In *Deserts on the March*, Sears explained the understanding of both weather and climate circulating during the 1930s. In some “scientific circles” he said, it was believed that the weather was becoming drier due to “human interference with natural vegetation” which made “rainfall less efficient.”⁸⁸ British Forestry Professor E.P. Stebbing claimed that on the Great Plains, the actions of man, not drought had caused the rain to stop falling, permanently. He used the term “drought” to describe a process created by humans. Man, he said, had stopped the rain and it would not return. “Taking place in what is termed the Dust Bowl in the western districts of the United States,” he continued, “I ventured to query the use of the word ‘drought’ in connection with the drying – up of water supplies and the falling off in the rainfall.”⁸⁹ However, J.B. Kincer, chief of the Division of Climate and Crop Weather at the Weather Bureau, explained that “climate doesn’t change: climate is the general run, or sum total of weather, and that sum total does not seem to be undergoing any fundamental changes.” Ellsworth Huntington (among whose theories also claimed links between race and climate) stated that “the ultimate decision

as to whether climatic changes have taken place on a large scale during historical times...rests primarily with persons who are trained in climatological, and especially geological, methods."⁹⁰

At the same time Stebbing expressed the concern of the time over "nature's balance," he also argued that, as seen in the Saharan case, sand drift was a sign that deserts that were "advancing over, or invading, the inhabited country...by a series of sand waves, like the advancing sea."⁹¹ Britons, Jacks, and Whyte corrected Stebbing on this in their *World Survey of Soil Erosion*. They explained that where sand drift appeared it was "not correct to say that the desert has 'advanced.'" Although areas at the edge of a desert might have become desert, they said "it was due to the degradation of that soil and not from sand brought from the adjacent desert by wind action."⁹²

It was, however, Walter Clay Lowdermilk, of the US SCS who coined the term "accelerated erosion" indicating "man-made deserts." He did this to try to explain that human actions had accelerated the speed of natural soil erosion processes or had stimulated such a change.⁹³

Despite the disagreement surrounding these issues, there was some consensus. It was agreed that soil had physical and generational limits. A "dust bowl", it was agreed, was a sign that humans had ignored this rule and as a result the Earth's natural processes had been dangerously disrupted. It did not indicate an ecological desert. A "dust bowl" or man-made desert indicated an area once fit for agriculture or grazing, with a climate able to sustain the progress of Western civilization, but no longer able to. Man-made deserts indicated that that very process (and idea) of civilizing arid lands was either threatened or in reverse. In other words, people were being forced off their land on the southern Plains by drought and soil erosion. The US Dust Bowl was considered to be an area once in "natural balance" *with western civilization*, but not any longer.⁹⁴

A paradox appears where deserts were seen as "uninhabitable places" even though ecological deserts had been inhabited for centuries. And though the Great Plains experience a sub-humid to semi-arid climate, they are not desert. However, when ecologists such as Paul Sears encouraged readers to embrace an ecological worldview, how did they do this? By indicating, in explanations echoing Frederic Clements' "climax" theory, that the Great Plains might very well be heading toward becoming a permanent "Sahara" though it wasn't a desert, *yet*.⁹⁵

Traditional ideas surrounding Manifest Destiny clashed with these ideas about man-made deserts to create a second paradox in discussions

about climate and desert. Centered around the Judeo-Christian concept of “desert,” these traditional beliefs explained the progress of civilization as one of conquering once “uninhabitable deserts.”⁹⁶ Yet uninhabitable “dust bowl deserts” had been created by that very act of trying to overcome “deserts” with pastoralism, agriculture, and all the European signs of progress that Gast’s airborne beauty had brought in her wake.⁹⁷

The catastrophic soil erosion problems of the US Dust Bowl helped to develop ecological understanding further but it was the myth of “The Great American Desert” or “an American Sahara” which was most often used to explain it. Within US Dust Bowl narratives, urgent warnings of a “Great American Desert” proliferated and reinforced the connection between this myth, and agriculture in the New World. “Man Strides Over The Earth And Deserts Follow In His Footsteps,” declared Clements, quoting an “OLD PROVERB” in the opening pages of *Environment and Life on the Great Plains*.⁹⁸

A LONGER PERSPECTIVE ON DROUGHT: TURNING TO THE GEOLOGICAL RECORD

By the 1930s, the writings of Clements also emphasized the role of climate adaptation more so than his already extremely popular theory of a climax state. For Clements, climate became the primary measure of a “mature formation” of the climax community. In *Environment and Life on the Great Plains* (1936), he agreed with Kincer and Huntington that the only way to predict the climate of the future was to understand the climate of the recent past. Clements stated that climate analysis was needed to address the problem of the broadscale “abandonment of farms and the [problem of the] belief that a great portion of the land is permanently unsuited to agriculture.” His opinions reflected some of the views of Ellsworth Huntington when he argued that “such views are the outcome of too short a perspective.” He added that “the more we know of the geological record, the more clear it becomes that change, not uniformity, is the rule.” In addition, “even in the long period when the larger types of climatic changes have been absent, there is abundant evidence of minor fluctuations and pulsations.” Similarly, Clements argued a short perspective was not useful. He said it had become “imperative to analyse the situation in the light of changes of climate and life as revealed by the geological record.” Basically, Clements was saying that it was necessary to look at past climates over the long term, by studying fossils, sediments,

“and related sources.”⁹⁹ As his earlier ideas on the climax state had been widely accepted, this newer focus left Clements in a difficult position. This, as Donald Worster has explained, was reflected in a confusion over “which direction to turn” in Clements’ own work and in US conservation ideas of the time.¹⁰⁰

A lack of clarity on these issues was far from exclusive to the 1930s. As late as 1946, American meteorologist Ivan Ray Tannehill complained that still “we have no good definition of drought,” not in the *Encyclopedia Britannica* and not in the USDA’s *Methods of Long-range Weather Forecasting* (1939), *Climate and Man* (1941), nor in books about climate and weather. But if humans could not make rain fall from the sky or at least predict drought, there was one more option.¹⁰¹

Early in the decade, farmers on the Plains began to place their hopes in the “land of the underground rain” or the Ogallala Aquifer, and by the middle of the decade a scattering of wells existed.¹⁰² This was despite the fact that many farmers insisted that irrigation would leave wells dry and Plainsmen in “a dryer land than we have here, and no drinking water.” These worries seemed of little concern to many in the short term. Some Dust Bowl farmers were excited by the dream of underground rain promised in the Aquifer and by the decade’s end, they began sinking deep wells. It was a solution preferred by some to government soil conservation programs, which they saw as coercive.¹⁰³ At the same time, farmers were arguing for and against this irrigation option, in 1946 Tannehill lamented that there remained great confusion over drought. It was still believed to be caused, he said, by anything from radio waves caused by broadcasters emitting electricity into the atmosphere to the use of explosives, or “some other hocus pocus or mumbo-jumbo.” But such “mumbo-jumbo” was often a reflection of real human fears and determination in the face of a growing soil and human tragedy.¹⁰⁴

HUMAN EROSION

During this period, all of these ideas about deserts and drought combined with another concept. The idea of human erosion expressed the concept of a human/soil interrelationship. The idea that eroding soil could cause “human erosion” was evident in Dust Bowl narratives promoted by New Deal agencies including the US SCS. The human/soil interrelationship was a strong aspect of the basis of New Deal conservation ideas surrounding rural living standards. The idea of a human/soil interrelationship

was conceived of from a national perspective and embodied in the 1938 USDA Yearbook entitled *Soils and Men*. It was dramatized in imagery created by government and non-government photographers, film-makers, and writers. Human erosion imagery reflected the ideas expressed by Jefferson and later Turner of an east-west advance across the American continent, humans and the environment locked together in a process of change, with the frontier establishing the national character.¹⁰⁵ In human erosion imagery however, it is a process of decline where all symbols of civilization are seen to decay until finally people leave the Plains heading farther west, but this time as Dust Bowl refugees.¹⁰⁶ This imagery suggested an indivisible interrelationship between soil and humans, between soil impoverishment and human impoverishment. As the idea of this relationship became expressed more broadly, it reflected a fear of dual permanent decline of agriculturally inhabitable areas to a man-made desert. This ecological decline would result in extinction of civilized nations (progressive states) and civilized humans (progressive Western civilization moving toward modernity). Ecologists such as Paul Sears wanted humans to change their behavior so that imbalance could be remedied and permanent deserts avoided.¹⁰⁷ Imagery describing "human erosion" was created by government and non-government photographers, film-makers, and writers but it was not only government action that created these stories and their wide circulation. The artistic movements of the time were highly influential.

SOCIAL REALISM

The documentary mode is said to have become more clearly defined by the work of FSA photographers during the 1930s.¹⁰⁸ Among them were Dorothea Lange and Arthur Rothstein. New Dealers tried to draw parallels between the reliability of the social sciences and the photographic documentation they were creating at the FSA.¹⁰⁹ The photo-story or photo-essay was becoming popular.¹¹⁰ At the same time, "photo-textual books" were a recent new genre.¹¹¹ Both aimed to strike a balance between images and words in order to create meaning. Photojournalists came to expect a ready supply of FSA photos for magazines and newspapers. American modernist artists, such as Alexandre Hogue, found new ways to employ well-worn symbols in order to convey meaning in their paintings. Writers such as Steinbeck created protest literature in journal articles, in the text of the photo-story and in novels.¹¹² Newsreels used film technology to convey

news events to the world with “moving pictures” screened in the cinemas each week, particularly through a focus on close-ups and mid-shots of their subjects.¹¹³ But documentary film-makers did much more. Cutting-edge wide-angled lens technologies meant they could bring panoramic views of the landscape to their audiences, while speed editing meant that dramatic meaning could be constructed by cutting rapidly between scenes of different people, times, and places.

Social realism developed in response to a concern over “deteriorating human conditions in the United States and abroad.” The genre commented on “contemporary human suffering” and often promoted a liberal political agenda.¹¹⁴ It aimed to convey “human tragedy.” Dorothea Lange’s photography has been described as classic “American social realism,” a genre where, as Linda Gordon has explained, the grouping and arranging of a photograph was used to create meaning. Lange worked in a similar way to the Cubists by breaking up and reassembling objects in a way that would “denaturalize the whole.” This was clear in her work for *An American Exodus*, a photo-textual book of the kind gaining popularity at the time, where she constructed meaning through such “grouping and arranging” of images. In this genre, the images were supported by text, rather than the other way round. Works of the genre included Margaret Bourke White and Erskine Caldwell’s *Have you Seen their Faces*. Archibald MacLeish’s *Land of the Free* included sixty-two photographs that had been taken for the US FSA, while the “prose-and-picture documentary masterwork of the decade” is said to have been *Let us Now Praise Famous Men* by James Agee and Walker Evans.¹¹⁵

FSA photographs appeared in illustrated magazines such as *Life* and *Fortune*. The first issue of *Life* was published in 1936 and became the “centre of gravity” for the new American photo-story. It is said to have introduced Americans to photojournalism and generated the widest possible national publicity a story could receive.¹¹⁶

At the same time, the documentary film movement was also developing.¹¹⁷ Like photographs, documentary short films and newsreels were considered educational “documents of fact” as opposed to “the fiction film.” Yet most of these films were also described as “documentary news-gathering through re-enactments.” In other words, these “fact films” like radio programs of the period, used actors to dramatize news events which were then screened or broadcast across the nation or the world. But whether they used actors or not, during the 1930s and 1940s, there was a real hope that “non-fiction” films could “interpret one part of the country

to the other,” to show how the other half lived, and above all, to “pose a problem” to their audiences.¹¹⁸

The idea of a Dust Bowl was generated by and circulated through these movements in literature, film, and photography—many of which had influence beyond both the New Deal period and US borders. Drawing on national, gendered, and environmental myth and ideas, these artistic developments made a strong contribution to creating three potent Dust Bowl narratives. These three narratives achieved wide publicity. But how exactly did these developing artistic movements—such as the photo-story—help conservationists to dramatize all of these ideas and generate imagery so potent, that in turn, it too became part of American national mythology, and later found currency during World War Two Australia?¹¹⁹

NOTES

1. Wellington Brink, *Big Hugh: The Father of Soil Conservation* (New York: Macmillan, 1951).
2. Showers, “Soil Erosion,” 390, on storytelling aimed to shock see 389; Worster, *Dust Bowl*, 213.
3. Showers, “Soil Erosion,” 392.
4. Henry A. Wallace, United States. Dept. of Agriculture, foreword to *Soils and Men* (Washington: U. S. Govt. Print. Office, 1938). On Wallace, see Gary Beene, *The Seeds we Sow: Kindness that Fed a Hungry World* (Santa Fe: Sunstone Press, 2011); Joel, “Soil Conservation Reconnaissance,” 3. On Sears, see Worster, *Dust Bowl*, 200; Paul Sears, *Deserts on the March*, 3rd ed. (Norman, Oklahoma: University of Oklahoma Press, 1964); Stuart Chase, *The Tragedy of Waste* (New York: Macmillan, 1925); Stuart Chase, *A New Deal* (New York: The Macmillan, 1932); Stuart Chase, *Rich Land Poor Land: A Study of Waste in the Natural Resources of America* (New York: Whittlesey House, 1936).
5. Mark Andrew White, “Alexandre Hogue’s Passion: Ecology and Agribusiness in The Crucified Land,” *Great Plains Quarterly* 26, no. 2 (Spring 2006): 70–71.
6. Jack Glenn, “News Film Director and Producer of Documentaries,” *New York Times*, February 15, 1981.
7. Archibald MacLeish, *Land of the Free* (New York: Harcourt, Brace, 1938), 86; Archibald MacLeish, “The Grasslands,” *Fortune* 12, no. 5 (1935): 59–201. On the influence of Lorentz upon MacLeish and others, see Worster, *Dust Bowl*, 96, MacLeish’s career, 45–46; David Barber, “MacLeish, Archibald (7 May 1892–20 Apr. 1982),” *American National Biography Online*.

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9. On Steinbeck's career and intentions, see Worster, *Dust Bowl*, 44–47, 55, 63.
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Three Dust Bowl Narratives: Farmer Attitudes, Human Erosion, Women, and Natural Disaster

As the soil conservation writer Russell Lord penned *Behold our Land* he declared that he was not given to making dramatic claims about Americans being “wiped out” within “the next twenty years or so” due to soil erosion. But he wanted action. He did not originally believe in soil erosion but having worked for the SCS, traveled, and seen it with his own eyes, he had changed his mind. Now awestruck, he declared, “I believe in the menace of erosion now. I am afraid of it.”¹ Conservation storytellers such as Lord aimed to shock the American nation with alarming stories of erosion. Arthur H. Joel explained the reasoning behind this effort in his 1937 *Soil Conservation Reconnaissance Survey* for the USDA. He said that “probably one of the chief reasons why the full seriousness of the damage and menace of wind erosion has not been fully and generally realized” was that “wide publicity and a full statement of facts” had not been achieved nationwide. And yet, he stressed, this would be “necessary to command the serious attention which the situation deserves and demands.”²

So that all Americans would “believe” and be “afraid” just like Lord, conservation writers set out to remedy the publicity gap identified by Joel.³ They dramatized the idea of a “dust bowl” in government and non-government films and newsreels, newspapers, and illustrated magazines and when they did, they constructed the group of narratives described here. These narratives expressed both explicitly and implicitly the understandings of their time. But as they overlapped, complemented, and contradicted one another in sometimes paradoxical imagery, they contributed to the construction of the “dust bowl” concept.

ENGAGING AMERICANS WITH CIVILIZATIONS, IMMORAL FARMERS, DESERT DECLINE, AND HOUSEWIVES

The story of farmer culpability for erosion was one of these narratives. Another was that of “human erosion” and a third was the narrative of civilization coping with “natural disaster.” Central to this entire set of imagery was the narrative of once-mighty civilizations fallen to soil neglect, now buried under desert sands.

There was a problem. The idea of once-mighty nations fallen to soil neglect might have been considered believable in terms of the “Old World,” but it wasn’t considered so believable for contemporary America. Conservation storytellers wanted to change this. To do so, they dramatized the idea of man-induced accelerated erosion by telling stories that spanned centuries. The whole function of this imagery was to show Americans what was threatened, how much time was left to save it and what America would be like if they didn’t save it. Creators who utilized this narrative were able to establish a tragic trend over time. Spanning the historical period from ancient civilizations to contemporary America, the story went that wherever long-term stewardship of the soil had been neglected, civilizations had fallen and now lie in ruins.⁴ Stories used this imagery to raise awareness of erosion. They tried to illustrate that America might already be in the process of becoming just one more of those civilizations buried under desert sands. They used effects similar to that of time-lapse photography to do it. Their stories moved the reader or viewer through a narrative which slid easily “backwards and forwards” between nations and their experiences of wind erosion, and across the centuries. Here, Americans could make links between what had happened in the past and what was happening in the present, right on their doorstep. The stories allowed audiences to feel as if they had traveled across space and time to the Great American Desert of the past, to the Sahara Desert, ancient Rome, or Egypt, while *at the same time*, or mere seconds later, the reader might be in the present on a farm in Oklahoma. Or they might be in a future Great American Desert one minute, and somewhere in present day Washington, DC the next. The intergenerational dramatic structure of these narratives meant Americans might be at home reading or viewing a film or magazine but they could simultaneously visit a “dust bowl”—not a place, but an idea that existed between places and across centuries.

In narratives focused on blaming the farmer for erosion, the concept of ecological balance and immoral farming was dramatized in stories of

“nature’s balance.” Moral tales described suicidal farming practices and personified a suffering Mother Earth as a victim of violence in a tragedy of the grasslands (often evoking sexualized imagery to do so).⁵ Writers described the land as having been murdered at the hands of the enemy of erosion and dust at “war” with it. The concept of efficient use, the idea of a collective guilt for erosion, and a new stewardship ethic to preserve the land for future generations was dramatized in these tales. All these elements were enriched by a turn to the jeremiad tradition and empowered with warnings of the downfall of past civilizations.⁶

Personification was also a useful way of explaining the life of the soil while it simultaneously accentuated the immorality or cruelty of humans. When conservationists dramatized the concept of the ecological limits of the soil and the possibility of desert decline, they did it like this: Mother Earth was alive and vulnerable. Her covering of soil was like skin and she could not remain alive for long without it. But humans were using that soil too fast and it would soon be gone. For farmers to take that covering of skin would be akin to murder, even rape. It would bring “chaos” to America.⁷ For their sins, the nation would see chaos in the return of the Great American Desert or “American Sahara”—the Great Plains in a permanent desert state. This had happened to other once-mighty nations and could happen again. An immoral attitude was considered a major contributor to soil erosion. This needed to be replaced with a new awareness that the expert and his technology could bring, through New Deal interventions.⁸

The idea of geological time was dramatized through the use, again, of a time-lapse effect. Stories might jump from Kansas to ancient Rome and back to contemporary Kansas again. The effect was used to illustrate the degree of damage wrought by American farming on the face of the planet in a relatively short period of decades—particularly by the speculative or “suitcase farmer”—and tractors. The key symbols reiterated in this imagery included Mother Earth, the “living” grasslands, the farmer, and his damaging tractor or plough, and the expert and his soil conservation technology—paradoxically, including the tractor.⁹

Human erosion narratives reflected the concerns of the newer “social science” and an interest in exposing people to different social realities they might otherwise not be aware of.¹⁰ They dramatized the idea of a soil/human interrelationship, along with the idea of permanent desert as the antithesis to permanent civilization. The idea took form in imagery describing depression-era poverty—and impoverished people or the “Dust Bowl refugee” became central. Displaced from their relationship with the soil,

these people had been expelled from their farms by wind erosion on the Great Plains now turning to permanent desert. These often gloomy narratives described the process of the decline of civilization—it began with a struggle on the land, human, and animal suffering under dust and sand storm conditions, then home abandonment. This was a narrative driven by fear, pleas for a new conservation ethic, social science thought, and agitation for industrial change, as well as deeply embedded beliefs about women, family, and motherhood.

In human erosion narratives, the focus was on a reinterpretation of the pioneer story and frontier myth. American exceptionalism was questioned in the prophesizing of a downward trajectory for the nation. In these stories, technological optimism had turned to despair, the dream of settlement on the Plains had failed, and the idea of the return of a Great American Desert had become far more plausible. The pioneer was in the wagon but now fleeing a failed dream. The American mother had no tidy doorstep from which to call her children in. She appeared homeless, sometimes starving, and her clothes often in rags. Images of humans living in poverty under Depression conditions, with nowhere to belong, became symbolic of the destructive power of wind erosion. A complete absence of humans from imagery portraying only abandoned homesteads, farms, or towns, symbolized the same decline. The homestead and barbed wire fencing referenced the Homestead Act and the poverty caused by soil blowing from neglected properties, across the land of conservation farmers.¹¹ Tractors also featured in this set of imagery. They indicated civilization beaten because it had lost its natural place living on, and working with the soil.¹²

The symbols most often reiterated in human erosion narratives were sand (and a lot of it), dead or dying cattle, the skull or bleached bones, tractor tire tracks, buried farm implements and fence-lines, individuals struggling against blowing dust, abandoned farm-houses, broken wind-mills, impoverished women and families, and the wagon or car—indicating the pioneer. As seen in Gast's painting, *American Progress*, bleached bones suggested the old American West or deserts of the Middle East as places devoid of civilization. The buffalo skull in particular, symbolized inevitable death and extinction. But all of these symbols, when used in the human erosion narratives, suggested the decline of soil and humans to a permanent desert state (Fig. 3.4).¹³

Archibald MacLeish described this process of decline in *Land of the Free*, a poem that interpreted pages of FSA photographs. One of them was an image of a little boy struggling to protect his face from a dust

storm at Cimarron County, Oklahoma. MacLeish suggested the meaning of such images by raising the question. Now that the grass was gone, was American justice, equality of opportunity, and liberty to be lost as well?¹⁴

But there was a further set of imagery that denied any cultural disaster. It argued that the good people of the Plains remained stoic, capable, and only temporarily affected. Some denials of wind erosion conditions were explicit. They were expressed in outrage over alarming media portrayals of regions as desert, and people as impoverished.¹⁵ These defenses were sometimes driven by a need to defend a region from exaggeration. Often they were driven by optimism, sometimes civic pride, and also commercial interests. And as Donald Worster has explained, denial was often fuelled by the belief that nature was benign and the march of progress inevitable.¹⁶ When the national press described impoverished people struggling to survive in a Great American Desert, they were accused of condemning “a group of courageous Americans for a six year drought cycle and national conditions beyond their control.”¹⁷

There was another form of denial and it was implicit. The focus was on the housewife and mother, portrayed as coping with erosion, despite desert-like conditions worsening daily. Central was the idea of something temporary rather than permanent—a natural disaster—something terrible that would pass. This imagery asserted the contradictory idea that civilized living could remain stable despite “uncivilized” desert-like conditions that suffocated animals, and engulfed homes in waves of sand and dust.

In these stories, the symbol of sand was most commonly employed to indicate an uncivilized or uninhabitable place or permanent decline. The homestead doorstep, and the housewife herself in a nice frock, her broom or her brood all indicated something contradictory—civilization. By bringing all these symbols together, these stories dramatized a set of incompatible beliefs about the relationship between women and civilization—and desert as something uninhabitable. Meanwhile some imagery described women, often Dust Bowl refugees, as removed from that civilized place of the home by drought and erosion, but again, in this imagery they appeared civilized, rather than physically impoverished by the harsh, sandy conditions surrounding them.

GRAVEYARDS OF EMPIRES

Conservation writers such as Lord, Lowdermilk, Bennett, Sears, Chase, and Cooke gave Americans a time limit. They warned of only decades before America would “follow the history of scores of civilizations which

have arisen and flourished and disappeared.”¹⁸ In *Rich Land Poor Land* (1936) Chase traversed international borders and traveled back in time to the city of Antioch, now “perished.”¹⁹ By the end of the decade Britons, Jacks, and Whyte had published their *World Survey of Soil Erosion* (1939). They took the reader through the once fertile soils of Persian and Carthaginian Empires buried under desert sands, and on, to their outline of wind erosion currently “terrorising” the USA, Canada, Australia, and South Africa as well as Russia.²⁰

Walter Clay Lowdermilk sounded the same warning. In the 1930s, he undertook an eighteen-month tour of Europe and the Middle East. He was on a mission, he said, to read the history of the land. The findings he brought home to America on land-use throughout the “old world” were summed up in his *Land use Survey of Europe and the Middle East in 1938* as well as the later thirty-eight-page illustrated account, *Conquest of the Land Through Seven Thousand Years*. This government publication sustained the myth, already established by soil conservation writers and film-makers of the time, that civilizations’ destiny lie in deserts, “ruins and wrecks.” And this myth was central to his warning that unless Americans wanted to suffer the same decline that “North Africa and the Near East [had suffered] for 13 centuries,” society would have to “be born again” and trade “exploitation” for “conservation.”²¹

To achieve such a re-birth, storytellers tried to change a belief in frontier progress and an inexhaustible supply of soil. In *Deserts on the March* (1935), biologist Paul Sears warned: “Get vegetation back on the ground. Mother Earth is a staid and dignified old lady, no nudist by choice.”²² Writing of these vulnerable soils Sears warned:

other continents-Asia, Africa, Australia-have dry centers and fabulous deserts. Not so North America yet. But a few more generations of the course we have pursued will produce man-made deserts which will have few rivals in other continents.²³

These writers were trying to project American imaginations into the past and then the future. Here they might envisage their own civilization buried, and develop an intergenerational sense of responsibility, because, as Lord explained in *Behold our Land* “as her agriculture failed, Rome fell.” And because America may fall just like Rome. Like Lord, MacLeish warned in “The Grasslands,” that when soil is ungoverned anywhere across the sweep of history “dust is most like dust and deserts look like

deserts.” He meant that Garden City, Kansas may soon follow “the fate of Antioch in Syria.”²⁴ After the Dust Bowl in 1941, Bennett continued to reiterate the tale. He wrote, “never before in history was such a mighty civilization built in such a short time.” But he added that the speed of erosion had matched the speed of development of American civilization and would be mirrored in its decline.²⁵

CHANGING BAD “ATTITUDES OF MIND”

To prevent such a dreadful fate, New Dealers promoted a new American tradition. A “slash ‘n burn” attitude, they claimed, had been passed down by Americans as tradition. A new tradition of conservation would have to take its place.²⁶ New Dealers framed their message in the language of old myths. By 1941, with dust storms still rising on the Plains during drought, Bennett continued to promote the idea that “a new frontier has formed about us—one that must now be occupied by the forces of conservation.”²⁷ To explain, *The Future of the Great Plains* had introduced a new interpretation of frontier myth—as “chaos.”²⁸ The conservation message was this: Great Plains farmers did not have to give up a belief in American exceptional freedoms, nor the idea of embracing nature as a servant to humans.²⁹ But farmers of the Dust Bowl region could no longer rely on a traditional faith in individualism and exceptionalism to get them there. An improved nature would have to come from somewhere else. The idea was to change the relationship between democracy and private property in the American mind that was creating the “chaos,” so concerning to Chase and New Dealers.³⁰ Within this problematic relationship, stewardship was to take the place of a concentration on private property. To try and achieve this, New Dealers identified eleven problematic attitudes of mind that must change, while Lowdermilk, inspired by his travels through the Middle East, penned an eleventh commandment:

XI. Thou shalt inherit the holy earth as a faithful steward, conserving its resources and productivity from generation to generation. Thou shalt protect thy fields from soil erosion and thy hills from overgrazing by thy herds, so that thy descendants may have abundance forever. If any shall fail in this stewardship of the land, his fertile fields shall become sterile stones and gullies, and his descendants shall decrease and live in poverty or vanish from the face of the earth.

But, Lowdermilk lamented:

no such Commandment has been part of man's attitude toward his occupation of the Mother Earth except in limited areas. Man has generally been an exploiter, despoiler, and destroyer ³¹

In 1936, the Great Plains Area Drought Committee produced a report *The Future of the Great Plains*. Here they outlined the eleven "attitudes" that needed to change. Each was heavily weighted with a faith in American exceptionalism, a frontier attitude to life on the land, and the dream of the virtuous life of a self-reliant American pioneer. At every turn, and from every angle, the committee staged a thorough assault on exceptionalism and its subsidiary myths. They argued that the following traditional beliefs would need to be substantially revised. Their word choice is reflective of the wider production of soil conservation imagery produced by the New Deal during this period, imagery that eventually circulated far beyond national borders.

They challenged the ideas that "Man Conquers nature" that natural resources were "inexhaustible" and that "habitual practices" were best. So too, the belief that "whatever is good for the Individual is good for everybody." This kind of "self interest" they warned, was not sustainable. They targeted the ideas that owners could do what they liked with their own property at the expense of others and that markets would expand and values increase indefinitely. The American dream of a nation of owner-operated farms could "no longer exist," they argued due to the "disappearance of free land" and "high realty values." To protect "soil assets," the Committee wanted the idea of the "factory farm" to be replaced with a new "philosophy of life" focused on "the family farm." The belief that an individual "must make his own adjustments," was to change, while they promoted a "common will to action" rather than individualism or "self interest."³² While New Dealers recommended a co-operative federalism to supersede this idea of "Old Individualism" they also noted that this very idea stood contrary to "the stated ideals of American democracy."³³ Nonetheless, the New Deal message was clear. Now dated, "Old Individualism" was unable to protect American soil.³⁴ And, though foremost in the Plainsman's mind, the Old World dream of New World abundance, had now turned to dust. With it, his faith in achieving "boundless wealth," no longer relevant to society, must come to an end.³⁵ At the core of all of this call for change was an interest in the ecological "story of the grasslands" grounded in Clements' idea of "climax communities." But these ideas were new in the

1930s, and soil was often still viewed as an “inexhaustible asset,” while accelerated erosion was often seen as nothing but a myth.³⁶

The most powerful interpretation of this moralizing narrative was constructed by Pare Lorentz for the US RA. Appearing on movie theater billboards across America, it came in the form of a ground-breaking film that made the lifetime of the grasslands central. *The Plow that Broke the Plains* was created to educate staff of the RA and other government agencies. It was used to launch an appeal to Congress for funds to cover soil conservation activity on the southern Great Plains.³⁷ And it aimed to change farmers’ minds and methods. Described as “America’s PRIZE WINNING STORY OF THE PLAINS,” *The Plow* premiered in the White House, in March 1936. Later viewed by thousands of Americans, the film received critical acclaim. Lorentz re-directed the upward trajectory of the American story into a downward-spiraling tragedy and the symbol of the yeoman was reinterpreted to indicate destruction. Finis Dunaway explains how *The Plow* was treated as factual visual documentation—“a compelling visual history,” and a “true history.”³⁸

Lorentz told the story of ancient grasslands evolving through pioneering and cattle grazing and a World War One “wheat plow-up” and on to a grasslands tragedy in the Dust Bowl of the 1930s. He absolved nature of blame for erosion in a film carrying a strongly moralizing tone. Lorentz portrayed the grasslands as harmonious, age-old, and at peace on the plains.³⁹ Humans, he warned, had not adapted to this place of “high winds and sun, high winds and sun...and of little rain” but they would have to.⁴⁰ By ending in a downward spiral to decline, Lorentz aimed to generate a “sense of collective guilt.”⁴¹ As a result, the film has been referred to as cinematic jeremiad.⁴²

We hear the narrator warning the settler, “plow at your peril!”⁴³ Virgil Thomson’s epic score creates the impression of a great army of tanks rolling across the land—but they are actually tractors (Fig. 3.1). Then winds and dust descend. A church organ plays a religious hymn to remind us of the great sin of disturbing this place of “little rain.” Lorentz shows the “soil mining” farmer having failed America, his actions to blame for the ecological crisis of the Dust Bowl. The repeated message is that the climate of the Plains, one of “little rain” cannot be improved and must be adapted to. No one though, has heard the message of “little rain.” Guilty, the farmer and his machinery are forced to endure “God’s vengeance” alongside dying cattle—as dust and sand drift cover the homes and the technology which has broken the plains.⁴⁴ Winds howl. The camera focuses in on barbed wire fences surrounded by drifting sands. There is sand as far



Fig. 3.1 Tractors are juxtaposed against shots of army tanks in *The Plow that Broke the Plains* (Farm Security Administration, 1936). As this sequence unfolds, Lorentz' army of tractors are obscured by the dust they raise



Fig. 3.2 Sand drift in *The Plow that Broke the Plains* (Farm Security Administration, 1936)

as the eye can see. Homes and hopes are abandoned as families leave the plains to escape “nightmares of swirling dust.” This is no ringing endorsement of frontier myth. There are no pioneer heroes. There is no happy ending promised here (Fig. 3.2).⁴⁵

Like Lorentz, writers such as Lord, Wallace, and MacLeish tried to create stories that would change a belief in soil as indestructible, infinite. And when they did, they personified the planet, the soil, and grass. MacLeish described the grass as “healing” and “humble.”⁴⁶ Soil, Hugh Bennett explained as “this dead-looking stuff [that] actually teems with life and activity.”⁴⁷ Conservationists dramatized this sense of “teeming finite life.” In the foreword to the USDA’s 1938 yearbook, *Soils and Men*, Secretary of Agriculture Henry A. Wallace turned to gendered imagery and the myth of Mother Earth:

the earth is the mother of all of us—plants, animals and men. The phosphorus and the calcium of the earth build our skeletons and nervous systems. Everything else our bodies need except air and sun comes from the earth. Nature treats the earth kindly, man treats her harshly.⁴⁸

He added that “no man has the right to destroy soil even if he does own it fee simple.” The yearbook, over a thousand pages long, was a good start he said “in helping all those who truly love the soil to fight the good fight.” When Russell Lord penned *Behold our Land* for the SCS, he aimed to convince readers that accelerated erosion was not a myth, rather a serious threat to the nation. In his chapter entitled “Body of Land,” Lord too, turned to the idea of a “Mother Earth” to explain:

Land and sea, plain and mountain, cloud and stream, desert, Arctic cap---all Earth is of one body and alive, sunshine is the pumping heartbeat. Water is the Earth’s blood circulation, bearing food in solution, breaking down dead tissue, building seed, and bringing it to life. Rock is Earth’s skeleton. Soil is her skin, her lungs, her entrails, and her womb...This may sound a bit abrupt but Americans are old enough now to be told about the soil.⁴⁹

The earth was alive and suffering too in the work of Vance Johnson. He began his tale of an exhausted soil with “once upon a time the plains had been a vast inland sea.” Ages pass in this tale, until he describes “a carpet of grass [that] grew over the land.” He explains that winds were a reality on the Great Plains and that “Nature” had created a balance with “tightly woven short grass—to protect the soil against the wind.” So why in 1933, he asked, “did the soil drift so badly?” And why did the wind “begin [to blow] so quickly. To those who understood the soil, the answer was obvious. The land was tired, terribly tired.”⁵⁰

For MacLeish, the grasslands were now a “landscape of murder” with dust at “war” with the land.⁵¹ Stuart Chase wrote that “when grass goes

erosion begins” and believing Americans were “old enough to hear about grass” as well, he put it bluntly: “a dry cycle on the plains, followed by dust storms,” literally choked the American people into recognition of “the tragedy of the grasslands.”⁵² Then he went on to dedicate “a song to the grasses of America.” His was an emotional story of the death of grasslands that had once run free. He began his lament with a few lines from the classic American novel, *My Antonia* by Willa Cather:

As I looked about me I felt that the grass was the country, as the water is the sea. The red of the grass made all the great prairie the color of winestains or of certain seaweeds when they are first washed up. And there was so much motion in it; the whole country seemed, somehow, to be running.⁵³

In the work of Dust Bowl artist Alexandre Hogue, the story of soil neglect took the form of a woman’s body. His paintings echoed the ideas of ecologists such as Clements and Sears while his portrayals of nature were shared by Lorentz, Steinbeck, and MacLeish.⁵⁴ And they were recognized in the Department of Agriculture journal, *Soil Conservation* for their authentic portrayal of erosion.⁵⁵ Hogue had grown up on 50,000 acres of grasslands on a ranch near Dalhart in the Texas Panhandle—later in the heart of the Dust Bowl. Here he gained an understanding of the soil.⁵⁶ In turn, he developed an emotional response to the loss of the grasslands and the Dust Bowl, which he expressed in his erosion series of paintings. In June 1937, three of these were featured in an eight-page *Life* magazine pictorial, along with stills from the Time Inc. short film *US Dust Bowl* and a number of RA photographs. In “The U.S. Dust Bowl: Its Artist is a Texan Portraying ‘Man’s Mistakes,’” *Life* explained, the artist himself described his painting method as “psychoreality.”⁵⁷ Hogue aimed to affect the senses by arranging symbols geometrically to create a heightened sense of reality. He wanted the viewer to *feel* the heat of the landscapes and the discomfort of the tragedy he portrayed, while in *Erosion No. 2—Mother Earth Laid Bare* (1936) (portraying the Dallas area outside of the Dust Bowl) Hogue personified the soil in an enormous figure of a naked woman carved out of the eroded land of an abandoned farm. There is a plow in foreground—a phallic symbol. Hogue used it to symbolize the rape of Mother Earth.⁵⁸

But what was there to fear from this celebrated, this living, breathing, tired Mother Earth and her beautiful, fragile grass—what did this “tragedy” really mean? In an emotional plea for an ecological consciousness, in *Deserts on the March*, Sears provided the answer in a grim warning.

Americans, he stated, must face up to “the story of man’s destruction upon the face of his own Mother Earth” or continue, in the New World, to accelerate the once “sustained narrative” of “vanished civilizations.”⁵⁹ Similarly, Chase warned Americans that if resource devastation was to continue at the same rate, within twenty years they would see chaos in the form of “deserts, ominous and terrible.”⁶⁰

DRAMATIZING A PARADOX: TRACTORS AND TECHNOLOGICAL SALVATION

In “The Grasslands,” MacLeish reminded readers that “all flesh is grass.” Then he told a story of Thomas D. “Tom” Campbell, a large-scale wheat farmer from Montana. Across the 1930s, a passion for the use of technology in the form of the tractor and the plough was being attacked for destroying the grasslands of the Great Plains. Campbell was “the man who broke the sod.” With a wheat farming venture funded with \$2,000,000 from J.P. Morgan, Campbell was the “one representative figure to personify the whole problem” of the grasslands tragedy.⁶¹ How? MacLeish explained: “the overriding passion in his life was tractors.”⁶² Then he explained why he had tried to embody the entire grasslands story in one character—he said it “satisfies some inward need of the dumb facts to personify themselves.”⁶³ But although Tom Campbell was attacked for embodying America’s “passion for power, speed, and the predictable machine” paradoxically, ideas of an integrated, organic whole in no way excluded the idea of a machine-like nature.⁶⁴ Stuart Chase asked, “can we find a new ecology which respects nature and still permits technological progress?” He answered, “I believe that we can. I know that we must, or face the choice between abandoning our machines and abandoning our continent.”⁶⁵

Jack Glenn’s short documentary film *US Dust Bowl* (1937) offers a visual representation of the SCS technical approach to soil conservation. Shot in Dalhart Texas for *The March of Time*, the film describes the Dalhart Wind Erosion Control Project started in 1934 under the SES.⁶⁶ Later, as the SCS, they set up their office for the Dust Bowl region in Amarillo (Texas).⁶⁷ *US Dust Bowl* described “incalculable” soil damage in Dalhart, Texas, the efforts of a first federal government project there, the efforts of local newspaper editor, John L. McCarty and the work of experts who faced “one of the world’s greatest land reclamation problems.”⁶⁸

Viewing the film, we see a sign erected on a farmer’s property. It says “Keep Soil and Water on the Farm. Co-operator with the US Soil Conservation

Service. Terracing the Land with Modern Machinery.” We see industrious scenes. Efficient conservation workers operate modern SCS machinery and a musical score accentuates the idea of optimism and productivity. Workers terrace and contour the land, level eroded areas, replant grass to bare land, and grow windbreaks with “hardy young trees” in order to try and protect soil from the wind.⁶⁹

There was, however, a paradox in the New Deal’s call for technological salvation. It was needed in a world where competitive individualism and the practices of commercial agriculture meant tractor use was on the increase across the southern Plains—with “the most modern of these wheat outfits” creating “factories on wheels.”⁷⁰ But in *US Dust Bowl* all in all we hear that technological conservation methods such as “furrowing bare fields to keep dust from drifting,” and tractors leveling “completely eroded areas,” give “hope to the farmers of the Dust Bowl.”

At the heart of this paradox was the fact that the problem was not technology, but the social forces directing the technology, for either individualistic or collectivist ends. Vance Johnson was one of these Dust Bowl farmers and a writer for the Amarillo *Daily News*. Looking back, he summed up this paradox in *Heaven’s Tableland* (1946). Recognizing that image of demonized technology so clear in Lorentz’ invading army of tractors and grass-murdering ploughs he wrote:

The irony of this great battle escaped no one. Not long ago, many of these same tractors had crawled over these same acres—tearing back the sod. The tractors were agents of destruction then. Now they were agents of mercy. Without them the land could not have been saved.⁷¹

HUMAN EROSION NARRATIVES

In 1937, Arthur H. Joel’s *Soil Conservation Reconnaissance Survey* confirmed that not only the soil need salvation but also people and their animals too. Produced for the SCS, his report described living conditions around the homesteads of the Dust Bowl as “pathetic.” Farms commonly appeared with:

high sand drifts filling yards...partly or wholly covering machinery, wood piles...and young trees...sand drifts piled against fence rows, across farm roads and around Russian-thistles and other plants...the scenes are dismal to the passerby; to the resident they are demoralizing...

Numerous livestock have died as the result of strangling, eating excessive amounts of grit and from starvation, all associated directly or indirectly with wind erosion and drought.⁷²

Joel described travel that had become a trial. He said “roads have become impassable,” cars and buildings ruined, stripped of paint. There were “frequently serious difficulties from the stalling of cars” due to the accumulation of electricity in the atmosphere, and increased sickness “due to dust laden air.” In Amarillo, Texas this was not helped by the fact of forty-seven concurrent days when “visibility was limited to 6 miles or less by dust storms.” For the majority of those days he claimed “visibility was 1 mile or less,” darkness prevailed and storms lasted between twelve and “55 hours or longer.” Besides affected mucous membranes and respiratory organs, he described people suffering “great discomfort and nervous strain.” Schools often closed and had low attendance rates while there was an “epidemic of respiratory infections” often referred to as “dust pneumonia.” Scientists, Joel said, had found that dust was carrying the “body poison” silica, and had warned of the risk of silicosis. And while the Red Cross had established and staffed emergency hospitals in three states, protection from the dust Joel argued, was “at best primitive and makeshift.” He described only goggles or a mask of light gauze to cover the face while, to seal window frames, “translucent glass cloth” was recommended.⁷³

Human erosion narratives were referencing these conditions when they raised the question: were man-made deserts to end in human extinction, leaving all signs of civilization in ruins, and half-buried under desert sands? Perhaps, they suggested, there were only twenty years left for America.⁷⁴ The work of writers, artists, film-makers, and photographers of the time suggested that this process of decline—human erosion—was already underway. Portrayals of people—or images stressing their absence—expressed the idea of civilization in these ways: it was something stable, with people in their place working the soil. It could be relatively stable where people retained their own civility despite “uncivilized” wind erosion conditions. Or civilization was portrayed as impoverished, perhaps even dying. Whether civilization was stable, dying, or somewhere in between, these human erosion narratives expressed the idea of a direct soil erosion/human erosion relationship—and this idea became inseparably woven around images of the abandoned homestead and the Dust Bowl refugee (Fig. 3.3).

Abandoned buildings, deserts sands, and struggling people described by Joel all featured in the images produced by Roy Stryker. As head of



Fig. 3.3 From Jack Glenn's short film, *US Dust Bowl* (Time Inc., 1937). A truck loaded with children, mattresses, and all the family owns leave "their arid acres" in Texas for California. "NO MORE DUSTBOWL" is painted on the side of their trailer. These images featured in "Refugees Stream from Stricken Dust Bowl," *Life* magazine (1937) (Image, HBO Archives)

the FSA photographic project Stryker believed their job was “to educate the city dweller to the needs of the rural population.”⁷⁵ He constructed human erosion imagery by providing his photographers with detailed lists of ideas that he wanted them to capture. Stryker’s lists were suggestions for how to construct an image of the rural America he wanted Americans to see. Though they did not always stick to the script, his photographers took the lists along when they went about creating documentary studies of people and places in the Dust Bowl.

Back in Washington, DC, Stryker himself had the last say on which negatives would be developed. He was not a photographer, but aimed to publicize the need for federal and co-operative programs in rural America by exposing rural hardship. He knew that publicity images had to be aesthetically pleasing and full of symbolism to impact on the imagination. When he described the experience of reading a photograph he said, “it is because I enjoy looking that I go on looking until the pity and the shame are impressed upon me unforgettably.” This was how he aimed to “bring to light” rural problems and he employed all of the symbolism embedded in the human erosion idea to help him. The following items are taken from a “Plan for Work” that Stryker gave to photographer Marion Post Walcott for her assignment in Eastern Colorado and Kansas. He suggested, “the sense of loneliness...might be developed around an abandoned dwelling on a plains homestead...Remember that the windmill is a symbol of the struggle for water. One in ruins is also a symbol.” He wanted to see barbed wire. He said it symbolized the Homestead Act and changes to the Plains after 1870 and it told the story of how “the country went under the fence and the plow and then came the dust storm.” He wanted Walcott to “look for very dramatic shots of fences...and I want a close-up of the wire stapled to a post,” while he sought “dramatic shots of the combine... in wheat fields.” Stryker was envisaging all this during a period when the camera was expected to take the place of the viewer, whether capturing moving or still images.⁷⁶

Another two of Stryker’s photographers who worked in the Dust Bowl were Dorothea Lange and Arthur Rothstein. While Rothstein was on location in the south-West, both Stryker and Ed Locke, also of the Photographic Division, wrote to him, asking that he try and capture images of people benefiting from Resettlement programs. The Division wanted to see “foreclosure signs” and wondered if there was a way for

Rothstein to “connect that if possible with the drought.” Rothstein was asked to capture images of “crops covered with dust.” And they wanted images capturing “a very definite idea of exploitation.” Stryker added, “I do hope you have the good fortune to be on hand when some family is packing up, ready to leave for parts more moist.”⁷⁷

Rothstein photographed a series of images describing “the devastating effects of drought and wind erosion” in Cimarron County, Oklahoma and Amarillo, Texas. He aimed for images that could tell a story and used symbolism to capture the essence of his story. The myth of a Great American desert returning took form in his photographs—through a heavy use of abandoned buildings battered by the wind and barren sandy wastelands surrounded by wind-sculpted dunes and growing hills of sand drift. Those left behind in Rothstein’s desert, are seen struggling to survive against sand-heavy winds. This list of titles from both Lange and Rothstein’s Dust Bowl images tell the story. They included: *Fleeing a Dust Storm, Cimarron County, Oklahoma, April 1936* (Fig. 3.5); *The Winds of the “dust bowl” have piled up large drifts of soil against this farmer’s barn near Liberal, Kansas*; *Abandoned farm in the dust bowl area Oklahoma*; and Lange’s *Abandoned farm in the Dust Bowl- Coldwater District, near Dalhart, Texas*; *Sand drift along fence. Dust Bowl, north of Dalhart, Texas*.⁷⁸ Most famously, Rothstein created the controversial image, *Steer Skull*. It was photographed in the drought areas of South Dakota, outside of the Dust Bowl as defined by the SCS, but became an iconic “dust bowl” image nonetheless (Fig. 3.4).

This, however, was a period where photographs were expected to convey the absolute, rather than essential truth, and it would not do to move a prop. But Rothstein did. He moved a steer skull while setting up a shot in South Dakota. Controversy erupted over *Steer Skull* when it was published in the press. With his composition, Rothstein had been trying dramatize what he had experienced. He wanted to convey an idea, that of drought turning once fertile American lands to desert. He was accused of “faking it.” Critics suggested that if the photographs of the FSA were a lie, then their whole social program was based on a lie.⁷⁹ In July 1936, Stryker was away. Ed Locke wrote to Rothstein who was on location, as Locke put it, in “the great nude dust bowl.”⁸⁰ He told Rothstein that images of resettlement were “all over the picture pages.” Even the Nazis, he said, had requested some of Rothstein’s images and he added “Hitler promised you credit lines and troops will see that his order is carried out.”⁸¹ These

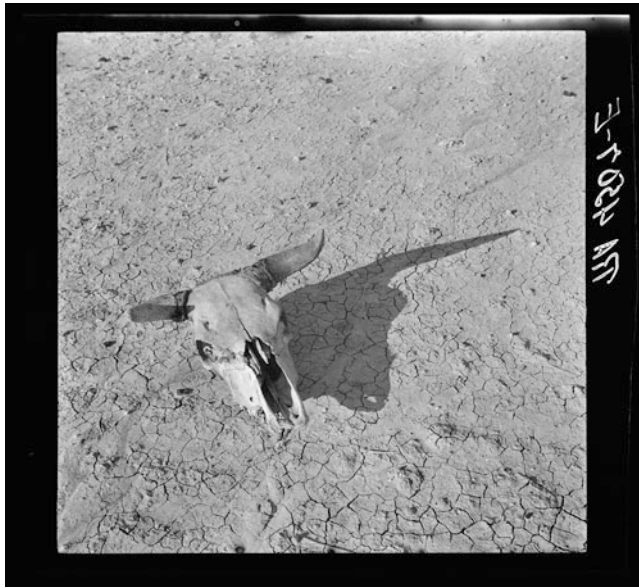


Fig. 3.4 Arthur Rothstein, *Steer Skull, South Dakota Badlands* (1936). Library of Congress

controversial images were clearly being very widely seen. By August, Locke wrote that he had been forced into publicly denying “the spuriousness of our photography.” He feared the press would try to contact Rothstein, while he was still on location, and question him on the authenticity of the image, *Steer Skull*. Locke warned “so if you still have that goddam skull hide it for Christ’s sake.” He added, “stick close to my story.”⁸² Rothstein’s *Fleeing a Dust Storm*, became another iconic Dust Bowl image (Fig. 3.5; also 4.3 and 4.4). When he photographed it he directed his subjects in order to portray an idea—that of “dreary desolation.” He was still defending his work against charges, they were a “hoax” years later. But in a 1978 issue of *Camera* 35 Rothstein explained the importance of *Steer Skull*. He said that during the summer of 1936, an Associated Press picture editor had distributed the image to the newspapers as “a symbol of the drought situation.”⁸³

FSA photographs were controversial because they aimed to bring home, particularly to urban Americans, an uncomfortable truth—there

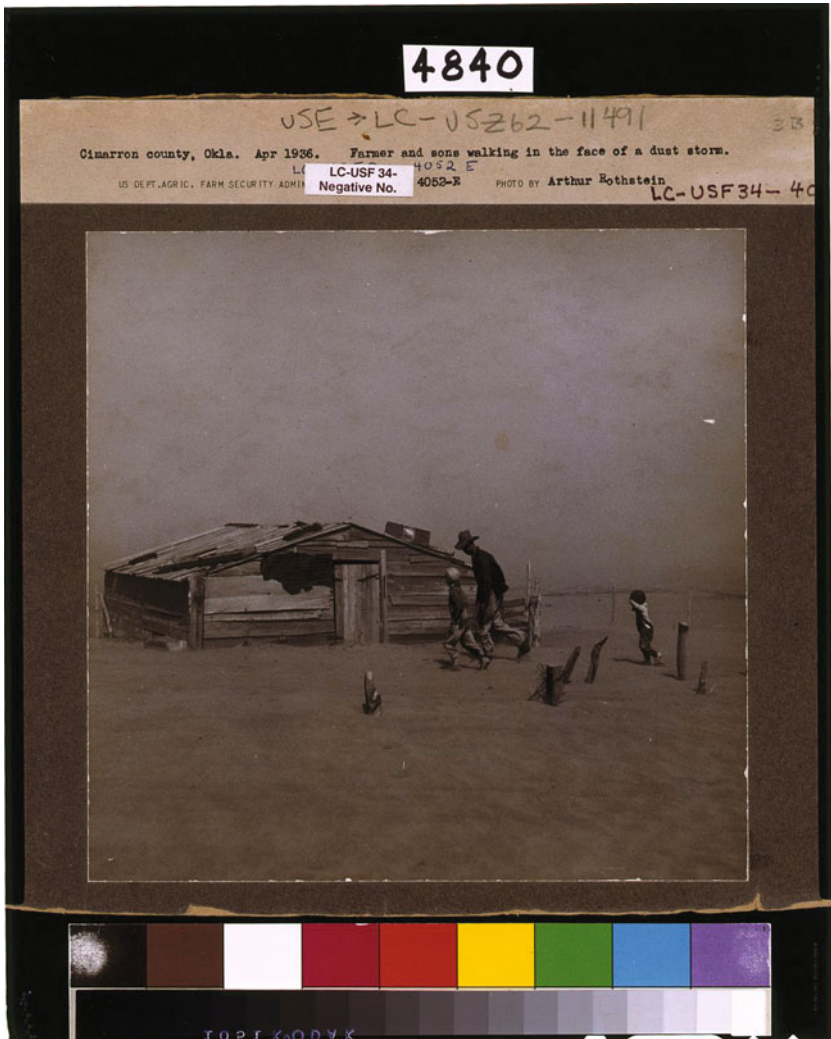


Fig. 3.5 Arthur Rothstein, *Farmer and Sons Walking in the Face of a Dust Storm*. Cimarron County, Oklahoma (1936) or *Fleeing a Dust Storm*. Library of Congress. This image was included in *The Future of the Great Plains* (Fig. 19, pages 48–49) and entitled *Running from a Dust Storm*

was a need for government interventions in the Dust Bowl, through resettlement and other initiatives. Just as controversial was what the skull symbolized, within that broader narrative of American national decline Stryker had set out to construct. It symbolized remoteness from civilization, decay, mortality, even extinction in an “inhospitable wilderness”—this time in a new American Desert.⁸⁴

Also widely seen, the work of Alexandre Hogue was equally controversial. His work featured in the June 1937 *Life* Dust Bowl spread, along with RA photographs and stills from a short film directed by Jack Glenn for *The March of Time* called *US Dust Bowl*.⁸⁵ Hogue received “overnight recognition.”⁸⁶ But arguments ensued questioning the authenticity of his images. Having seen the *Life* feature, the West Texas Chamber of Commerce even threatened to buy and publicly burn Hogue’s painting *Drouth Survivors*—it was, they protested, a false portrayal of their region (Fig. 3.6).⁸⁷

When *Life* described the Plains as a “hot, arid, lifeless desert,” in this story, they illustrated the idea with Hogue’s *Drouth Survivors* (1936), *Drouth Stricken Area* (1934), and *Dust Bowl* (see Australian newspaper story in Figs. 4.2 and 4.7).⁸⁸ *Drouth Survivors* featured one rattlesnake, a tiny prairie dog, and in partnership with a tractor half buried by desert sands, two dead bulls (Fig. 4.2) *Life* captioning it with *Drouth Survivors* (1936). *Life* captioned it: “only the rattlesnake and the prairie dog came through alive as desert conquers Texas Prairie.” The bulls were Hogue’s comment on the loss of cattle grazing the Dalhart grasslands, to growing wheat, to the death of the grass, and finally, to dust.⁸⁹ In this painting, humans are nowhere to be seen. But when referring to the damage they had wrought on the land, Hogue said “you feel that man is present in my Dust Bowl paintings.” Through his technique of “psychoreality,” Hogue wanted to make the viewer “feel” the heat, despair, and anguished death portrayed in his paintings.⁹⁰ He wanted viewers to experience the Dust Bowl and “the tragedy of its farmers.”⁹¹

Hogue’s *Drouth Stricken Area* shows an abandoned farm engulfed by endless waves of drift sand (Fig. 4.2). All signs of civilization are broken or lie buried under desert sands. A windmill, now useless, stands broken. By the windmill, a bull so important to civilization, has been left behind and starving, now searches for water in a tank filled with sand. A vulture waits—he will be the only one left soon. *Dust Bowl* (1933) also featured (see newspaper image, Fig. 4.7). *Dust Bowl* shows destructive tractor tire tracks and fence-lines in the foreground, a homestead in the background

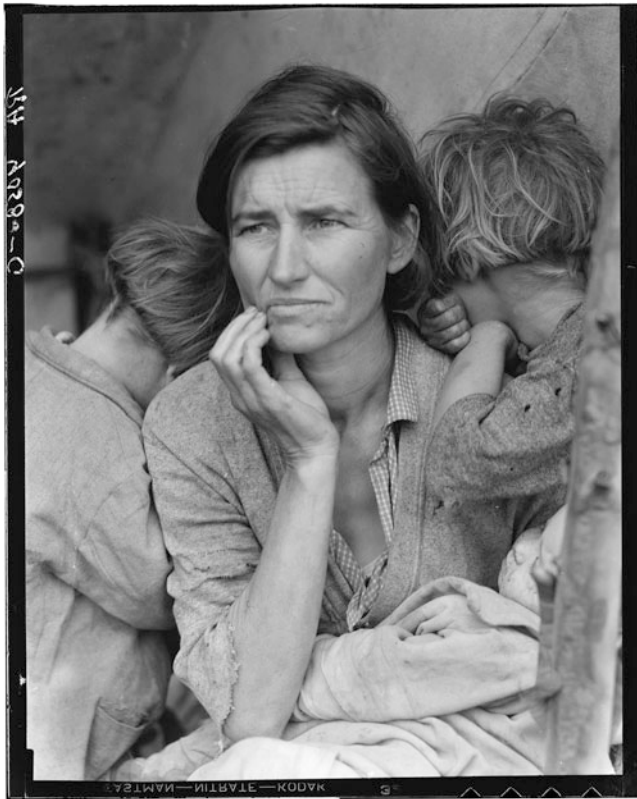


Fig. 3.6 Dorothea Lange, *Destitute pea-pickers in California; a 32 year old mother of seven children*. February 1936. Library of Congress. Known also as *Migrant Mother*, the image featured in “Ragged, Hungry, Broke, Harvest Workers Live in Squaller,” *San Francisco News* (March 10, 1936) and “What Does the ‘New Deal’ Mean to This Mother and Her Children?” *San Francisco News* (March 11, 1936)

of a desert expanse. The whole image in its brilliant orange and red tones is framed by an oppressive heat and a sense of loss the viewer can feel.

A scorching sunset on the horizon frames this waterless place with a heavy sense of oppressive heat. Hogue provided no desert gardens. There are no happy endings in his painting, nor in his commentary on the pumping of water from the region’s great aquifer. Instead, he warned:

the Ogallala aquifer is the largest in the world. But since millions of acres of wheat are irrigated from it, it will soon be dry for several thousand years leaving Llano Estacado a desert.⁹²

WOMEN AND HUMAN EROSION: MA JOAD, *WOMAN OF THE HIGH PLAINS*, AND *MIGRANT MOTHER*

The idea of a permanent desert decline is also clear in gendered Dust Bowl narratives. They reflect that traditional and paradoxical set of beliefs about deserts, women, progress, and civilization—and the connections in between. Here, the idea of “the family as the traditional unit of our civilization,” was expressed in the image of the housewife and mother.⁹³ Conventional images showed her as orderly, slim but healthy, fashionable and attractive, clean and tidy, and almost always operating in and closely around the domestic sphere. However, human erosion narratives took her away from the homestead and into the wilderness. To dramatize the idea of a soil/human interrelationship, they drew on the Judeo-Christian idea of “desert” as a “deserted place or wilderness.”⁹⁴ Photographers such as Dorothea Lange expressed this by capturing images of depression-era poverty, but Lange remained wary of Stryker’s ideas, conceived of in Washington, DC, so far away from the influence of her subjects in the West. Featuring in Lange and Taylor’s *An American Exodus, Woman of the High Plains* (1938) is one of those images but the subject is not a refugee. In this image, the “wilderness” of the Dust Bowl is the place into which she has been cast. Impoverished by it, she struggles to survive in the Texas Panhandle. The caption, quoted from the subject, Nettie Featherston reads, “when you die you’re dead, that’s all.”⁹⁵ Unlike *Woman of the High Plains*, in many of Lange’s photographs, women are often no longer in the Dust Bowl and have become refugees. On the road or in migrant camps, they symbolize civilization, once the pioneering conqueror of deserts and wastelands, expelled by the very desert it has created.⁹⁶

In *American Exodus: A Record of Human Erosion* (1939) Lange, together with economist Paul Taylor, gave a name to what they saw as the relationship between people and soil erosion. To explain it, they turned to American social realism, creating a photo-textual book that arranged photographs and supporting captions in meaningful ways.⁹⁷ Their message was that through capitalistic farming, the tractor had become an agent of destruction, leaving the Plains no longer “as nature intended,” abandoned by civilization. Just like the soil, the winds had “loosened the hold of settlers on the land and

like particles of dust drove them rolling down ribbons of highway.” Taylor added that “the violation of the law of nature” had seen “Mother Nature,” use dust storms to “answer to man’s ruthless violations.”⁹⁸ Taylor tried to promote the need for federal leadership on the refugee issue. He considered these photographs so important that he presented them at a senate committee enquiry into unemployment relief that year.⁹⁹

An American Exodus describes a connection “between the soil erosion...and the dislocating effect of drought, wind, and tractors.” Lange’s photographs taken in Texas and Oklahoma are loaded with declensionist symbolism. Humans are conspicuous by their absence. Often only, their words are included in captions. Here is a brief snapshot: Where we see hardened earth there is no vegetation, no life. There is barbed wire fencing, again, no life and a dust storm but no people. Where we see an abandoned cottage, there is washing on the line, but we see no living thing. Around a deserted homestead in the Texas Panhandle, nothing lives. There is a distant image of the back of a farmer on tractor—the caption says that “every dime” he has is “tied up right here, and if I don’t get it out I’ve got to drive off and leave it.” He asks, “where would I go?”¹⁰⁰

People, however, were not always absent in stories describing human erosion. How then, were the people who had abandoned these places portrayed? They became “dust bowl refugees”—nomads. *Life* described “new pioneer[s]” moving West. In “battered Fords and Chevrolets” and in “trailers or on foot,” they traveled across the desert to California, seeking work and a home (Fig. 3.3).¹⁰¹ In July 1935, *Survey Graphic* featured “Again the Covered Wagon” by Taylor. His subjects, “drought immigrants” were captured in photographs by Lange. Taylor described how a combination of “dust [,] drought and protracted depression have exposed also the human resources of the plains to the bleak winds of adversity.” Of refugees fleeing these conditions he wrote, “we are witnessing the shifting of human sands.” The “drifting dust clouds drift the people” who he said had shifted, carrying “all their worldly possessions.” Taylor described worn bedding, children, aunts, grandparents, and pets all piled atop the family car or wagon, headed either to California or to Oregon. In California, the migrants met only with “rural labor struggles.” Lange’s photographs, originally taken for the RA, accentuated this message by portraying makeshift homes, cars, and run down wagons piled high with America’s forgotten families and their possessions.¹⁰²

When Lange captured the experiences of women, her subjects often included mothers breastfeeding or caring for their children while no men

are present. In her photographs, we see many refugees who have been forced out of the Dust Bowl and removed from their domestic role in and around the homestead. They are displaced. Their clothes are close to rags, they live in makeshift tents or in cars, and they have very few possessions. Lange's women also appear physically impoverished. They are either very slim or extremely thin. Any reference to female strength or stoicism is portrayed through images of women enduring eroded social and physical conditions, and a sense of poverty, hunger, resignation, even dread (Fig. 3.6).

Lange's photographs also featured in a pamphlet called *Their Blood is Strong*, written by Steinbeck to promote the refugees' plight. It was widely distributed and the cover featured Lange's now iconic image, *Migrant Mother* (1936). This was an image of Florence Thompson, a migrant worker who labored in the pea fields of Nipomo, California. The image of Thompson breastfeeding her child became nationally symbolic of the human impacts of the Dust Bowl, the refugee and white American motherhood in Depression America (Fig. 3.6).¹⁰³ Yet despite *Migrant Mother's* iconic status, it was photographed outside of the Dust Bowl, the subject was not from the Dust Bowl area itself, and decades later it was claimed by Thompson that she was "a full-blooded Cherokee."¹⁰⁴ Nonetheless, this image of a young mother enduring homelessness and desperate poverty in California has come to symbolize the Dust Bowl and the idea of human erosion—impoverished humans suffering a breakdown in the human/soil interrelationship. For John Steinbeck too, women became central to his narrative of the fictional Joad family in his novel *The Grapes of Wrath* (1939).

Steinbeck's fictional Joad family had been forced off the land by the combined impacts of mechanized farming and wind erosion. Geographical and other inaccuracies have been identified in the novel.¹⁰⁵ The Joads hailed from Sallisaw in Oklahoma's east and not the Dust Bowl region, for example.¹⁰⁶ But Steinbeck's was a work of fiction—and he captured the essence of an idea—that of a broken relationship between humans and the soil. Like many of Lange's subjects, the Joads had become Dust Bowl refugees traveling on the road to California.¹⁰⁷ In the novel's final scene, the young character of Rose-of-Sharon has suffered a stillbirth. She is producing milk and is confronted with the prospect of breastfeeding a man who will otherwise starve to death. Here Steinbeck's imagery suggested a dying civilization, only just being kept alive by women—now cast out of the home, impoverished, and struggling to perform in their traditional nurturing roles.¹⁰⁸

But when Steinbeck created the central character of Ma Joad, he dramatized something different—something more than just a dying civilization. He described a paradoxical set of beliefs about women and desert—that uninhabitable wilderness. In her big, solid body, Steinbeck gave Ma Joad a grounded physical strength. In her strong bare feet and plump hands, he gave her a beauty that conveyed the idea of “high calm and superhuman understanding.” For Steinbeck, Ma Joad embodied the idea of co-operation and community as the foundation of society. Her character placed a question mark over the value of frontier myth and pioneer individualism—both conveyed by Steinbeck as essentially patriarchal.¹⁰⁹

The novel shows Ma Joad has been forced from the land by a combination wind erosion and mechanized agriculture. Her life has been reshaped by the forces of wild nature and she has become a nomad in the wilderness. In this way, she appears impoverished by erosion. But at the same time, her “high calm” means she simultaneously embodies the tradition of celebrating women as a civilizing force. She is a contradiction, remaining civilized in her physicality despite being removed from her place in the domestic sphere. Steinbeck had described an abandoned house and land in a fictional “dust bowl.” He described the lives of women who had left it. But what of the women like Nettie Featherston who remained in the Dust Bowl and the domestic sphere? What was their experience while they remained, how was it portrayed more broadly in narratives of the time, and why?

DENIAL AND THE HOUSEWIFE: JUST A DRY SPELL

Personal accounts of life in the Dust Bowl echo the claims of Joel regarding daily hardship there for families’ such as Featherston’s who were so poor they “couldn’t have went to California or nowhere else.”¹¹⁰ Lange also photographed an unnamed “Dust bowl refugee from Chickasaw, Oklahoma.” A young woman, who appears dangerously thin, she had managed to leave but described conditions there: “Black Sunday, 1934, that was the awfulest dust we ever did see.”¹¹¹ Homer C. Beck of Wichita, Kansas remembered April 14, 1935, bringing “layers of horizontal clouds” that were “all churning within themselves.” After the storm Beck recalled waking in the morning, their beds “covered with dust.” Even the chickens shook “piles of dust” from their backs.¹¹² Odalee Lowery Bohn from Boise City recalled that she could not see her hands in front of her face during a dust storm. While they were “coughing and choking,” Beck

remembered, his mother ordered the children to lie on the floor with only “wet washcloths” to protect their faces from the dust.¹¹³

Caroline A. Henderson’s now oft-quoted series of letters to a friend, published in the *Atlantic Monthly* across 1936, described remaining in Oklahoma’s Dust Bowl during 1935 and 1936. Her husband suffered dust pneumonia.¹¹⁴ Henderson wrote of tying handkerchiefs over their faces and placing Vaseline in their nostrils to protect from the dust. She tried to “rescue” her home from “wind-blown dust which penetrates wherever air can go.” This however, was an “almost hopeless task,” because the dust storms came daily. Visibility she described as “zero” while “everything” was coated in dust which sometimes settled in ripples on the floor. To stop dust penetrating, Henderson used “oiled cloths on the window sills and between the upper and lower sashes.” And to sweep the floor she used “red cedar sawdust with oil added.” She described “merciless drift” destroying her gardens, mulberry hedges, and a once cherished locust grove. Henderson dearly missed “that little green shaded spot in the midst of the desert glare.”¹¹⁵

Lawrence Svobida suffered under these conditions too. He was a Kansas wheat farmer who finally abandoned his long-fought-for farm. He explained in *Farming the Dust Bowl*:

Living out of cans is no joke in the Dust Bowl. Sealed cans are the only type of container to which the dust won’t penetrate...Even so you will have to eat dust with your food if you eat at all, while a storm continues, which may mean a period of days. Table and food are covered in a space of a minute or less...the water will be thin mud before you get it back to the house.¹¹⁶

These conditions may have been horrendous but as historians such as Donald Worster have clearly shown, explicit denials were delivered by regional newspapers and Chambers of Commerce to silence communities and to take action against artists, film-makers, writers, and editors—including Hogue, Steinbeck, and Glenn. Anyone who chose to portray Dust Bowl conditions as severe or dared to suggest the coming of a “new American Desert” was a target.¹¹⁷

In his Soil Conservation Reconnaissance Survey of the Southern Great Plains Wind-Erosion Area, Joel made a statement about the need for wide national publicity. In this, he had noted the:

natural hesitancy of newspapers and authorities in localities affected to make free statement of existing conditions because of the possibility of resulting adverse local publicity.

This, Joel added, was stifling efforts to raise awareness of erosion.¹¹⁸

Newspapers of affected areas promoted wind erosion solely as a product of natural disaster—and sometimes as a source of regional pride. They aimed to silence the media on the full facts and extent of erosion. This was either to deny human agency, to protect their region from exaggeration in the press—or to protect it from any publicity at all—on the human and environmental impacts of erosion that Joel, Svobida, Henderson, and others described. Henderson explained this when she wrote of “charges of disloyalty to this western region,” for anyone who spoke of the severity of environmental conditions. As conditions worsened she said, “optimism has been the approved policy.”¹¹⁹

But in addition to these explicit denials of a cultural disaster, were implicit narratives of denial. These were driven by those deeply embedded and contradictory beliefs about the relationship between deserts as uninhabitable, wilderness, and women. If civilization had created a man-made desert and deserts were uninhabitable, how was it that many women were still living in the Dust Bowl? And if they were not portrayed as physically impoverished by erosion, dangerously thin and in rags—why not?¹²⁰

IMPLICIT DENIAL IN GENDERED NARRATIVES

When these gendered narratives featured a lot of sand and decay, they explicitly suggested that the immediate and the cumulative effects of wind erosion were creating horrendous and uncivilized domestic conditions for women that worsened daily. But at the same time, their portrayals of women implicitly denied any cumulative effects upon the women in those same stories. Storytellers did not always see these two ideas as paradoxical enough to separate them so they didn’t. There was simply a tension in people’s understanding—because the one process of agricultural settlement had produced both progress (civilization), and now, the hardships of the Dust Bowl and its desert-like conditions that were not accommodating to civilized living: there may have been a “dust plague,” a “dust blight,” or a “dust menace” spreading across the Plains in these narratives, with waves of sand dunes engulfing homes and dust blowing incessantly across a new American desert. But intended or not, the symbol of the healthy, active housewife functioned to dissipate or at least soften any alarm. She symbolized permanent civilization defying the prospect of human extinction in any “permanent Sahara.”



Fig. 3.7 Desert contradictions. Dust Bowl refugees portrayed in Pare Lorentz' *The Plow that Broke the Plains* (US Farm Security Administration, 1936). These women all appear tidy and healthy-looking. They are wearing shoes, dresses, bonnets, hats, and cardigans in new condition. But Lorentz describes them as "bewildered," with "nothing to hope for" and "nothing to eat" living as nomads in homes "on four wheels"

In newsreels and documentary films, women and their homes were portrayed as adjusting to accelerating wind erosion conditions and impacts, returning to normal every day. In this imagery, either the housewife is not abandoning the farm, or if she is preparing to, she is certainly not leaving behind her civilized domestic demeanor (Fig. 3.7). Soil may have been in a terrible state in other words, but people, women in this case, were certainly not in an equivalent state of permanent decline. This promoted the impression of women and their families as victims not only of depression, but also of natural disaster, something that was to have short-term effects. And it may have convinced members of the American public to support federal government spending on relief and related infrastructure projects.¹²¹ Newsreels particularly, described drought and erosion conditions as a "dry spell"—the worst or the longest dry spell on record perhaps, but a "spell," nonetheless. This indicated that drought was something temporary, and not a sign of any permanent environmental change. In the Hearst Metrotone newsreel coverage of drought and erosion, we hear the sound effect of wild howling winds. The sound accentuates

the sense of effort we feel as we see people struggle against winds that “sweep away priceless topsoil.” We can hear those “tons of dirt” moving across the Plains as they take “scores of lives among humans and animals” and threaten “wide-spread calamity.” When viewing Hearst newsreels it is Edwin C. Hill, “the voice of Hearst Metrotone News,” who we can hear narrating. Not in a regional dialect, but in Standard American speech, the all-knowing narrator warns that this place is becoming a “new man-made Sahara.”¹²² But newsreels also showed the “braver souls” who remained to endure this “dry spell.” These were the “plucky” housewives and farmers who stayed to “defy plague’s havoc.”¹²³

A one-time radio commentator, Hill’s is an authoritative tone. The all-knowing “voice of Hearst” pumps out the news in a dramatic, rushed tempo that adds a sense of immediacy and absolute urgency to every story. We see the Kansas housewife struggling to perform her daily chores against relentless wind and dust conditions. Her timetable accelerates along with erosion conditions in what Hill describes as a “new Sahara.” In so many newsreels, we see her sweeping a bucket load of sand from her house, and down her four front stairs. Often she does not hold a broom but shovels the sand from her doorstep. Her mouth is covered with a makeshift mask, as she battles against howling winds to feed her cows, to tend to the milking, collect eggs, feed the chickens, clean windows, and seal windows with newspaper, in short, to maintain a civilized domestic environment.¹²⁴

Under the desert-like conditions created by this “dry spell,” Hill describes domestic life as “almost unbearable.” In just one night he tells us “floors are covered inches deep” and across Garden City, Kansas “everybody tries to avoid the dreaded dust pneumonia.” Houses in these “desert wastes” appear half-buried under dunes as if perched in the middle of the Sahara Desert. But the contradictory message implicit here is that although conditions are “uncivilized” or disastrous, they have no cumulative effect on a woman’s civility. This is a temporary disaster in the face of which she can maintain her “pluck,” her daily domestic routine, and her conventional appearance. The housewife’s courage will be enough to see civilization through until salvation comes with rain (not necessarily with soil conservation).¹²⁵

Both Pare Lorentz in *The Plow that Broke the Plains* and Director Jack Glenn also dramatized a contradictory set of ideas about gender, desert, and civilization (Figs. 3.7 and 3.9). The focus here will be on Glenn who shot *US Dust Bowl* on location in the Texas Panhandle to publicize wind erosion conditions there. When it was released by *The March of Time* in June 1937, it screened nationally and was described as “the best dust

storm motion picture ever taken.” Glenn had captured classic dust storm imagery in scenes that suggested humans pursued by a relentless nature.¹²⁶ But audiences not only saw these images, they heard the voice of the *March of Time* narrator, Westbrook Van Voorhis.¹²⁷ This was at a time when the news came to audiences only three ways—through newspapers, radio, or newsreels, and it was a time when working as a narrator or radio announcer in the American context, meant national celebrity status.¹²⁸ Van Voorhis’ “debonair” face was plastered over billboards across America at the time. He was known as the “voice of doom,” for the sense of drama he brought to the news.¹²⁹ Contemporaries even described his narration as Greek-God-like, an all-knowing voice of authority and calm, rising above the clamor of tragedy to narrate a conclusion. His Standard American speech, as used by most American actors in these roles, no doubt extended his omniscient appeal widely and well beyond any state borders.¹³⁰

Viewing *US Dust Bowl*, we hear the voice of Van Voorhis. We also see rusted implements buried under rippling sands that spread to the horizon (Fig. 3.8). A tiny house is in the foreground. A huge dust cloud brews, looming in the background, many storeys high. It sweeps across the plain toward us. The film crew must be filming from the back of a truck to capture



Fig. 3.8 In *US Dust Bowl*. Once signs of American progress, “rusted and sand-blocked farm implements” are “now scrap iron in a new American Desert.” Jack Glenn, *US Dust Bowl* (Time Inc., 1937) (Image, HBO Archives)

this. The dust cloud sweeps toward us almost engulfing the camera. Glenn is asking: will this desert ever be stopped, what will the fate of humans be under such conditions—and would they ever stop running?

In *US Dust Bowl*, Glenn's "hopeless and bewildered" housewives and their families do not stay in the Dust Bowl. They abandon their homesteads, and with their few possessions, leave behind homes now in ruins. Their young children are piled onto the back of trucks, horse-drawn wagons, or caravans. They leave behind homes surrounded by desert-like dunes. Nothing else is visible. They are Dust Bowl refugees. "California or bust" is painted on the side of a trailer and "No more Dust Bowl" is painted on the back of a caravan. Possessions are piled high as these families drive off across what looks like a sandy desert. However, in this tragedy Glenn draws a line between the declining state of the soil and the state of the civility of the people. The actors in the film are not thin. They do not appear sick or physically impoverished and do not wear rags. The animals do not look thin either. They are all very healthy looking.

We see a horse with a decent-sized belly. He stands in the sand, managing to find some feed (interestingly, he isn't in the footage of the family leaving in their small truck. He seems to have been forgotten at this point). Outside her home, a "bewildered" mother grabs her child and runs inside for protection (Fig. 3.9). But the message implied in her healthy figure, her



Fig. 3.9 A mother in tidy frock and heels picks up her child to take him in from an approaching storm as blowing sand sweeps around the corner of the house in Jack Glenn, *US Dust Bowl* (Time Inc., 1937) (Image, HBO Archives)

obvious physical fitness and her fashionable, tidy frock and heels—is that there surely is some way to go before the desert catches up and civilization can be eroded by the “contagious and deadly natural blight” of wind erosion described in this film. Despite this implicit gendered denial, Glenn ends the film with a question that suggests impending doom. A giant dust cloud looms behind a tiny homestead. It grows larger and larger, closer and closer to the camera. Glenn sets up his shots so that simultaneously the humans in the frame become smaller and smaller as they run for shelter from the dust storm. Van Voorhis breaks into the rhythm of his narration to leave an impression of “forever” almost reverberating in the imagination of the viewer. In the closing few words of the film below, our “voice of doom” utters the word “when.” Then he pauses. He wants us to think about this word. Next he places strong accent on the first syllable of the word “*ev-er*” to drive home its meaning. He wants us to think about this too. To emphasize its importance, he stops to pause again before delivering the final question of the film about the Dust Bowl. After that he pauses again. It is a longer pause and it is filled with dramatic music that accentuates Glenn’s warning, forcing us to think once more about the terrifying possibility of a permanent desert. Then in his characteristic voice, almost threatening in its dramatic depth, “the voice of doom” signs off. Here are the closing lines that I have just described delivered by Van Voorhis as a tiny figure of a man races toward his house for shelter. He warns Americans that: “new dust storms sweep Dalhart and no soil expert will predict when [*pause*] if *ever* [*pause*] the US Dust Bowl will be reclaimed [*a long pause fills with the drama of threatening music*]. Time [*pause*] marches on” (Fig. 3.10).¹³¹

DUST BOWL STORIES: A SECOND WIND IN AUSTRALIA?

These are the ways in which national myths and environmental ideas came to be dramatized across America in Dust Bowl narratives of the 1930s. The “dust bowl” idea was not just about wind erosion and drought. It was about its time. It was about FDR and the New Deal, it was about the poet Archibald MacLeish, the passions of conservationists such as Hugh Hammond Bennett, modernist artists, New Deal photographers such as Dorothea Lange and film-makers such as Jack Glenn and Pare Lorentz, all products of their time. It was about the people and the organizations, who promoted it, the developing artistic movements that facilitated its dramatization, and the film, print, and broadcast media that drove its circulation,



Fig. 3.10 As “new dust storms sweep Dalhart” the camera captures the figure of a man. He appears tiny as he races toward a house—away from the camera—for shelter. At the same time, the house is engulfed by the approaching storm that appears bigger and bigger, and diminishes both. Jack Glenn, *US Dust Bowl* (Time Inc., 1937) (Image, HBO Archives)

all at a time when the nation was affected not only by drought, but also by long-term economic depression.

During the New Deal era, soil conservationists constructed this idea in ways that made links to a set of ideas held in the American imagination at that time. But newspapers and film-makers turned their attention away from drought—and onto rain, recovery, and bushels of wheat at the end of the decade when drought and depression ended, and World War Two began, bringing with it an increased demand for American wheat. The idea of a Dust Bowl endured but as American national myth about a time in the past, during the Depression of the 1930s. It did not regain its currency, even when drought returned and dust storms rolled across the southern Plains in 1952 during the “filthy fifties.”¹³²

But what would happen if the story found a second wind—and all of the national, environmental, and gendered ideas, bound up in Dust Bowl narratives, were transferred across the world in the following decade—to Australia, and broadcast across that nation? This is what occurred during the 1940s, a time of drought—and of world war. But how would the idea of a “dust bowl” evolve? And what kind of influence, if any, could it possibly have upon a country weighed down by war?

NOTES

1. Lord, *Behold*, 305.
2. Joel "Soil Conservation Reconnaissance," 3.
3. Lord, *Behold*, 305.
4. On the need to construct a recognizable pattern of erosion events the public can identify with, see Showers, "Soil Erosion," 374.
5. Sears, *Deserts*, 113, 301. On tragic Dust Bowl narratives, see Cronon, *A Place for Stories*, 1363.
6. *The Rape of the Earth* was the original title of Jacks and Whyte's *Vanishing Lands: A World Survey of Soil Erosion* (New York: Doubleday, Doran & Company, 1939). On "tragedy," see Chase, *Rich Land*, 113, 301. On the genre of tragedy, see Abrams, *A Glossary*, 321–325. On suicide, see Sears, "Death from the Soil," 440; MacLeish, "The Grasslands," 67. MacLeish described "Murder," and a "battle" on 60–61, grasslands as "dead" on 59.
7. Sears, *Deserts*, 203.
8. On personification, sympathy, and empathy, see Abrams, *A Glossary*, 99, 74.
9. Lord laments a tractor increase between 1925 and 1930, in *Behold*, 206. Cunfer describes comparative impacts on the soil from irrigation technologies in *On the Great Plains: Agriculture and Environment* (College Station: Texas A&M University Press, 2005), 226. See also Leslie Hewes, *The Suitcase Farming Frontier: A Study in the Historical Geography of the Central Plains* (Lincoln: University of Nebraska Press, 1973); Worster, *Dust Bowl*, 93, 152.
10. On facilitating Americans' understanding "across class lines," see David Goodman, "Democracy and Public Discussion in the Progressive and New Deal Eras: From Civic Competence to the Expression of Opinion," *Studies in American Political Development* 18, no. 2 (Fall 2004), 82.
11. See Libecap and Hansen, "U.S. Land Policy," 26–27; Morris L. Cooke, *Report of the Great Plains Drought Area Committee*, August 27, 1936, Franklin D. Roosevelt Library, Hopkins Papers, Box 13.
12. On "the land as nature intended," see Dorothea Lange and Paul Schuster Taylor, *An American Exodus: A Record of Human Erosion* (New York: Reynal and Hitchcock, 1939), 103; On fears for permanent agricultural settlement, see Phillips, *This Land*, 14.
13. See Bourke-White's imagery in "Dust Changes America."
14. MacLeish, *Land of the Free*, 86; Also Worster, *Dust Bowl*, 45–46; Dunaway, *Natural Visions*, 57.
15. Hurt, *The Dust Bowl*, 64; Dunaway, *Natural Visions*, 54–55.
16. Worster, *Dust Bowl*, 27.

17. John L. McCarty, "Thou Shalt not Bear False Witness," 1942, (unpaginated), John L. McCarty Papers, Amarillo Public Library, Amarillo, Texas.
18. Cooke, "Twenty Years of Grace," 282.
19. Chase, *Rich Land*, 342; preface Burges, *Soil Erosion Control*, vii.
20. Jacks and Whyte, *Vanishing Lands*, 23.
21. Lowdermilk, foreword to *Conquest of the Land through 7,000 Years*, Agriculture Information Bulletin 99 (Washington, DC: US Dept. of Agriculture, Soil Conservation Service: 1975), 2.
22. Sears, *Deserts*, 103.
23. Ibid, 15.
24. Macleish, "The Grasslands," 67.
25. Hugh H. Bennett, United States Soil Conservation Service, *Soils and Security* (Washington, DC: U.S. Govt. printing office, 1941), 6.
26. Chase, *Rich Land*, 222.
27. Bennett, *Soil Conservation*, vii; See also Henry A. Wallace quoted in Lookingbill, *Dust Bowl USA*, 49–50.
28. Cronon, *A Place for Stories*, 1358–1360.
29. White, *Organic Machine*, 34.
30. Sears, *Deserts*, 203; *Future of the Great Plains*, 65.
31. Lowdermilk, *Conquest of the Land*, 30.
32. Of these listed Attitudes of Mind, Point 1, can be seen on page 63, points 2–4 page 64, points 5–7 page 65, points 8–10 page 66 and point 11 on page 67 of *The Future of the Great Plains*.
33. US National Resources Committee, *Regional Factors*, ix.
34. Ibid.
35. Lord, *Behold*, 82.
36. Powell, "Mothering Husbandry," 277. On these eleven attitudes as related to capitalism on the Plains, on the report's failure to assert such ideas in its conclusions, and on a failure to sustain a shift in US attitudes beyond the 1930s, see Worster, 194–197, on a middle ground between laissez-faire capitalism and socialism, 189.
37. Hurt, *The Dust Bowl*, 61.
38. Dunaway, *Natural Visions*, 49; See also Lowitt, *New Deal and the West*, 45; also Gregg Mitman, *Reel Nature: America's Romance with Wildlife on Films* (Cambridge, MA: Harvard University Press, 1999), 100–101.
39. Dunaway, *Natural Visions*, 42, on absolving nature, see 49.
40. On high winds, see Paul B. Sears, "Floods and Dust Storms," *Science* New Series 83, No. 2152 (March 27, 1936), 9.
41. Suggesting individualism had failed and co-operative conservation was needed. Cronon, *A Place for Stories*, 1361.
42. Finis Dunaway, "New Deal Jeremiads," *Environmental History* 12, No. 2 (April, 2007), 312, and *Natural Visions*, 50–51; Lookingbill, *Dust*

- Bowl USA*, 28, 32, 52; Lookingbill, "A God-Forsaken Place": Folk Eschatology and the Dust Bowl" in *Americans View Their Dust Bowl Experience*, edited by John R. Wunder, Frances W. Kaye and Vernon Carstensen (Niwot: University Press of Colorado, 1999), 151–174.
43. Macleish, "The Grasslands," 201 wrote "Men plow them at their peril," 201; Dunaway, *Natural Visions*, 49.
 44. Dunaway, *Natural Visions* 51, on the "capturing and collapsing time" in the film, see 57.
 45. Dunaway, *Natural Visions*, 52; See Robert L. Snyder, *Pare Lorentz and the Documentary Film* (Norman, Oklahoma: University of Oklahoma Press), 1968, 37, 139; On anti-farmer propaganda, see Powell, "Mothering Husbandry," 277; Carville Earle, "The Myth of the Southern Soil Miner: Macrohistory, Agricultural Innovation, and Environmental Change," in *The Ends of the Earth: Perspectives on Modern Environmental History*, ed. Donald Worster (New York: Cambridge University Press, 1988), 175–210.
 46. Macleish, "The Grasslands," 201.
 47. Bennett, *Soils and Security*, 1.
 48. Henry A. Wallace, United States. Dept. of Agriculture, foreword to *Soils and Men* (Washington: U. S. Govt. Print. Office, 1938).
 49. Lord, *Behold*, 2.
 50. Johnson, *Heaven's Tableland*, 165.
 51. Macleish, "The Grasslands," 62, on a "battle," see 60–61.
 52. Chase, *Rich Land*, 113, 301.
 53. Chase, *Rich Land*, 100. *My Antonia* (1918) featured strong pioneer women. See "Prairie Settlement: Nebraska Photographs and Family Letters, 1862–1912," LOC.
 54. Mark Andrew White, "Alexandre Hogue's Passion: Ecology and Agribusiness in The Crucified Land," *Great Plains Quarterly* 26, no. 2 (Spring 2006), 69.
 55. Susie Kalil, *Alexandre Hogue: An American Visionary, Paintings and Works on Paper*, Tarleton State University south-western studies in the humanities, no. 23 (College Station: Texas A&M University Press, 2011), 65.
 56. White, "Alexandre Hogue's Passion," 70–71.
 57. "The U.S. Dust Bowl: Its Artist is a Texan Portraying 'Man's Mistakes,'" *Life*, June 21, 1937.
 58. Kalil, *Alexandre Hogue*, 71–74.
 59. Sears, *Deserts*, 11, on civilizations, 4. On Sears' writing, see Worster, *Nature's Economy*, 233.
 60. Chase, *Rich Land*, 48.
 61. MacLeish, "The Grasslands," 187.

62. See Worster, *Nature's Economy*, 238.
63. MacLeish, "The Grasslands," 65.
64. Ibid, 186.
65. Chase, *Rich Land*, 55. On agricultural mechanization, see Showers, "Soil Erosion," 372; John L. McCarty, *Some Aspects of the Farm Problem: With Special Reference To The Panhandle Area of Texas: A Study in Contemporary Problems for Professor S. H. Condron, Head of the Department of Government, West Texas State College, Canyon, Texas, 1941-42* (1942), McCarty Papers, Amarillo Public Library, Texas; See also Kenneth M. Sylvester and Eric S.A. Rupley, "Revising the Dust Bowl: High Above the Kansas Grasslands," *Environmental History* 17, no. 3 (July, 2012): 626.
66. Jack Glenn, *US Dust Bowl* (Time Inc., 1937).
67. Donald Worster, "Dust Bowl," *Handbook of Texas Online*, Texas State Historical Association, 2010.
68. Glenn, *US Dust Bowl*.
69. On a tree-planting scheme planned to extend to Canada from Texas, see Hurt, *The Dust Bowl*, 121, 124-125.
70. Lord, *Behold*, 206; For Sears' attack on "power machinery," see *Deserts on the March*, 227, nature, humans and "mechanical invention," 11; Also Cunfer, *On the Great Plains*, 125-126; Sylvester and Rupley, "Revising the Dust Bowl."
71. Vance Johnson, *Heaven's Tableland: The Dust Bowl Story* (New York: Da Capo Press, 1947; 1974), 202-203. For appraisal of Johnson's work as still-pertinent, see Carey McWilliams, "Heaven's Tableland: The Dust Bowl Story by Vance Johnson," *Annals of the American Academy of Political and Social* 256 (March 1948), 194-195. On Lorentz and the tractor paradox, see Worster, *Dust Bowl*, 96.
72. Joel, "Soil Conservation Reconnaissance," 2. For images of a "black blizzard," see Plates 1, 2, 3 and 4, on livestock death, see Plate 5B. Arthur H. Joel was "In Charge, Western Field Office, Section of Conservation Surveys, Soil Conservation Service," 1.
73. On stalling cars, see Joel, "Soil Conservation Reconnaissance," 2-3 and Plate 5C, on black blizzards bringing darkness, see Plate 2B. On "black blizzards" as opposed to "sand blows," see Worster, *Dust Bowl*, 14-15, on acute respiratory cases, 20; Sears, *Deserts*, 158.
74. Cooke, "Twenty Years of Grace," 282.
75. Archives of American Art, Smithsonian Institution, "The Great Depression and the Arts: Photography," educational slide 13.
76. On Walcott, see Paul Hendrickson, *Looking for the Light: The Hidden Art of Marion Post Wolcott* (New York: Knopf: distributed by Random House, 1992), 55; For the "Plan for Work" and on reading lists Stryker

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 78. All listed are from LOC: Rothstein photographed *Farmer and Sons* (also known as *Fleeing a Dust Storm*); *Dust storm, Amarillo, Texas*; *The winds of the "dust bowl"*; *Abandoned farm*; Lange photographed *Abandoned farm...Coldwater District*; *Sand drift along fence*; *Dust Bowl, north of Dalhart, Texas*; See Lisa Kathryn Dorrill, "Picturing the Dirty Thirties: Paintings and Prints of the Dust Bowl," PhD diss., University of Kansas (UMI Dissertations Publishing, 1998), 81.
 79. On *Steer Skull*, Rothstein's dramatization of his impressions, the 1930s expectation of photographic truth and perceptions of "faking it," see Robert Hirsch and Greg Erf, "Perceiving Photographic Truth," *Photovision* 2, no. 6.
 80. Stryker Collection, Letters 1:25, Ed Locke to Arthur Rothstein, August 14, 1936.
 81. For Locke's comments on the picture pages and Hitler, see Stryker Collection, Letter from Locke to Rothstein, July 7, 1936.
 82. For Locke on "spuriousness" and on hiding the skull, see Letter from Ed Locke to Arthur Rothstein, August 29, 1936. Stryker Collection, Arthur Rothstein Letters 1:28.
 83. See Arthur Rothstein, "Setting the Record Straight," *Camera* 22 no. 3 (1978), 51.
 84. On wilderness and other meanings embedded in skull images, see Corn, *The Great American Thing*, 270–271, 272–27, on the importance of "bleached bones" to American modern art of the 1930s, see 245–249, 268–271.
 85. On The March of Time, as "an advance in creative screen journalism," see Andrew Buchanan, *Film and the Future* (London: George Allen and Unwin, 1945), 45.
 86. Kalil, Alexandre Hogue, 75–76.
 87. White, "Alexandre Hogue's Passion," 71; Worster, *Dust Bowl*, 41; Kalil, *Alexandre Hogue*, 76.
 88. "The U.S. Dust Bowl," *Life*. See Kalil, *Alexandre Hogue*, 68 on *Dust Bowl*.
 89. White, "Alexandre Hogue's Passion," 71.

90. "The U.S. Dust Bowl," *Life*.
91. Kalil, "Alexandre Hogue," 63. *Drouth Survivors* was destroyed by fire. See Kalil, *Alexandre Hogue*, 77; "Hogue's Incisive Canvas, 'Drouth Survivors' finds Purchaser in Paris After exhibition," *Dallas Morning News*, September 1, 1938.
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94. Limerick, *Desert Passages*, 5.
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97. On "socialist realism" in terms of Marxist theory, see Abrams, *A Glossary*, 288. On Lange and American social realism, see Gordon, *Dorothea Lange*, 280–282, on "denaturalising" a photographic subject 282–283.
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99. For Taylor's arguments, see Worster, *Dust Bowl*, 56–57; On seeking federal leadership, see Milton Meltzer, *Dorothea Lange: A Photographer's Life* (New York: Farrar Straus Giroux, 1978), 182.
100. On tractors' "dislocating effects," see Shindo, *Dust Bowl Migrants*, 48. For this list of captions, see Lange and Taylor, *An American Exodus*, 70–103.
101. "The U.S. Dust Bowl," *Life*.
102. Paul S. Taylor, "Again the Covered Wagon," *Survey Graphic: Magazine of Social Interpretation*, v, i (1935), 349 (photographs are credited to Division of Rural Rehabilitation, California ERA).
103. Meltzer, *Dorothea Lange*, 182; Shindo, *Dust Bowl Migrants*, 50–51, 53.
104. Gordon, *Dorothea Lange*, 240–241.
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114. Sears notes "Pulmonary troubles, especially pneumonia" had increased "because of the dust" in *Deserts*, 158.
115. On oil and sawdust, see Henderson, *Letters*, 94, merciless drift and her shaded spot, 97.
116. Svobida, *Farming the Dust Bowl*, 143.
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118. Joel, "Soil Conservation Reconnaissance," 3.

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120. On desert as "deserted place," see Limerick, *Desert Passages*, 5.
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123. Hearst Metrotone news. Vol. 6, no. 259—excerpt. *New dust storms blanket vast area: Appalling scenes in Kansas filmed as plucky farmers defy plague's havoc* (Distributed by Metro-Goldwyn-Mayer, 1935-04-15), UCLA Film and Television Archives, Inventory Number: VA12572 M; "Plucky housewives" appear in *Dust storms revive fear of new Sahara; vast areas in the Mid-west turned into desert wastes*; nation warned of peril—Derby, Colorado, UCLA Film and Television Archives Inventory Number: VA4490 M.
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 132. On events during the 1950s, see Worster, *Dust Bowl*, 227, the New Deal soil conservation project including ecology, agronomy and planning as a failure on the Plains, 229.

PART 2

Soil and the US Dust Bowl:
American Imagery Converges
with the Australian

Battlefields of the South-West Pacific: Australian Soil Erosion, Enemies, Graziers, and Traitors in “Dust Bowl” Imagery

Severe drought had taken hold in south-eastern Australia by 1937, but the “dust bowl” idea did not gain purchase immediately in Australia in response to it. More was needed than the physical realities of drought to provide the sense of panic required to power “dust bowl” warnings. That panic came from the World War Two, particularly events that unfolded from late 1941. The dust bowl idea began to develop in the Australian imagination, as World War encroached closer to the nation’s shores—and the idea of “the enemy” and “the traitor” became foremost in the national consciousness.

On September 29, 1938, the Munich Agreement was signed by Adolf Hitler, Neville Chamberlain, Edouard Daladier, and Benito Mussolini. Australia’s Leader of the Opposition, John Curtin, assured Australians that the crisis regarding Germany’s ambitions for the return of Sudetenland from Czechoslovakia was over.¹ Curtin insisted that diplomacy was achieving the road to peace, a stance colored by his pacifist views. He likened the experience of war to “hell!” and did not intend to see Australians yet again dying in “European quagmires.”² But in March 1939, Hitler invaded the remaining territory of Czechoslovakia, destroying all hope that the Munich Agreement would appease his ambitions. By September 1939, Curtin had conceded that Australian involvement in World War Two was unavoidable. Great Britain declared war on Germany and on September 3, Australian Prime Minister Robert Menzies announced on radio across the nation, the beginning of Australia’s involvement in World War Two.³

By October 1941, John Curtin had become Australia's fourteenth Prime Minister. Weeks later, on December 1, 1941, he announced to Australians that the cruiser, *HMAS Sydney* and its entire crew were missing off the West Australian coast after a battle with the German raider, *Kormoran*.⁴ However, Britain's military strategy meant Australia's most powerful armed forces were fighting in Europe and the Middle East, while at home, Australians were left without the aircraft, carriers, and tanks needed to defend the continent in the case of a major invasion.⁵

This was a time when Australians defined "the enemy" firstly as Hitler, "the Nazis," or "the German" —this enemy was described as a threat to democracy, to freedoms, and to Britain itself. But Australians' cultural and geographical reality was one of a "European outpost on the edge of an alien Asia." Before the World Wars, this had driven a deeply felt need for a sense of belonging—or community connection to their Anglo-Saxon roots, and during the wars, more so their English "language, lineage, history and heritage." The evolving focus of Australians' cultural longing was exacerbated and complicated by the combined effects not only of war with Germany but also of distance between Australia and Britain. It was further affected by the 1941–1942 southward advance of Japanese forces in their attempts to isolate Australia from the US, and the Allied policy, opposed by Curtin, that treated the Pacific conflict—and Australian lives threatened by it, as "subordinate" to the European situation. As the threat of a Pacific War grew ever closer in the early 1940s, another enemy also came to be defined. The Japanese or "the Jap" was seen as a threat not only to Australia but also to the British cultural foundations of an Australian way of life.⁶

In 1940, Australian poet Dame Mary Gilmore turned to agricultural themes to describe what was a "growing threat to Australia." A champion of workers' rights, Gilmore has been described as "patriot, feminist, social crusader and folklorist," her works "among the permanent gems of Australian poetry." *No Foe Shall Gather Our Harvest* was published in the *Australian Women's Weekly*, framed by images of stockmen, farmers, and graziers working on the land, along with images of Australians in battle.⁷ Gilmore, now seventy-five, penned this offering for "the men and women of Australia." The possibility of war with Japan, so feared by the nation, and expressed by Gilmore, had become a far greater reality by November 1941.⁸

On December 5, 1941, two days before Pearl Harbor, Curtin's War Cabinet had agreed to freeze Japanese funds, seize Japanese vessels in Australian waters, and intern Japanese nationals. On December 7, the Japanese attacked Pearl Harbor (December 8, eastern Australia time).

Within days, they had also sunk the British battleship and cruiser Prince of Wales and Repulse, as they left Singapore to intercept Japanese invasion forces landing in Malaya.⁹ The losses both in Malaya and at Pearl Harbor had left Australia vulnerable to that much-maligned distance. Across December 1941 and into 1942, Curtin pressured Churchill to honor his commitment to send forces to support Australia, because Australians were locked in combat far from home in Europe and the Middle East.¹⁰ During this same period, the Japanese offensive advanced southward toward Singapore, but little help was forthcoming from Churchill. Fearing Japanese invasion, Curtin wrote a now-famous message to the nation, just before the New Year in 1942. He stressed the possibility of turning to the USA for the defense of Australia.¹¹ Not long after his message, Australians were shocked when inadequate British defenses in Malaya swiftly fell. British, Australian, and Indian troops then staged a desperate last defense at Singapore before they capitulated to the Japanese on February 15, 1942.¹²

For Australia, Singapore had been considered an impregnable fortress, and a symbol of British status and power in the region—yet it was here that some 120,000 British, Indians, and Australians became prisoners of war (POW) of the Japanese. In March 1942, the *Australian Women's Weekly* published Mary Gilmore's poem, *Singapore*. Hers was a gut-wrenching response expressing Australians' sense of betrayal by the British. She described a beleaguered Singapore looking to the skies for Allied support, and the now "dead and captive sons of Australia," and she called for revenge for "allied incompetence and corruption," in Singapore her poetry was embedded in imagery showing soldiers strewn on a battlefield. Their graves rise from the image, as do bayonets in the foreground. Their fists are raised in defiance as enemy planes besiege Singapore and the white flag is raised above Britain's Union Jack.¹³

Prime Minister Curtin described the fall of Singapore as "Australia's Dunkirk" and predicted that "the battle for Australia" would soon ensue. This, he said on February 16, 1942. Only days later, on February 19, the Japanese launched the first of a series of sixty-four raids against Darwin in northern Australia. Forty-seven ships were sunk in the harbor, ten US Kittyhawk fighters were shot down, and some 250 people lost their lives in the first two air raids which were also the heaviest. Among the dead were cooks and postal workers, a Wing Commander, merchant seamen, Australian army nurses, mothers, grandfathers, and teenagers, members of the Royal Australian Air Force, aboriginal and non-aboriginal Australians. But the largest loss of life was suffered by American naval and air force

personnel attached to the *USS Peary*.¹⁴ Some made successful escapes from Malaya and Singapore, but many were captured and killed by the Japanese as they tried—including women, children, and nurses crowded aboard the *Vyner Brooke*. Curtin warned Australians that there would be no turning back. He said, “‘fate has willed our position in this war.’”¹⁵

Among the thousands of Australians who were called to join the armed forces were those who normally provided rural manpower, while those left behind to manage the land suffered from resource shortages including transport for stock, petrol, or vital machinery parts, all difficult to access. In addition, while suffering under worsening drought conditions, Australia was under pressure to produce food for millions in the Pacific, India, and Britain, often where food supplies had been lost to the Japanese or destroyed by submarine and air raid campaigns. They produced “384 million eggs a day for US forces,” and grew crops to provide for the tastes of the US Army and Navy, and Australian civilians. Meanwhile Australians on the domestic front prepared for an influx of hoped-for evacuees from Singapore and Malaya in the Autumn—with absolutely no knowledge of who would arrive, how many would arrive, or how far south the Japanese intended to push.¹⁶

After Singapore, the mainland suffered attacks including at Broome and midget submarine attacks on Sydney. Curtin agreed to a defense strategy which placed General Douglas MacArthur in command of all south-west Pacific forces. But for months, Curtin was embroiled in a battle with Churchill, over bringing the remaining Australian troops home from the Middle East. Churchill agreed to the return of the Seventh Division but when he tried to divert the Division into Burma, Curtin insisted that this order be rescinded. The Australians were not all returned until early in 1943—while Australia’s requests to Britain for modern aircraft for the Royal Australian Air Force were similarly fruitless. Despite these challenges, Australians were heavily involved in the battles of south-west Pacific.¹⁷

Following the fall of Singapore, in May 1942, the Battle of the Coral Sea took place off Australia’s north-east coast. It “signified the end of the expansion of the Japanese Empire.” Following this battle, the Japanese navy lost four aircraft carriers in June, at the crucial Battle of Midway, a victory for the Americans in the Central Pacific. At the battle for Port Moresby, Australians halted the Japanese land-forces at Milne Bay, defeating them on November 2, 1942, at Kokoda on the Owen Stanley Ranges—the Kokoda Track, infamous as one of the most treacherous terrains in the

world. War cameraman Damian Parer captured this “deep green hell” in the only newsreel ever awarded an Oscar—*Kokoda Front Line*, for Ken Hall’s Cinesound films.¹⁸ Kokoda was a turning point for Australia and for the Pacific War. But the war was not over yet. For many at home, there was still no news from the International Red Cross, of Australians missing in Singapore, Malaya, and Java. The Japanese now focused their attentions on Guadalcanal Base in the Solomon Islands. Here, the Americans’ success meant that Australia’s fortunes had truly turned. Together, the Australians and Americans established a counter-offensive that drove Japan out of the south-west Pacific. Meanwhile the war may have ended in Europe by May of 1945, but in the Pacific, it did not end until Japan’s unconditional surrender in August of that year. Neither President Roosevelt nor Prime Minister John Curtin lived to see that day, both dying within weeks of one another in April and June that year, respectively.¹⁹

This was the atmosphere under which Australians identified a third enemy threatening the continent and along with it, a new traitor to the nation. But who was it? And how can the answer to this question help reveal the structure of a transnational dust bowl idea? In order to understand what the idea of a “dust bowl” actually was, as it was experienced by people of the past, factors other than the war-time context first need to be understood. These include where a so-called “dust bowl” was believed to have existed by Australians, and when that idea was publicized and uppermost in the popular imagination.

By the time the war began, severe drought meant that protective vegetation cover was reduced across the Australian continent. This led to “dramatic dust storms and widespread wind erosion of soils.”²⁰ The Australian Bureau of Meteorology has described the following conditions as “more or less endemic” for Eastern Australia between 1937 and 1945: there were record low rainfalls for New South Wales from 1937. Intensifying drought spread to other states the next year and while 1940 was “one of the driest years of the century for most of southern Australia,” by 1945 large rivers had “virtually dried up.” Across the war-time period, the south-eastern states sweltered under heat wave conditions with severe water shortages, while for the nation, both war and drought finally came to an end together, in August 1945.²¹

In light of all these conditions, where did Australian narratives locate their idea of a “dust bowl”? As illustrated across the coming chapters, during the 1940s, politicians, popular writers, journalists, and broadcasters all with various political and conservation interests described a

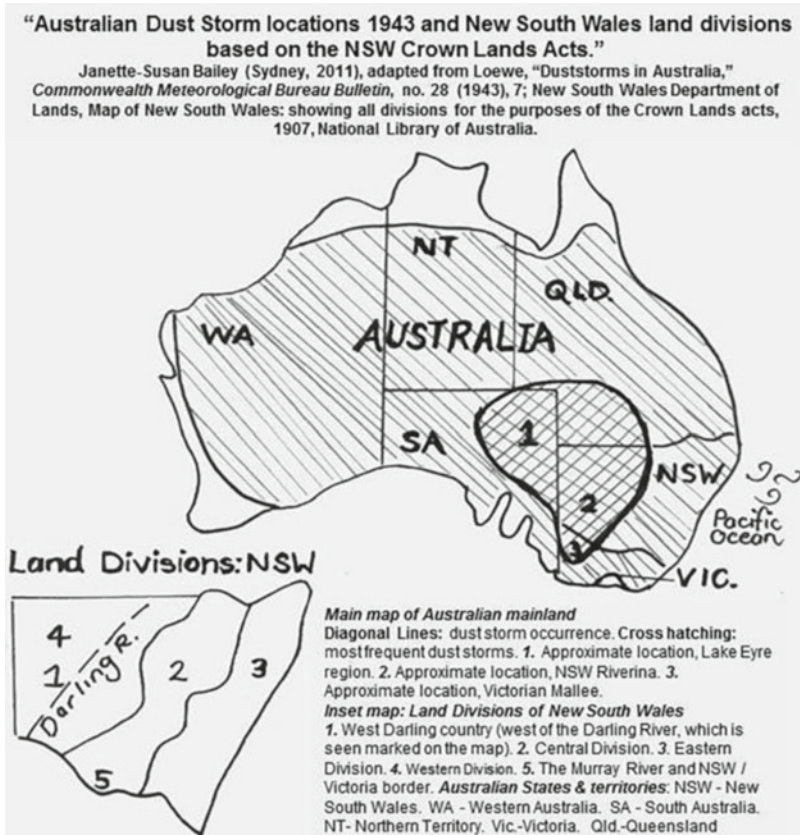


Fig. 4.1 Janette-Susan Bailey, "Australian Dust Storm locations 1943 and New South Wales land divisions based on the NSW Crown Lands Acts" (Adapted from Loewe, "Duststorms in Australia," (1943), NSW Department of Lands, Map, Crown Lands acts (1907), Sydney, 2011)

"dust bowl." Recent reports have confirmed that among "the major wind erosion regions in Australia," at the time was the Lake Eyre Basin region of South Australia, north-western Victoria and western New South Wales (Figs. 4.1 and 6.4).²²

Australian stories located "dust bowls" in different areas right across the continent in all of these states and beyond, depending on the aims of storyteller. But New South Wales and the bordering state of Victoria

in south-eastern Australia are the focus of this history while this chapter is about stories generated by wind erosion in western New South Wales (Fig. 4.1). In these stories, the US ideas about soil conservation, wind erosion, and the US Dust Bowl, converged with imagery describing sheep, the overstocking grazier of western New South Wales, and a knowledge of Australian war-time sentiment. Australian stories of individualism, the pioneer, settlement, national progress, and land destruction were tacked onto a US Dust Bowl warning and the national myth of economic progress—"Australia rides on the sheep's back" was challenged.

During this period the term "dust bowl" was used to describe differing phenomena: including aridity or drought conditions of any kind, dust storms, dust haze or sand drift and sometimes water-eroded lands. It was also described as something in various locations, sometimes within, or moving beyond, regional, state or national borders. In 1944, the *Adelaide News* described a "dust bowl in the north of South Australia," in the Lake Eyre vicinity—but moving east to impact on New South Wales. The *Melbourne Herald* located a dust bowl first in New South Wales, then as something traveling beyond Australian borders: "the New South Wales dust bowl is drifting over New Zealand's west coast." Many newspaper articles described a "dust bowl" extending from the north-west Victoria's Mallee region into the western division of New South Wales and east toward the coast.²³

With the New South Wales story in mind, the aim here is to establish what the transnational idea of a "dust bowl" was, how "dust bowl" stories were constructed in Australia, and why. To do this, it is also important to briefly discuss the gaps that existed in Australia's knowledge of their own soil conditions, and what the causes of Australia's wind erosion problems were thought to be at the time.

KNOWLEDGE GAPS: "THE FARMER'S MIND" AND OTHER CAUSES OF WIND EROSION

The part played by human activity as opposed to drought in contributing to wind erosion of the 1940s has never been established with absolute certainty. Clearly, this means there was uncertainty in the 1940s.²⁴ This knowledge, including the role that farmers and graziers had played, was still in development. In 1943, the New South Wales Government lamented that the USA and Russia had a strongly developed soil science compared to Australia, where the only soil map was "a somewhat generalised map of Australian soil types produced by the C.S.I.R. Soils Division."²⁵

The New South Wales Government described efforts to control soil erosion in their own state as a national exception because their SCS was creating maps illustrating the problem. Much of this work was achieved due to the leadership of Premier William McKell. As an ex-Member of the Legislative Assembly, John (Jack) Bailey explained it in 1947:

The McKell Labour Government...is carrying on a vigorous policy of country development, such as water conservation, irrigation and electricity... His Government has tackled the question of soil erosion in a way that no previous Government has and reafforestation.²⁶

Under McKell, the erosion survey of New South Wales had been completed by 1943 and results published in the first issue of the *Journal of the Soil Conservation Service of New South Wales*, in April 1945.²⁷ Based on his 1941 expression of a “trinity of water, soil and forests,” McKell had amalgamated the management of soil, water, and forestry into one Department of Conservation by 1944, and established the Kosciuszko National Park in the Snowy Mountains while he also called for a nationally coordinated approach to conservation of natural resources.²⁸ The New South Wales SCS (established 1938) conducted a soil survey. This showed 18,650 mile² of “moderate” and 974 mile² of “severe” wind erosion across 118,316,172 acres of agricultural lands of the Eastern and Central Divisions, with much “beyond economic reclamation.” However, the pastoral lands (ranches) of the western division—the focus of so much debate about “dust bowls,” were not included in the survey.²⁹ The first coherent classification and map of the vegetation of western New South Wales was produced in 1948 by the botanist, Noel Beadle.³⁰ The first person ever employed by the SCS to conduct a vegetation survey of that region, his research is described today as a benchmark study in the field. Beadle was first hired in the late 1930s, and by 1945, was based at Condobolin headquarters in the west (Fig. 6.4).³¹ He confirmed that “the cause of all erosion in western New South Wales can be traced ultimately to either over-grazing or timber removal or to a combination of these two factors.”³² Among the US and Australian experts in agreement over these contributing factors were Hugh Hammond Bennett and Australian geographer James MacDonald Holmes. Beadle described sheep populations reaching over fifteen million in 1891.³³ This, combined with the later dry years, rabbit plagues and the drought of 1901 had reduced stock levels to four million, destroyed “thousands of miles of fine native pasture and

established the erosion menace.” He added that in 1945, the soil menace was an increasing problem.³⁴

But as far as film, print, and broadcast media stories were concerned there was one very major contributor. Reflecting New Deal morality narratives, soil erosion stories heaped blame on the “attitudes of mind” of the unscientific farmer/grazier. But while the overstocking grazier was a contributor to erosion, he was an indirect one, within a complex interplay of elements.³⁵ Drought killed edible shrubs and caused lack of feed and water on stock routes and properties. Native plants that did survive such as the perennial shrub, saltbush, soon became overgrazed. They are slow growing and could not recover quickly enough to match the demands of hungry animals.³⁶ Many had little choice but to remain on drought-affected properties and vegetation was quickly eaten out by their hungry stock. In addition, rabbits had reached plague proportions while war-time manpower shortages left rabbits uncontrolled.³⁷ Further contributors included economic depression, inadequate transport infrastructure, and government drought relief for graziers to move their animals out of affected areas and reduce stock numbers early in the drought. Soil conservation agencies were created in the late 1930s and 1940s—too late to have an impact during a period when war-time resource and manpower shortages were acute. A lack of animal husbandry skills, understanding of environmental conditions and knowledge of grazing systems were also contributors, while there was no legislation to make drought-induced animal suffering and starvation illegal. The closer settlement policies of New South Wales prior to 1940 divided big pastoral properties (ranches) into inadequately sized, eighty-acre parcels of land. This encouraged overstocking of small blocks in good years.³⁸ When drought came, they became overcrowded with sheep and native shrubs were eaten out, leaving dry topsoils exposed to the wind.³⁹ Meanwhile, the 1901 *Western Lands Act* contained no clause limiting the number of stock on properties until after the drought in 1949.

But it was not only the media but also experts who laid various measures of blame on the grazier and his lack of “conservation mindedness.” Dean of Agriculture at the University of Melbourne and Rural Reconstruction Commissioner Samuel Wadham was one of them. Wadham had co-authored *Land Utilisation in Australia* (1939) with economic geographer, Gordon Leslie Wood, a work said to have “heightened a sense of national identity.”⁴⁰ He spoke frequently on national radio on agricultural questions and the issue of overstocking. When he addressed the Annual

Convention of the Chamber of Agriculture of Victoria in 1941, Wadham chose literally to speak through the voice of an American. Robert Bowman was a member of President Roosevelt's scientific advisory committee of enquiry into land utilization and settlement issues. Wadham used Bowman's speech "America Wakes to the Need for Soil Conservation," to express himself with typically dramatic New Deal conservation rhetoric about soil disease, waste, and national assets. Americans, he said, had been awakened to the idea of conservation "by such overwhelming disasters as the Dust Bowl." Reflecting the moral tone of the US Great Plains Committee's 1936 report, *The Future of the Great Plains*—and their list of problematic farmer "attitudes of mind," Wadham described the "magnitude" of erosion and the "insidious nature of the 'disease'" that had turned that nation "conservation conscious."⁴¹ By accentuating the problem of the grazier's mindset, these national conservation narratives tended to downplay not only the decadal and environmental differences between the USA and Australia. They simplified the wide range of factors contributing to the problem, and the overstocking grazier of western New South Wales became a target, foregrounded in media stories of the day.

Of the complex range of contributors that did exist, it was this aspect—the farmer or grazier's mind, that came to dominate narratives of cause and effect in the Australian national media. Wadham's address reflected a developing transnational understanding of the causes of wind erosion, at the same time that the scale of the tragedy was beginning to take hold in the popular national imagination.⁴²

The figures required to reveal a full and accurate picture of the state—or the nation's soil losses, simply did not yet exist in the 1940s. Certainty or real data was missing. Australians turned to the only kind of evidence that was available and based on this, frequently targeted the grazier in these narratives of blame. The knowledge gap existed partly because, despite New South Wales having invested in soil conservation research and activity, other states were said to be lagging behind. This meant there were gaps not only at the state level of understanding on erosion but also in the nation's overall accumulation of knowledge. In light of this, soil conservationists either turned to existing New South Wales figures to describe the causes of erosion, or most often, to the US knowledge and ideas. New South Wales SCS Project Manager Tom Taylor, lamented this knowledge gap in 1945 arguing that:

local knowledge and experience in erosion control is sadly lacking in Australia and the only approach to the problem has been based on overseas information mainly from the U.S.A.⁴³

Stories describing erosion conditions on the US Great Plains were used as evidence for the claim that Australians were destined for a US-style “dust bowl” at home, if they did not take heed of American conservation initiatives. To avoid that fate, graziers and farmers were warned to co-operate with the soil conservation expert. Evidence of a need to act against “dust bowls” could also be seen in “non-theatrical” or documentary films, a medium considered not only educational but “a most powerful weapon of tremendous national importance.”⁴⁴ The same claim made its way across the airways through debates broadcast by the Australian Broadcasting Commission (ABC), at a time when radio was considered an important tool for developing democratic discussion.⁴⁵ Further evidence appeared in newspapers and illustrated magazines, each a powerful force in the development of visual culture at the time, while newsreel films too, produced “dramatic images of huge dust storms engulfing rural towns and of sand drifts burying fence-lines.”⁴⁶ This kind of imagery often provided the clearest available evidence of what soil erosion conditions were like across the country—particularly for those unable to witness erosion, or unable to witness all of it with their own eyes.

These stories reflected the natural human desire to overcome uncertainty, as well as the desire of journalists and media professionals to “convey ‘clear messages’ or warnings for the public about pressing issues.” Alexa Weik von Mossner has explained the nature of such narrative—it accentuates some connections at the expense of others. This means that “a single narrative will never be able to tell the ‘complete story’ or do justice to the complexity of...large scale environmental issues.” Rather, we might get “interesting protagonists and intriguing plotlines, elements that keep readers, or viewers cognitively and emotionally *engaged* in what is being communicated.”⁴⁷ In the 1930s and 1940s, a young man called Sam Clayton was one Australian soil conservationist very much concerned with engaging audiences this way.

SAM CLAYTON AND A SPECTACULAR STORY TO SHOCK THE NATION

The American response to wind erosion had been to invoke a declensionist view of the causes in human error—particularly the attitude of the farmer—and a technological solution to the problem of the Dust Bowl. Technology applied through governmental action, while taking “the balance of nature” into consideration, the story went, would see the trajectory of the American

story rise up, to beat the story of a Dust Bowl descent into death and decline. An intergenerational story, it packaged its message in the myth of ancient civilizations fallen to soil neglect.

Australians drew this Dust Bowl narrative into their own national context and empowered it with new meanings. Writers felt that a belief in the story of great civilizations fallen due to soil erosion was needed before Australians might believe America to be one of those fallen (and the most recent). Australians would then need to see a correlation between that fallen civilization—in the US Dust Bowl region—and their own tradition of land use under similar environmental conditions. To achieve this, Australian storytellers drew on the fact that the Dust Bowl had occurred within only a decade, and that American conditions, and people, were considered to be similar in Australia. Along with this strategy, Australians introduced storytelling elements that aimed to appeal to the emotions of a broad war-time audience—both rural and city—at a time when Australians were experiencing daily, a heightened sense of national emergency.

Australian conservationists used “dust bowl” imagery to create a simple plotline. They presented a moral argument about the ecological consequences of human actions in their storytelling. These Australians capitalized on the moral tone of New Deal narratives—the US references to “war” against the “enemy” of soil erosion corresponded well to Australian war-time sentiment.⁴⁸ Australian stories contrasted the morality of the soil expert and his conservation attitude—as “patriotic savior”—against the immorality of an “unbelieving, anti-science grazier”—portrayed as an “unpatriotic gambler,” and an affront to the Anzacs shedding their blood on foreign battlefields. Born of the tragic World War One landing at Gallipoli of Australian and New Zealand Imperial forces in 1915, the legend has formed part of a powerful Australian national mythology, centered around ideas of masculinity, mateship, and egalitarianism. Over and again, the Anzac story has been said to describe the character of the nation.⁴⁹ The legend has its roots in the landing at Gallipoli but broadly acknowledges the service of New Zealanders, the 61,522 Australians who died out of a population of under five million during that war, and over 100,000 wounded, gassed, or taken prisoner.⁵⁰ In addition to Anzac, Australian storytellers tacked the nation’s stories of individualism, the pioneer, settlement, national progress and land destruction onto their own US Dust Bowl warnings and the national myth of Australia riding on the sheep’s back was tested. “Dust bowl” imagery was a commentary on this myth. There were loopholes in nineteenth and early twentieth century land legislation. Like the US

Homestead Act (1862), it was designed to create the “small man’s frontier,” and the independence that like Americans, Australian “small men” like John (Jack) Bailey (1871–1947) had also hoped for.⁵¹ This was not to be.⁵² Bailey wrote of the experience of “small men” when searching for land in New South Wales. He said that as a boy:

when leaving home my father advised me to keep a sharp look out for a suitable block of land big enough to support the whole family, so we could be all together and work the land and we would all be independent.⁵³

Bailey searched the state for land and was eventually told by a Crown Lands Agent at Hay in the Riverina (Fig. 6.4) that “it is not the policy of the government to interfere with the squatters’ runs,” and that “all the lands in the Western Lands Division are beyond me and all the lands in the Central Lands Division are successfully tied up.” Instead of a small man’s frontier, this created a frontier “hospitable to the large man instead.” It was a frontier where the rights of workers were fought out from the early 1880s, and established through rural labor struggles under the leadership of advocates such as “small man,” Bailey.⁵⁴ In the 1940s, Bailey recalled how “over 200 miles” of land had been “controlled by about 100 people” on Riverina stations. “I am now in my twenties...” he wrote looking back. Forced to re-consider his prospects, he turned to politics, becoming federation Vice President and President of the central branch (1914–1924), President of New South Wales branch of the Australian Workers’ Union (AWU) (1938) and from 1918, Labor MLA for Monaro and Goulburn in the New South Wales Parliament, establishing arbitration and the first award for rural workers in Australia (1926).⁵⁵ The story was different to the US case.⁵⁶ Widely published on the topic, when University of Melbourne historian Brian Fitzgerald compared the US and Australian cases in 1947, he described how an American trade union movement of a similar scale had not been established until the 1930s.⁵⁷ And this was reflected in the work of writers and photographers such as Lange and Taylor whose portrayals of “tractor farming” and the rural labor struggles of Dust Bowl migrants were used to advocate for change.⁵⁸

Australia’s sheep myth was rooted in this nineteenth century history. Though they held a monopoly over the lands of western New South Wales, large landholders (producers, and later finance companies) were said by many to provide the economic backbone of the nation, buoying primary industry with wool exports. Progress was eventually made toward

fairer distribution of lands through acquisition and subdivision (closer settlement).⁵⁹ Reflecting this history, in “dust bowl” imagery, instead of a symbol of economic progress, the sheep was now portrayed as “trampling across the face of Australia.”⁶⁰ Just like cattle and the tractor in the US narratives, it was no coincidence that in the Australian story of blame, sheep now lay dying across a drought stricken landscape. But the media proliferation of this narrative of blame did not happen overnight and one of its most avid promoters was Sam Clayton.⁶¹

Stories about the US Dust Bowl had graced the pages of Australian newspapers in the 1930s. In these stories, there was often an erosion problem and but for a few claims in Movietone films and the print media late in the decade, certainly no “dust bowl” in *Australia*—yet. Instead, newspapers described severe wind erosion as a “great American tragedy.”⁶² The US case stood as a warning that “Australia’s new peril” of “marching sand-dunes” was reducing “millions of once-fertile acres to a desert-like dreariness.”⁶³ Writers told of President Roosevelt and the efforts of the US SCS, stressing that Australians should emulate the American effort. Otherwise, writers warned in New Deal rhetoric, parts of Australia would also be converted to “wilderness” by “the havoc” wrought by dust storms upon the balance of “Nature.”⁶⁴ In New South Wales, it was the first Director of the pioneering New South Wales SCS, Sam Clayton, who really began utilizing “dust bowl” imagery to promote soil conservation in Australia.⁶⁵

Under Clayton, the New South Wales SCS was established through a 1938 act of parliament.⁶⁶ The Service developed research stations, lectures, publications, and conservation demonstrations on private land, surveyed the eastern and central divisions of the state and established a research station in the western division where Beadle investigated pasture loss and regeneration. Clayton promoted the US style innovations in the SCS journal and educational publications and in turn, these were promoted by the media. He became known for supporting the idea of expert-driven science and advice but decentralizing activity, as was the American model in their soil conservation program. Clayton traveled to the USA as a guest of Hugh Bennett, adopted and adapted American technologies in Australia, and spruiked the New Deal message of “nature’s balance” to such a degree that he has been described as a “near clone” of Bennett.⁶⁷ Clayton quoted Bennett. Bennett quoted Clayton and other Australian experts in *Soil Conservation*. Politician William McKell, later premier of New South Wales from 1941, introduced Clayton to *Rich Land Poor*

Land, by “famous American author” Stuart Chase.⁶⁸ Clayton pasted whole passages from Chase in the speech he crafted for the introduction of a soil conservation bill into the New South Wales Parliament. The 1938 New South Wales Soil Conservation Bill became the first act of its kind in the Commonwealth, while the Act established legislation supporting “action on a wider scale and the establishment of a soil conservation authority.” But the focus here is not on the soil expert, policy, and legislation, rather the body of storytelling that was generated by the bill which in itself was a transnational accomplishment. Clayton admired not only the conservation efforts of New Dealers but their ability to get a message out to the public. Australians had undertaken soil conservation work but, Clayton explained, this would never be enough on its own. Interest in soil conservation in Australia had been at best “spasmodic” he said. What was needed was something akin to the Americans’ national storytelling strategy. They had a real talent for it he thought, and had proven this with their brilliantly crafted storytelling response to all forms of the “soil menace” including wind erosion on the southern Great Plains. Clayton lamented Australia’s lack of the same and argued that like the Americans, the nation must become “cognisant” of the problem of erosion—understanding that it actually existed first. Clayton connected Australian conditions on pastoral land to the US Dust Bowl, in a warning, like Bennett, that stressed the awareness of the problem of erosion must be established. The newspapers repeated his warning that otherwise, “undoubtedly the serious trouble experienced in the United States of America would eventually be repeated here.”⁶⁹ The only way to avoid this was to publicize the problem with a sustained and dramatic national storytelling effort. Clayton tried to instigate this. In *Soil Conservation*, Bennett quoted an anonymous Australian writer (very possibly Clayton), boasting that:

Investigations had been proceeding in New South Wales for about five years, but until the introduction last month of the Soil Conservation Bill public interest had been aroused only spasmodically.⁷⁰

In the kind of transnational language often adopted by Clayton, the anonymous writer added that lessons could be learned from the Americans. Bennett quoted his argument that it “[is] perhaps unfortunate that we shun the more spectacular methods of American publicity for national questions of this kind.” Anonymous then demonstrated this narrative skill, personifying the wind in imagery he conjured of the Australian problem.

In *Soil Conservation*, Bennett quoted him describing the “Wind in the West” that was “stealing our soil.”⁷¹

This is the group of US ideas that formed the foundation of Australian war-time soil conservation propaganda targeting the grazier and farmer. In media stories of the time, it is useful to note that grazier and farmer were terms sometimes used interchangeably, particularly where the target audience was broader, and included city readers or viewers. This was also perhaps to accommodate the transnational narratives from the US Dust Bowl. They were centered around wheat, but were applied to the New South Wales story concerned with overstocking graziers. Clayton’s pioneering publicity soon became reflected in the nation’s print, film, and broadcast media narratives. By the mid-1940s, newspapers printed hundreds of articles carrying dire warnings of a US style “dust-bowl” at home. Titles of newspaper stories read: “Dust Bowl is a National Menace,” “Drought Lesson for Australia in USA Dust Bowl,” “Soil Conservation the Tragedy of Erosion,” and “Soil Erosion Serious Menace to Australia.”⁷²

NEW DEALERS, SHEEP, AND SALTBUSH IN AUSTRALIA’S “DUST BOWL” STORY

By the early 1940s Australian newspapers, reports of the War Organisation of Industry and other government agencies, professional journals, the national broadcaster, even women’s magazines had all borrowed from New Deal tales of “dust bowls,” nature’s balance, and technological salvation. Experts writing on soil conservation at the time had stated that Australians were yet to understand just how “entirely different” American environmental conditions, and farm management practices were—and just how diverse they were from one American region to the next. They stressed an urgent need for “the utmost caution” in Australian scientific research if “our adaptations of American technique are to be satisfactory.” The “proposals and practices” of US experts, they advised, should be adapted carefully to suit Australian conditions.⁷³ Despite this knowledge, where there were gaps in Australia’s soil conservation knowledge, transnational imagery was often utilized to fill them. At the very least, it was considered proof of the urgency of finding a solution and the levels of change needed at home in Australia to achieve conservation attitudes and action.⁷⁴

Australian writers looked to Stuart Chase and Hugh Bennett for inspiration. The ideas of Russell Lord, Henry A. Wallace, Walter Clay Lowdermilk

and Frederick Clements can also be traced in the Australian narratives. Their stories echoed the New Deal message of new farmer attitudes and responsibilities and they often featured images of the farmer—fictional or not—to promote expert advice to land-users. In seeking to promote the expert as savior, these narratives reiterated the conservation ideas central to New Deal thought such as “wise use,” soil as an exhaustible asset, and ideas of wilderness. New Dealers had promoted the concept of ecology through stories of “nature’s balance” and moral tales that personified nature in a grasslands tragedy as murdered land or a mother earth suffering at the hands of the enemy of erosion.⁷⁵ Along with these elements, they included lessons about stewardship and the role of humans in protecting soil across generations. Australian writers borrowed all of these narrative strategies. They borrowed from moral tales and biblical references in New Deal narratives. In the Australian story, just as in the American, all of this was couched in the epic narrative of the soil erosion downfall of great civilizations. Most importantly, these are the stories where Australian national myth and ideas about sheep, patriotism, and the Anzac legend converged with American ideas about grasslands, stewardship, Dust Bowls, prairie dogs, and tragedy in Texas.

National and regional newspapers turned to the words of the American, Walter Clay Lowdermilk to explain the concept of “efficient” land use. The Melbourne *Sun* quoted Lowdermilk’s “Eleventh Commandment” urging farmers to practice stewardship across generations otherwise “live in poverty or be destroyed from off the face of the earth.”⁷⁶ The Australian Broadcasting Commission’s *Nation’s Forum of the Air*—inspired by an American model—turned to the personification of the soil and other elements of New Deal storytelling.⁷⁷ In “Erosion—The Menace to Australia’s Soil,” Gordon Wood launched into a tale warning that “no grass cover” meant “soil murder.” He added that Australians could soon “be living parts in a great drama as old as civilization itself, the drama of the death of a nation.” William Chairman Herbert Gepp borrowed the same lines from Shakespeare’s *Hamlet* as Russell Lord had done in *Behold our Land* warning that, “all flesh is grass.” He then closed the debate with a dramatic flourish: “I quote from a report of the U.S. National Resources Committee on this same subject. ‘The splendor of our bankrupt cities will become a ghastly joke.’”⁷⁸

In addition to all of this publicity, in April 1945, during the final months of war for Australia, the first issue of the *Journal of the Soil Conservation Service of New South Wales* was published, something Sam Clayton had

wanted to achieve for years in order to publicize soil erosion at home. A corresponding Soil Erosion and Water Conservation conference was held in Sydney that same month. Among contributors to the first journal issue and the conference were land-two users. One was Arthur Heath, an Advisory Councillor at the Agricultural Bureau of New South Wales.⁷⁹ Another was a grazier, animal husbandry expert, and vice-president of the New South Wales Sheepbreeders' Association, Frederick McMaster. The hope was that as land-users themselves, they could appeal to other land-users—but with expert advice. Heath described conservation as “a very old idea,” intergenerational in its proportions, and vital to Australia. But Australians needed to publicize it he argued, so that “conservation principles” would be accepted. Otherwise, “simple conservation measures” might never be practiced.⁸⁰

Heath took the title *Soils and Men*, from the USDA's 1941 Yearbook of the same name for his paper in the inaugural issue. Echoing New Deal rhetoric, he stated that the journal “may prove of historic importance as a mile post in the campaign to awaken Australians to the menace of erosion” an “insidious enemy which keeps creeping on.” To achieve this, he quoted Henry A. Wallace of the USDA to explain that erosion “may appear slow in man's lifetime, but not in a nation's” so that “we are inclined to defer action.” He reiterated Wallace's oft-quoted idea of a gendered nature: “Nature treats the earth kindly, man treats her harshly.” After touring every one of the Australian states, the USA, Africa, and Europe studying and photographing erosion, experts writing for The Bank of New South Wales turned to Wallace too, economic geographer Arthur G. Lowndes, sounding a similar warning in *Conserve Your Soil: A Simple Guide to Soil Erosion*.⁸¹ What Wallace, Heath, and Lowndes were describing was a “lack of intelligent care for the soil.”⁸²

As well as material from the Imperial Bureau of Science and various Australian State Departments of Agriculture, Lowndes' *Guide* referenced the American, Austin Earle Burgess' *Soil Erosion Control* and the USDA's *Soils and Men*. He also used “pamphlets and mimeographed reports too numerous to mention from the Soil Conservation Service of the United States Department of Agriculture” as well as “various photographs.”⁸³ With a Master of Science (Sydney University) and well traveled, Lowndes was widely quoted on the topic by the 1930s, and in his *Guide* now warned that wind erosion was developing right under Australians' noses just as it had Americans.' North American conditions were considered “similar to those in Australia,” and this is why Lowndes described Wallace's statements

as “truths” about soil infinity that could and should be “absorbed into the outlook of the Australian people.” If Australians did not stop imagining arid lands to be of greater value than they really were, Lowndes warned, the nation would face “social tragedy” as great as “the devastation in the United States.”⁸⁴

At the April 1945 Soil and Water conference in Sydney, Heath drew on American ecologist, Frederic Clements’ *Environment and Life on the Great Plains* to explain that in Australia, within a mere 40 years since 1902 ignorance, greed—and overstocking had upset nature’s “normal balance” and the nation now faced “new problems,” including the “menace to the integrity of the soil.” Clements had written, “Man Strides Over The Earth And Deserts Follow In His Footsteps.” Heath wrote: “the history of mankind indicates that forests preceded and deserts often followed his occupation.”⁸⁵ Documentary films from the US Office of War Information, and the Shell Company of Australia were screened at the conference including *Soil Erosion*, and two US films *Heritage* and *Rain on the Plains*. Heath noted that American conditions were thought to be “somewhat similar to our own.” Because of this, it was hoped that the conservation ideas Americans promoted in their films, photographs, and writing would help Australia move forward from “the talking stage.”⁸⁶

Lowndes’ *Simple Guide* for The Bank of New South Wales drew its Australian comparisons from Lowdermilk who estimated 145 million acres of once-productive soils in the USA now “wastelands.” Dust storms of the same “tremendous proportions” might soon destroy the livelihoods of thousands of Australians. To explain the scale of the risk, soil erosion in the USA was described as a “social tragedy greater than the death of 120,000 men from the United States in the Great War.” Lowndes’ *Simple Guide* described this as the “most important evidence” available, and undeniable proof that like Americans, Australians could not “sit back” and hope for soil erosion to pass without suffering “a national calamity of the gravest importance.” How could Australians be sure of all this?—“we know this is true from the American case.”⁸⁷

THE IMPACTS OF SINGAPORE: NEW BATTLES, ENEMIES, TRAITORS, AND SAVIORS

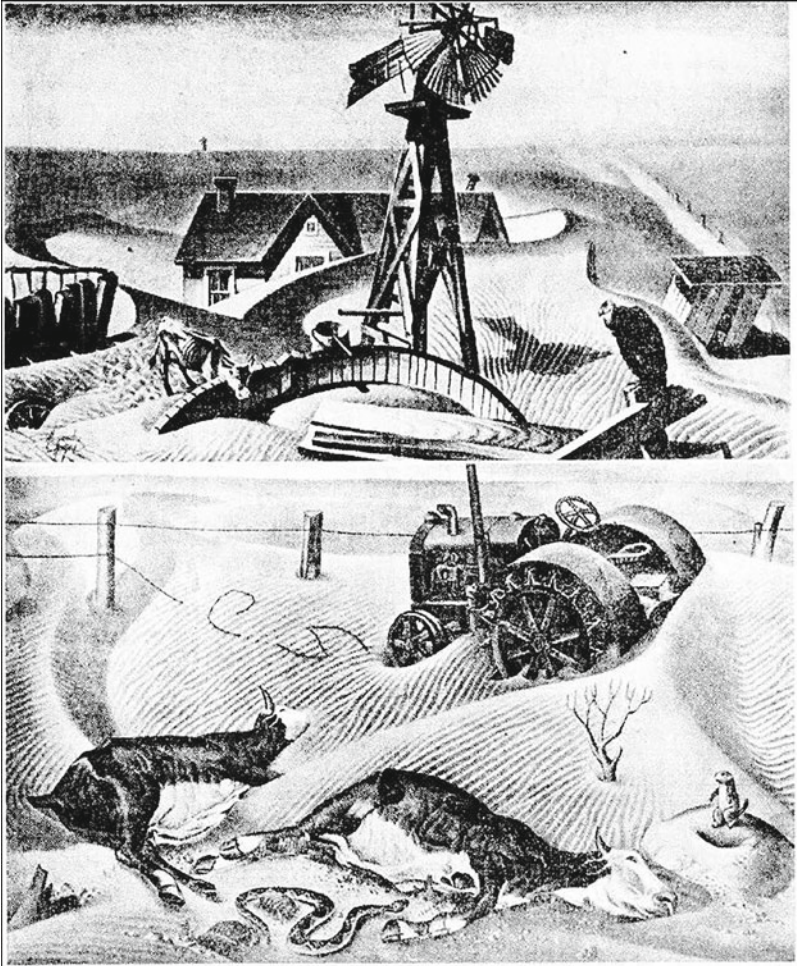
The fall of Singapore had intensified feelings of uncertainty and alarm over military invasion of the Australia’s mainland. This made way for a proliferation of nationalistic narratives promoting an intense sense of moral alarm

over erosion. Along with the press, pioneering documentary film-makers such as documentary film pioneer John Grierson of the Imperial Relations Trust of England and Australian film-maker Ken G. Hall were involved in publicizing soil erosion issues in “non-theatrical” films.⁸⁸

In March 1941, the Australian Conference between Commonwealth and State Governments on Non-theatrical Exhibition of Films was held and it aimed to establish “the Grierson Plan” for a Documentary Film Committee in each state. Grierson’s vision involved developing “national propaganda,” a “national viewpoint” and a sense of “national purpose” and generating “national information.” Soil erosion films were included in his list of six priorities for Australia.⁸⁹ When Grierson promoted the purpose of this kind of visual documentation, he described the “realities to which documentary seeks to give dramatic shape in order to fire the public imagination and the public will.”⁹⁰

When soil conservationists constructed these kinds of nationalistic stories, they accentuated the idea of human culpability and immorality. Many used war-time rhetoric and “dust bowl” warnings to explain soil in terms of farmers’ individualism versus his intergenerational responsibilities, in a new battle. This battle was taking place south of the conflict in the Pacific, on the Australian mainland. As the twin dramas of drought and World War escalated together in the region, so did these nationalistic narratives identifying a new enemy and a new traitor. At the same time, along with these threats, storytellers promoted the idea of a specifically *Australian* “dust bowl” and public interest did not remain “spasmodic” for long.⁹¹

There were two kinds of these stories that targeted graziers. Both described soil erosion as the enemy and overstocking graziers as greedy. Both described soil conservation as a battle using science, technology, and conservation-minded graziers co-operating with experts to fight it. In the second kind of narrative however, writers became far more hardened against the grazier. Those whose properties were overstocked, were portrayed not only as unscientific and uncooperative, but as traitors to the nation, the soil, and the Anzacs who lay dying on foreign battlefields and oceans to secure it. In both cases, the stories were loaded with emotion, often anger. Among the first group of more subtle stories were those featuring the Dust Bowl paintings of Texan, Alexandre Hogue in full-page visual spreads, to suggest the “greed” of Australian land-users. These images were taken from the June 21, 1937, *Life* Dust Bowl pictorial that included Hogue’s *Drouth Survivors* (1936) and *Drouth Stricken Area* (1934) (Fig. 4.2). Personifying the soil, the story’s title read,



WHEN THE SOIL DIES.

Fig. 4.2 “When the Soil Dies,” *Western Mail* (Perth, WA), December 31, 1942. *Top image.* Alexandre Hogue’s *Drouth Stricken Area* (1934), original at Dallas Art Museum: “Buzzards wait round an abandoned homestead until the last thirst-crazy animal succumbs.” *Bottom image.* Hogue’s *Drouth Survivors* (1936) original, formerly at Musée National d’Art Moderne was destroyed by fire: “Only the prairie dog and the rattlesnake are left alive in the dust-choked desolation.” Page 6 of this issue showed an Australian “MORTAR CREW IN ACTION,” portrayed “wiping out Japanese positions in the Papuan jungle”

“WHEN THE SOIL DIES. Grim pictures of drought and desolation in the Texas ‘dust-bowl’ by Alexander Hogue who knew the country before man’s greed turned fertile land into a desert.” Newspaper photographer J.M. Leonard, film-maker Ken Hall, journalist Keith Newman and poet Mary Gilmore were among others who created these kinds of stories. All of them publicized soil erosion and its relationship to drought and overstocking. They believed erosion was about a lack of awareness. They promoted an understanding of soil as something “alive,” described the threats to its survival and promoted the “urgent need for [a] scientific assault,” to fix it. And to ignite the Australian imagination, they packaged it all in a nationalistic and highly moral tone.⁹²

Gilmore had published letters, articles, and poems in newspapers and magazines on a diverse range of issues of national significance before, including the fall of Singapore, and the native shrub, saltbush. In November 1944, Gilmore’s *The Dust Bowl*, was published in the *Sydney Morning Herald*.⁹³ Though focused on ploughing rather than overstocking, her poem shows how the idea of a “dust bowl” had been absorbed into the sense of Australian identity by 1944. No mention of the US case was needed anymore. It could quite simply be suggested. Gilmore tacked the idea of a “dust bowl” onto a story where the Australian farmer was to blame for “blind pillage.” Gilmore stopped short of labeling the farmer as a traitor in her poem describing, “his fathers in their wet and misty isles” bringing the plough to Australia’s dry lands. Here, they had torn up the continent’s “Spartan soil” with farming methods suited to misty lands, “and made a vast dust bowl.” She concluded by conjuring imagery of a “dust bowl” as like an ocean, its waves in endless motion where: “the thieving winds lift up the dust and ever seaward roll” (Extracts from Mary Gilmore, *The Dust Bowl*, Courtesy ETT Imprint, Sydney).⁹⁴

That same summer, Newman and Leonard documented drought and erosion conditions for the *Sydney Morning Herald*. Touring with modernist artist Russell Drysdale, they traversed 3000 miles of the New South Wales Riverina and the far west of the state, before entering Victoria. The stories and images they captured were published in a series of features across December 1944 at the height of the drought, while soil erosion films made by Ken Hall were being screened to state and federal parliamentarians.⁹⁵

Described as one of Australia’s most successful filmmakers, and head of Cinesound films for twenty-five years, Hall created “dust bowl” imagery that expressed the vision for a national conservation agenda.⁹⁶ Film expert

Ray Edmondson has explained that while Hall headed the company, Cinesound took “an explicit or implicit editorial line on issues...certainly on the environment.”⁹⁷ His cinema newsreel films for Cinesound Review such as *Drought Grips Riverina* (1943) and on the same reel, *Australia is Developing a Dust Bowl* (1943) were treated as documentary and proof of the kinds of changes that were needed in the country.⁹⁸ They inspired urgent calls for action from state and federal parliamentarians—if every Australian took just one visit to the cinema it seemed, the whole country could witness the truth of a “dust bowl” and be motivated by it. Hall began *Drought Grips Riverina* by mirroring Clayton’s key concern. As “too few were cognizant” of the extent of the drought tragedy, Cinesound had sent a “special cameraman” out to western New South Wales to create “a startling factual record of what he saw” in the “once fertile and flourishing Riverina.” In November 1944, these sequences shocked audiences made up of parliamentary members.⁹⁹

In their “startling factual records,” both Keith Newman and Ken Hall described soil wastage, and portrayed graziers as gamblers, guilty of “flogging the country.” Newman did warn however that it was “unfair to make sweeping criticisms.” And in *Drought Grips Riverina* Hall showed that some “good graziers” existed and that they encouraged intensive research into saltbush regeneration. Newman even noted that some graziers “cherish[ed]” every saltbush while he acknowledged that grazier settlement on blocks that were too small, along with a cycle of debt were also contributors. But the main point of these stories was this—there may be conservation-minded graziers, but there simply were not enough.¹⁰⁰

To explain, Hall and Newman first constructed imagery of “desolation” in their newspaper features, the message accentuated with Leonard’s photographs that also featured in a 1945 issue of *Life*. Barbed wire fences are seen buried under drifting sands in both the US and Australian publications portraying “Grant McIntyre of Beralli Station, 17 miles from Balranald” (map, Fig. 6.4) struggling against a mountains of sand drift. Leonard’s image provided a visual reference to Rothstein’s *Farmer and Sons* as did stories in *The Australian Women’s Weekly* (Figs. 4.3, 4.4 and 3.5), while Newman described how McIntyre had:

spent £100 having the sand shifted from the homestead fence and hedge. When he returned [after a trip to Melbourne] the sand had drifted back so deeply that cows had walked over fence and hedge into the garden (Fig. 4.3).¹⁰¹



Fig. 4.3 Grant McIntyre, Beralli Station (J. M. Leonard image, *Sydney Morning Herald*, December 20, 1944)



Fig. 4.4 John B. Davies, "Prosperity can return to tragic dust-bowl," *Australian Women's Weekly* December 9, 1944

Both Newman's stories for the *Sydney Morning Herald* and *Life* were illustrated with scenes of death—the bones of bullocks and sheep lie where they have died, trapped by drying mud in the once-flowing Anabranch of the Darling River. In *Life*, a horse is seen trapped in a drying river “awaiting rescue,” with hardening mud rising almost to its belly. An accompanying note reads: “scene is reminiscent of U.S. ‘Dust Bowl.’”¹⁰² The opening scenes of *Drought Grips Riverina* also described desolation in the state's Riverina district, known as “one of the richest agricultural and grazing areas of New South Wales” (Fig. 6.4). Then Federal Minister for Agriculture Scully appears in the film, to describe the Riverina “in the grip of a drought” that is “one of the most tragic in the nation's history.” Illustrated features and films of the time dedicated much space and many meters of film to capturing images of this desolation featuring sheep either being hand-fed scarce feed supplies, dying or dead.¹⁰³ There are reasons for this. Sheep numbered over one hundred million, the idea that the “the nation rides on the sheep's back” was a powerful national myth, and the Riverina was a region famous for breeding some of the finest Merino sheep in the world. All this meant that if images of fat, healthy sheep graced the screens of theaters, Australians could be sure that neither their environment nor their economy, were endangered. But as audiences witnessed, in one after another alarming sequence of Hall's film, the sheep of the Riverina were in a shocking condition. Stock levels were the highest ever recorded before this drought and 70%—at least one million sheep had died by 1944 in the western Riverina.¹⁰⁴ Hall chose to accentuate the loss.¹⁰⁵ Therefore, in *Drought Grips Riverina*, it is no surprise to see paddocks full of hundreds of dead and dying sheep strewn along the fence-lines of barren properties. The film's explicit message is that the grazier, sheep, and nation are victims of a terrible drought. However, the emotional pull of these sequences conveys a moral tone suggesting he is not only culpable—but also gravely immoral. On properties that still have some fodder, graziers we are told, are forced to hand feed their stock. Either this, narrator Peter Bathurst warns, or the farmer “must watch them slowly starve to death.”¹⁰⁶

Both Hall and Newman had used imagery that highlighted the contrast between the two sides of a fence-line separating neighboring properties. They did this to accentuate the idea of the “immoral” grazier. On one side was an overstocked paddock and on the other was “a rested paddock.” On the “wrong side of the fence,” thousands of sheep could be seen dying, scattered every few feet, much like the wounded along the front



Fig. 4.5 *Drought Grips Riverina* (1943), National Film and Sound Archive, Australia

line of a battlefield (Fig. 4.5). Newman observed that properties lightly stocked before the drought could still be seen with half their sheep alive, and had enough feed to keep them going. On the opposite side of the fence, where properties had been heavily stocked, he said, they now had “nothing left.” Newman noted this contrast as “apparent where-ever you go (Fig. 4.6).”¹⁰⁷

There is another important element regarding the emotional pull of these scenes. The nation’s senses were being assaulted with two sets of imagery at this time. They witnessed actual scenes or media portrayals of drought, death, and sand drifting over devastated properties. At the same time, Australians feared—and they imagined in their mind’s eye—the suffering of loved ones who lay alone, anonymous bodies strewn across foreign battlefields dying or captive as POWs. They waited for news. In many newsreels they heard Damien Parer’s voice and saw the images he had captured of “the wounded, their faces grim and drawn with suffering.”¹⁰⁸ Fearful, mothers trawled newspaper lists for names of the dead while they mourned the loss of sons and daughters already fallen. They read Gilmore’s musings on the “dead and captive sons of Australia”—Parer himself was to become one on that list. Killed by a Japanese machine-gunner at Peleliu Island, he was walking backwards to capture the expression in Australians’ eyes as they surged forward into battle to face death.¹⁰⁹



Fig. 4.6 “The nation riding on the sheeps back”? Turning national myth on its head. Hall portrays the suffering of the innocent to accentuate the idea of the unpatriotic grazier in *Drought Grips Riverina* (1943), National Film and Sound Archive, Australia

Viewing Hall’s film we see footage of thousands of sheep as they lay strewn across the fence-line of Australia’s other “battlefield.” These are not just photographs of dead sheep (Figs. 4.4 and 4.5). They are still shots taken from the Cinesound film footage. Many sheep were still alive when filmed and viewers would have watched them struggling to swallow, their labored breathing visible in the rising and falling of their abdomens over their frail frames. Viewing the film, we see the anonymous. They lay unattended, dying from starvation and thirst, on the parched ground of a Riverina property, their eyes seeping, and no longer able to stand (Figs. 4.5 and 4.6) and with no water, feed, or help anywhere sight. The tragedy is emphasized with a dark musical score. It reaches fever pitch and a panicked tempo before dropping into deep bass notes to evoke a sense of doom. Ken Hall must have understood that the strong correlation between these two sets of imagery would tug at the already-raw, war-time emotions of his audience. He pressed the point—a close-up on the face of one sheep dying, forces the viewer into a relationship with the process of death (Fig. 4.7). The sequence is brief but the audience cannot escape the gaze of the dying, in footage still deeply disturbing today. Gilmore had expressed the correlation between these two sets of imagery lucidly

in “War” (1932). Gilmore described the experience of being a mother receiving news of the death of her son, killed in action. She is told he “died a hero’s death.” She is told he is dead. Then Gilmore evoked the kind of imagery that one might expect to be running through a mother’s mind. “But out in the street a dead dog lies” she adds. And forcing the reader to confront the horror of a boy’s lonely death at war, adds:

Flies in his mouth,
Ants in his eyes (Fig. 4.7)

Extracts from Mary Gilmore, *War*, Courtesy ETT Imprint, Sydney.¹¹⁰

To drive the message home, in *Drought Grips Riverina*, Hall’s closing sequences showed further disturbing images of sheep close to death and those that had died—importantly, lying within mere inches of pasture. Hall’s film was screened to state and federal government and parliamentary members in late 1944 and to the public in cinemas across capital cities. His imagery would have connected with the already strained emotions of his audiences.



Fig. 4.7 “Ants in his Eyes.” Suffering a cruel and lonely death on Australia’s other “battlefield.” The viewer is forced to look into the living eyes of the dying. Hall removes the sense of anonymity achieved by distance shots and those portraying sheep as “live stock,” or “dumb animals” in large groups in *Drought Grips Riverina* (1943), National Film and Sound Archive, Australia. Extract from Mary Gilmore, *War*, Courtesy ETT Imprint, Sydney

Charged with layers of meaning these images of death were empowered by repetition—images of many sheep suffering were reiterated in Hall’s film to impact upon the emotions of the viewer. As discussed in coming sections, when parliamentary members witnessed this dramatic imagery, their response was panicked and charged with emotion.¹¹¹

THE EXPERT AS SAVIOR IN *AUSTRALIA* IS *DEVELOPING A DUST BOWL*

Australian “dust bowl” imagery accentuated the idea of the bad grazier though images of death and decay, but it also highlighted the role of the expert and the need for a scientific approach. The Leonard/Newman imagery portrayed the expert as one member of a small army. The images are framed to diminish each man to a tiny figure, who from a distance approaches a wind erosion problem of overwhelming proportions, with science his only weapon (Fig. 4.8).¹¹²

Housed in Hall’s story, *Australia is Developing a Dust Bowl*, is the work of one of these scientists, Noel Beadle. He is seen directing a research project for the SCS in the western division. He was able to continue this work throughout the war, because Clayton, a World War One veteran himself, would not allow his soil experts to enlist. We see Beadle and his team at Condobolin, growing saltbush and other shrubs



Fig. 4.8 The expert portrayed as facing an erosion problem of massive proportions (J.M. Leonard image. *Sydney Morning Herald*, December 20, 1944)

“to replant the devastated land,” with results “already being achieved with the land saving seedlings”¹¹³ Bathurst describes how this “natural surface vegetation will hold the priceless top soil against the wind even in the driest periods.”

From Condobolin, Beadle started out in the late 1930s with a Chevrolet sedan for transport, and here produced a landmark vegetation map, still used by many who “marvel at its accuracy” given the conditions under which he produced it.¹¹⁴ In July 1944, the *Sydney Morning Herald* described Beadle’s report as a “monumental” survey of “150,000 square miles of semi-arid and arid grazing country” in the west.¹¹⁵ He had mapped twenty-five different vegetational areas and their corresponding soil types and noted the vulnerability of those soils to erosion, while he recorded the changes caused to them by overstocking. Beadle was passionate about protecting new pasture growth in the west from the impacts of overstocking and Hall used this to convey the idea of a “conservation” mindedness.¹¹⁶ But the Beadle story was not the only one Hall used to convey this idea.

As the story develops in *Australia is Developing a Dust Bowl*, we are introduced to a farmer. Rather than symbolizing the “greedy gambler” he represents the “wise farmer,” (used to indicate a grazier). But he is an actor, not an actual farmer. Our farmer looks with ease down the barrel of the camera, and into the eyes of the viewer.¹¹⁷ Unlike Bathurst, he takes on an “everyday” nasal tone and pronunciation, as he imagines appealing directly to an audience of ignorant farmers and city-folk.¹¹⁸

He introduces himself: “I speak as a farmer.” His is a plea to land-users generally, to adopt a new way of thinking. He warns that “land devastation and erosion is largely due to ignorance and exploitation” to “over-destruction of natural timbers and herbage” and to “overstocking of the land.” Our farmer acknowledges economic and other pressures that contribute to overstocking. But his emphasis on culpability builds as he is framed in dramatic close-up to stress that, “If we continue to flog the productive earth to death for a little more profit, posterity will pay a bitter price.”

Then the tone of the farmer’s voice shifts. The camera brings the farmer “up-close and personal” in a tight shot. The viewer cannot escape the actors’ gaze (or nasal tone) as he adds angrily, “that is fatal. If we do not turn from exploitation to conservation we shall without question destroy our national heritage.” “The farmer” heaps blame on the farmer in a terrible warning, while Bathurst turns to biblical themes reminding us that

“the land of milk and honey can become a desert and drought is not entirely to blame.” In a film with an undeniably transnational title, Hall concludes with a powerful message, warning that Australia must learn from American responses to the US Dust Bowl.

SABOTAGE: NAMING THE TRAITOR

In a 1943 broadcast of the *Agricultural Magazine of the Air*, the Rural Bank of New South Wales warned that “while most Australians today” were “absorbed with the drama of war” there was another battle going on, and though “perhaps less spectacular” it was “certainly no less vital to the future of Australia than the jungle battles of the South West Pacific.” This was “the battle for the preservation of the soil.”¹¹⁹

Pioneer pastoralist and author Jock Pick introduced Australians to their new enemy in *Australia's Dying Heart*. Pick created a correlation between soil erosion and the sense of war-time emergency Australians were experiencing. In describing this enemy, his aim was to try to explain the inter-generational concept of the lifetime of the soil. He also wanted to explain the level of threat posed to the survival of the soil, as something permanent. He described the sacrifice of young Anzacs fighting for the nation's future, asking:¹²⁰

Of what avail is their sacrifice if an enemy, an enemy within the gates is to be allowed to rifle the future resources of their country? Soil erosion is that enemy, an enemy more insidious than the traitor within the gates, a destroyer more deadly than all the Hitlers of history.

Soil erosion is an enemy far more ferocious. Its evil influence is everlasting. Once a country had been surrendered to the forces of erosion, it is rarely, indeed, that it can ever be reclaimed.¹²¹

To highlight points made by Pick, one 1943 book review illustrated just what this everlasting “evil influence” might look like for Australians forced to battle it. The reviewer explained that “when soil erosion is mentioned, one's mind is apt to switch to America's ‘Dust Bowl.’” The visuals, taken from the 1937 *Life* feature, included Alexandre Hogue's *Dust Bowl* (1933) and described a “man-made desert” (Fig. 4.9). Pick's reviewer used the Hogue image to turn Australian national myth on its head, publicizing the issue of overstocking, and the tragedy of so much soil already lost to erosion at home. Australians, he said, could no longer “ride to

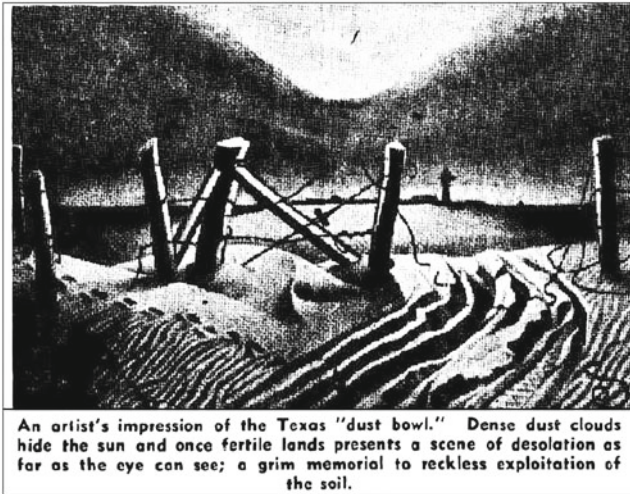
A MAN-MADE DESERT.

Fig. 4.9 A review of Jock Pick's *Australia's Dying Heart* showed the painting, *Dust Bowl* (1933) by Texan artist, Alexandre Hogue in "A MAN-MADE DESERT," *Western Mail* (Perth, WA), February 4, 1943. Historical newspaper reproduction of *Dust Bowl* (1933) included Courtesy Smithsonian American Art Museum

prosperity on the sheep's back."¹²² An evil enemy had been identified. It was soil erosion. But who would turn out to be the new traitor to the nation in this battle?

In 1941, William McKell delivered his soil conservation speech at Cowra and in 1942, Ken Hall produced a film called *Soil Erosion: The Enemy Within* for the national filmmaker.¹²³ Both described Australia's new traitor. He was the land-user who refused to act on expert soil conservation advice, knowing that as he aided the erosion enemy, by wasting the nation's soil, Australian soldiers were dying on foreign soil to save it. McKell stressed that if a farmer was patriotic he would surely commit to a scientific and "factually accurate" approach to "combating" soil erosion. His speech was littered with traces of New Deal rhetoric about soil as "the national asset" and the dangers of individualism:

McKell warned of farmers and graziers who simply chose to wring a profit from the land today, ignoring tomorrow's generations. He claimed that they were as dangerous as an enemy agent working within Australia in co-operation with the Nazis to undermine the war effort. McKell then

turned to the idea of the Nazi Fifth Column to explain. Christof Mauch has described the “Nazi Fifth Column” as based on the idea of Hitler’s war as not a war of military strength, but of conspiracy where, “a group of persons who whether out of selfish reasons, pure corruption, or political dissatisfaction were open to co-operating with enemy intelligence services.” In one of his radio “fireside chats” broadcast to Americans, Roosevelt had drawn on Fifth Column myth to describe a new war-time threat posed by “spies, saboteurs and traitors.” In his 1941 soil speech, McKell continued, drawing too on Fifth Column myth, but he used it to describe the farmer’s neglect of Australian soil. Such neglect he warned the nation, “is sabotage as deadly as any pro-Nazi Fifth Columnist sabotage could be.”¹²⁴

Frederick McMaster, foundational member of the State Committee of the Council of Scientific and Industrial Research (CSIR), had contributed £20,000 toward Sydney University’s F.D. McMaster Animal Health Laboratory—a center that developed a world-wide reputation for its research into sheep health.¹²⁵ In a 1945 paper, he condemned overstocking as “one of the greatest evils” warning that “to overstock the land is a sordid gamble, financially uncertain, *nationally unpatric* and unspeakably cruel.”¹²⁶ Jock Pick also appealed to the conscience of anyone in Australia ignoring the “ruthless exploitation” of soil, saltbush, and the “balance of nature.” Surrounded by a “fine all-pervasive dust,” from where he was serving with the Australian Imperial Force (AIF) in the Middle East, he wrote home to the newspapers with a warning that “the conservation of the soil resources of the world” must be made foremost. Otherwise, he stressed, the world would see “another period of fractricidal strife, through which our children must agonise.” Pick added: “not for that, are we pouring out our sweat and blood in this hell hole of sand and suffering.”¹²⁷

THE EVOLVING “DUST BOWL” IDEA: IMPACTS ON THE MEDIA, POLITICIANS, GRAZIERS, AND SOIL EXPERTS

On November 8, 1944, the press reported that Premier McKell and members of State Government “yesterday saw a screening at Film House by Cinesound of a film showing the Riverina under drought conditions and the effects of soil erosion.” The films shown were *Drought Grips Riverina*, and it is most likely that *Australia is Developing a Dust Bowl* was screened along with it. When politicians responded to Hall’s imagery their comments reflected the uncertainties and anxieties of the time. Audiences asked,

what was the relationship between drought emergency, too many sheep in a paddock, human culpability, sand drift, and soil blowing away? Could “fact films,” with their potent combination of immediacy, and visual and auditory impact, raise awareness in the minds of the public, politicians, graziers, and farmers in a way that would stop “the soil menace” from expanding?¹²⁸ After witnessing the Riverina footage, McKell announced the great potential for such films. He said they could raise awareness of the immorality of malpractice, and inspire a belief in the soil menace. “The picture” he said should:

be screened in all picture shows to bring before the public, knowledge of the Government’s efforts to conserve the soil, forests, and water of the State, and to bring home to the farmer and the grazier the evils of over-stocking, the destruction of timber and improper farming practices.¹²⁹

On November 16, 1944, Hall’s Cinesound drought films were screened to Federal Parliamentarians and officials in Canberra. The press did not always give a film the same title twice. And when Crayton Burns reported on this parliamentary screening for the Melbourne *Argus* he gave *Australia is Developing a Dust Bowl* the title of “*Soil Erosion*,” but he was describing the same footage documenting “drought and wind erosion in the Riverina.”¹³⁰ Hall’s films had been privately screened to their Canberra audience. And as they watched, Burns reported, hot, dry conditions, and a heavy dust pall prevailed across the capital. This, he observed, had created a potent “atmosphere” that accentuated the meaning of the film imagery for the audience.¹³¹

Burns recounted footage of “carcasses of thousands of head of stock which had died of starvation, areas where even rabbits starved, and homesteads abandoned.” For Burns, the film presented nothing but the facts. That day, after the screening, the issue of long-range government planning to deal with an Australian dust bowl threat, was raised in the House of Representatives. Alarmed parliamentarians looked to the issue of culpability but they also called for emergency solutions. They promoted the immediate needs of graziers under ongoing heat-wave conditions. The emergency use of trains and trucks was to be prioritized for relief fodder and agistment of surviving stock, with grass hay to be conserved in Tasmania and transported to the mainland. Federal Country Party Leader, Arthur Fadden, reacted with a warning to the House of Representatives of the “grave danger” at home of a “dust-bowl similar to that of the U.S.A.”¹³²

The day following the screening, Country Party member for Maranoa, Charles Adermann, commented in parliament that the “film exhibited yesterday by the Department of Information,” representing stock losses “in New South Wales and Victoria [of] 1,500,000..because of the drought” was proof enough that farmers must urgently receive financial relief. In the House of Representatives five days later, Labor Party member for Denison, Dr. John (Frank) Gaha noted “the wide publicity given recently to soil erosion” and called for investigation by “skilled authorities.” The same day, Labor member for the Division of Wakefield, Albert Smith, argued that Australians were “indebted” to recent “newspapers and film companies” for bringing the issue of drought and erosion “so forcibly” to them and hoped “Australia will not continue to convert good farming land into dust bowls.” Senator Courtice and member for Parkes, Leslie Haylen, added that regular public screenings of such “documentary films” were needed to “stimulate public thinking” as these were “splendid films.” Prime Minister’s Press Secretary, Don Rodgers had arranged many screenings for members of the Commonwealth Parliament from “world documentary films,” including the film title *Soil Erosion*. Along with Capitol Theatre manager M.J. Moir, Rodgers argued that these kinds of documentary films, should also be screening to the public, rather than just fiction films.¹³³

Weeks later, the *Canberra Times* published a story about the role of the states and the Commonwealth in financing the distribution of “propaganda” films about erosion. Commonwealth Government Minister for Information from 1943, Arthur Calwell reportedly described plans for a new soil conservation film, which would show “in detail the menace of soil erosion.” The idea was to benefit parliamentarians. But Calwell also wanted to educate graziers and farmers about the connection between the soil “menace” and emergency drought issues such as feed for starving stock.¹³⁴

Calwell may have wanted to educate the land-user; however, historians Barr and Cary have recently identified the following conundrum. When pastoralists were suffering under the uncertainty of great economic and climatic pressures, “external advice” was not likely to influence their decisions unless “direct subsidies” were provided. Expert advice on stocking levels and land capacity needed to be given in “good times.” But in “good times,” pastoralists were “least interested” because they felt they had “no problems to worry about.”¹³⁵

Unsurprisingly then, when graziers responded to “dust bowl” media imagery, the reaction was very different to that of soil conservationists

and many parliamentarians. Graziers often felt forced onto the defensive by the national coverage. After the 1944 national broadcast debate on “Erosion: The Menace to Australia’s Soil,” they responded defensively arguing that they were sick and tired of simplistic narratives portraying them as “the stubborn ignoramus” and “the villains of the piece.”¹³⁶ The Graziers’ Association attacked the *Sydney Morning Herald*, for their negative imagery, targeted McKell’s commentary and condemned the national press more broadly for their alarmist coverage. They described “exaggerated drawings and dreadful pictures in the Press,” moving that:

strong exception be taken to recent articles and drawings in the Press, and to public utterances by responsible persons which infer that the present soil erosion is caused by bad management and greed by the present occupiers.¹³⁷

The illustrated series by Newman for the *Sydney Morning Herald* was a target, along with Premier McKell, when members defended their reputations. They argued that “the inference was it was time someone took these dreadful people in hand before they wrecked the country. Graziers got no sympathy but much blame.” They added that, “‘The Sydney Morning Herald,’ deserved severe censure,” and attacked McKell’s government, asking, “were they making a great enough wartime effort themselves?”¹³⁸ To answer, graziers interpreted photographs of the US Dust Bowl—these provided evidence that the time for “identifying causes,” was over. Graziers were not simply “the bad guy,” and they insisted that they did support conservation initiatives. The US Dust Bowl images were proof, they argued, that something must be done, but not only by graziers. Negative stories simply deflecting responsibility onto land-users they stressed, was not an effective strategy for tackling wind erosion. They wanted the full range of contributors to erosion to be recognized including railway costs, rabbits, and parcels of land that were too small to avoid overstocking. Where decisions were made by authorities about soil conservation initiatives they wanted graziers’ opinions to be heard in the press and they called for the state government to take responsibility and fund soil conservation initiatives. McKell must act immediately, and not delay action “until after the war”:¹³⁹

The outstanding lesson of this great drought surely, is that erosion has developed so far that there is a real possibility that vast stretches will be turned into a dust bowl, like the dust bowl that ruined hundreds of thousands of

farmers in Oklahoma, U.S. Comparison by photograph of conditions which existed there show they are similar to conditions in our own.¹⁴⁰

Members described national press coverage as “based on complete ignorance of the subject and incorrect information” about the “permanently disastrous effect of wind erosion.” The media had created “an almost irreclaimable and uninhabitable dust bowl through overstocking by greedy graziers.”¹⁴¹

In its editorial response to graziers, the *Sydney Morning Herald* addressed the need for awareness of erosion and the issue of a scientific knowledge gap. Defending the Newman series, the *Herald* argued their “sole object” had been to make Australians aware of the suffering in affected areas, and to “point out the danger to the Commonwealth of what was happening.” Of Newman, the editor explained, “the writer’s principle theme was the need for intensive scientific research into a problem of which too little is known. Most of his information was obtained from men in the districts which were suffering.”¹⁴²

AUSTRALIAN WAR CORRESPONDENT BRUCE MILLER AND “DUST BOWLS”

In the end, Australian journalist, war correspondent, economist and, much later, prominent Australian academic, Bruce Miller best summed up the impact of the “dust bowl” idea during the 1940s. Miller is believed to have been the first Australian-born newsreader the ABC ever hired.¹⁴³ When they did, they sent Miller on a 1500-mile trip into drought-affected areas of south-western New South Wales. His job, he said, was to “find out how the people were standing up to hardship and what measures were being taken to hold our soil.” *Australia’s Dust Bowl*, a 1944 series of radio broadcasts was the result. Miller’s series described the importance of “newspaper articles and radio broadcasts” in publicizing the “dust bowl” problem. His interviews with farmers had uncovered evidence that the US “Dust Bowl” idea was having an impact—it was facilitating the acceptance of conservation principles by Australian land-users. In the *Australia’s Dust Bowl* broadcasts, dramatic impact was achieved by combining recordings of Miller’s voice, the voices of his interviewees, the “theme” sound of a sandstorm for up to 30 seconds at a time, music or quick “flashes” of music, and other sound effects.¹⁴⁴ When combined, these storytelling strategies allowed radio audiences in the city to feel as if they were in the west, out of

doors, on a farm and meeting with real farmers experiencing drought, as unceasing, sand-laden winds blew across their land. Miller aimed to show how an American idea was accumulating Australian meanings:

“Dust Bowl” is a phrase originally coined to describe the effects of wind erosion in the United States, in Kansas, the Dakotas and other western states, but it is coming to have a meaning for Australians.

He listed the contributors to “the erosion menace.” Drought had accelerated its progress along with the “unthinking butchery,” overuse and neglect of soils and forests, bushes, and shrubs.¹⁴⁵ But he added, “these chickens are coming home to roost.” Miller explained the power of print and broadcast media that over “recent months” worked to “persuade our people that they have a national problem to face in the destruction of their soil.”¹⁴⁶

To convey what he had seen Miller constructed imagery of sand drift, tree roots “exposed to a depth of six feet and more,” and vegetation “crushed out by the scorching winds and the stinging sand.” He described this imagery as a true rendering of the actual conditions that land-users were witnessing first hand in the west. He explained that these were the kinds of scenes that were educating and converting Australians to conservation mindedness. To clarify, he used the idea of an enemy, most potent at the time. “Dust Bowl” imagery he said, was “forcing us to understand that we are facing an enemy more insidious than the Jap, more remorseless than the German.”¹⁴⁷ But along with these scenes of devastation, the media circulation of “dust bowl” imagery Miller believed was also helping to change attitudes of mind. He stressed, “our farmers are rapidly becoming aware of the dangers of a developing Dust Bowl.”¹⁴⁸ A year after war’s end in 1946, Sam Clayton also declared success in the changing of those “attitudes” that had earlier led to “accelerated erosion.” He said that Australians were now to “a great extent passing out of the earlier exploitory era of land use.”¹⁴⁹ They had “learned by hard experience a great deal about our environmental conditions.” But although Clayton described these shifting attitudes in the mind of the majority of land-users, he did not let the rest off lightly. Clayton still couched his message in a New Deal-influenced narrative of continuing blame. The Australian farmer’s “attitude” had made “great advances,” he believed. Clayton added, however, that only the “backward or deliberately blind” now “decry conservation or minimize the effects of erosion.”¹⁵⁰

NOTES

1. James Curran, *Curtin's Empire* (Melbourne: Cambridge University Press, 2011), 77; Yale Law School, "Munich Pact September 29, 1938," Agreement concluded at Munich, September 29, 1938, between Germany, Great Britain, France and Italy, *The Avalon Project: Documents in Law, History and Diplomacy* (New Haven: Lillian Goldman Law Library, 2008).
2. On "'Hell!'" see Curran, *Curtin's Empire*, 35, "quagmires," 86, the Munich Agreement, 79, Britain's war declaration, 81.
3. For press coverage, see "AUSTRALIA ALSO AT WAR," *Argus*, September 4, 1939.
4. Curran, *Curtin's Empire*, 81. On the *Sydney* and the *Kormoran* see Timeline, *Australia's Prime Ministers* (Canberra: NAA).
5. Curran, *Curtin's Empire*, 80.
6. On Australia as a European outpost, see 18; on cultural loyalties, see 36–49 in Marilyn Lake, "British World or New World?: Anglo-Saxonism and Australian Engagement with America," *History Australia* 10, no. 3 (December 2013). On "essential Britishness," see Curran, 78, British lineage, 85. On Japanese nationalist and racial propaganda, see Sean Brawley, Chris Dixon, and Beatrice Trefalt, *Competing Voices from the Pacific War* (Santa Barbara: Greenwood Press, 2009), 151, 162. On competition for resources for Pacific and European theaters, see Brawley et al., 69; on the Allied policy of "Beat Hitler First" splitting resources 30/70 between Pacific and European theaters, 49, 119, on isolating Australia, 96, subordination, 12. For press coverage, see "Battle For the Pacific Comes First: Mr. Curtin's Declaration—USA and Australia Must Have Full Say," *Canberra Times*, December 29, 1941: 1. On the myth of Australian nationalism as anti-Britishness, see Curran, 123, on the strategic relevance to Australia of Japan's 1937 occupation of Manchuria, 69. For usage of the term "the Jap," see Miller, "Australia's Dust Bowl," 1.
7. Stockmen are the equivalent of cattlemen or ranchers and graziers the equivalent of sheepmen or ranchers.
8. W. H. Wilde, "Gilmore, Dame Mary Jean (1865–1962)," *ADB*, National Centre of Biography, Australian National University; also Geoffrey Serle, *From Deserts the Prophets Come: The Creative Spirit in Australia 1788–1972* (Melbourne: Heinemann, 1973), 124; Mary Gilmore, "No Foe Shall Gather Our Harvest," *Australian Women's Weekly*, June 29, 1940.
9. Brawley et al., *Competing Voices*, 70, 75–76; Day, "John Curtin-In office."
10. Barton Maughan, "Tobruk and El Alamein," *Australia in the War of 1939–1945* 3 (1966), 401. See also Australian War Memorial, *Siege of Tobruk*; Mark Johnston and Peter Stanley, *Alamein: The Australian*

- Story* (Melbourne, Oxford University Press, 2002); And see Australian War Memorial, *El Alamein Battles*.
11. See Curran, *Curtin's Empire*, 11 on much-debated aspects of Curtin's speech.
 12. On events and War Cabinet decisions leading up to the New Year, see David Day, "John Curtin-In office," *Australia's Prime Ministers* (Canberra: NAA). On events across late 1941–1942 including Malaya, see Day, "John Curtin-In office."
 13. "Dame Mary Gilmore's Poem: Singapore," *Australian Women's Weekly*, March 14, 1942.
 14. On Malaya and failed British strategy, see Brawley et al., *Competing Voices*, 55; W. H. Wilde, "Gilmore, Dame Mary Jean (1865–1962)."; "Dame Mary Gilmore's Poem: Singapore."; David Day, "A Great and Impotent Friend: The Singapore Strategy," in *Great Mistakes of Australian History*, eds. Martin G. Crotty and David A. Roberts (Sydney: UNSW Press, 2006), 123–139. On Curtin's comments on "the battle" and "Dunkirk," see Curran, 85. For press coverage, see "Home News," *Sydney Morning Herald* [hereafter *SMH*], February 17, 1942: 1; "Mr Curtin's Call To Duty," *Riverine Herald* (Echuca, Vic.: Moama, NSW), February 17, 1942: 2; "'Citizen Duties Parallel To Fighting Forces'—'Fall Of Singapore Opens Battle For Australia'—Curtin," *Northern Star* (Lismore, NSW), February 17, 1942: 5. On the timetable of events leading to Singapore and the "last stand at Singapore," see Day, "John Curtin-In office." On events following February 19, 1942, see "The Bombing of Darwin—Fact sheet 195: Japanese air Raids on Darwin and Northern Australia, 1942–43." On loss of life at Darwin and Kittyhawk fighters, see Peter Stanley, "Remembering 1942: The Bombing of Darwin, 19 February 1942," paper presented at The Australian War Memorial, Canberra, February 19, 2002. For casualty lists, see Names of air-raid casualties—Darwin 12/2/1942, NAA, Darwin Raids—Casualty Lists and Enquiries, Item: F1 1942/364.
 15. On Vynar Brooke survivor Vivian Bullwinkel, the sole survivor of the Banka Island Massacre, see NAA, BULLWINKEL, Vivian, Series: B2458 Item: F31029; Australian War Memorial, "Captain Vivian Bullwinkel, AO, MBE, ARRC." For Curtin's reference to "fate," see David Day, "John Curtin-In office."
 16. On food supplies, see Australian Labour Party, *Five Critical Years: The Story of the McKell Labour Government in New South Wales, May 1941–May 1946* (Sydney: Australian Labour Party, 1946), 26, on eggs 28. On air raids, see Daniel Connell, *The War at Home: Australia 1939–1949* (Crows Nest, NSW: ABC Enterprises, 1988), 28, on manpower, various shortages and foods for the US and Australian troops, 26, 103, on the calling-up of married and older men 88–89.

17. On Sydney Harbour, see Brawley et al., *Competing Voices*, 71. On Japanese attacks on Katherine (Northern Territory); Townsville (Queensland); and Wyndham, Derby, Broome, and Port Hedland (Western Australia), see Timeline, *Australia's Prime Ministers*. On MacArthur's appointment, and Australia's requests to Churchill, see Day, "John Curtin-In office."
18. Created as a cinema newsreel film for *Cinesound Review*.
19. On the Battles of the Coral Sea, Midway and Kokoda, see Timeline, *Australia's Prime Ministers*; also Elizabeth Rechniewski, "Remembering The Battle for Australia," *PORTAL* 7, no.1 (January 2010), 6. On the end of Japanese expansion, see Brawley et al., *Competing Voices*, 70, on Curtin's parliamentary address as the Battle of the Coral Sea raged, 79–80. On failed Japanese goals, the Battle of the Coral Sea, and the strategic importance of Midway Island, see Brawley et al., 69–71, on Milne Bay 95–96, hellish terrain, 95. On the International Red Cross, see Brawley et al., 197, Allied treatment of Japanese POWs, 196. On first published lists of the missing, see "Australians in Far East," *Townsville Daily Bulletin* (Qld.), July 7, 1942: 2. On Guadalcanal, and the Battle for the Beachheads, see Brawley et al., 96. On Australia's turning fortunes, see Curran, 88; Brawley et al., 71–72. On Curtin/Churchill disagreements, see Day, "John Curtin-In office."
20. G. H. McTainsh, J. F. Leys, T. O'Loingsigh and C. L. Strong, *Wind Erosion and Land Management in Australia during 1940–1949 and 2000–2009*. Report prepared for the Australian Government Department of Sustainability, Environment, Water, Population and Communities (Canberra: DSEWPac, 2011), 17.
21. Australian Government Bureau of Meteorology, "The World War II droughts 1937–45."
22. McTainsh et al., *Wind Erosion*, 9.
23. "M.Ps' Tour of State 'Dust Bowl' Sought," in *The News* (Adelaide, SA), December 15, 1944; "Our Dust in New Zealand," *Melbourne Herald*, November 17, 1944. On Sydney and beyond, see Noel Adams, "Arresting the 'Disease of Soil Erosion,'" *Advertiser*, December 15, 1944.
24. McTainsh et al., *Wind Erosion*, 1; Neil Barr and John Cary, *Greening a Brown Land: The Australian Search for Sustainable Land Use* (Crows Nest: Macmillan Education Australia, 1992), 285.
25. On a generalized map, see New South Wales Regional Boundaries Committee, *Report on Determination of Regional Boundaries by the Committee Appointed by the Premier The Hon. W.J. McKell December 1943* (Sydney: A. H. Pettifer, Government Printer, December 1944), 5.
26. "Labour," common for the period, is the spelling used by the writer to describe the Australian Labour Party. John (Jack) Bailey, "Comments by John Bailey ex-MLA Upon Historical Events," 14 in John (Jack) Bailey,

- "Reminiscences of John Bailey," (1947), Bailey Papers, State Library of New South Wales, Item: A2595. Jack Bailey was the Great Grandson of Thomas Boyd (1798–1885). Boyd was a member of the Hume and Hovell Expedition, and in the words of Lord Augustus Loftus had: "stood on what is now the Victorian side of the Murray [River], being the first white man that ever planted his feet there." On Boyd, see John (Jack) Bailey, "Comments by John Bailey," 3 and pages 1–4; Lord Augustus Loftus, *The Diplomatic Reminiscences of Lord Augustus Loftus*; Monument Australia, "Thomas Boyd," (2014); And see Tumut Pioneer Cemetary, Tumut Shire New South Wales, Australia, "Thomas Boyd," Find a Grave Memorial# 125596652; on Bailey and Boyd, see "John Bailey Dead," *Worker* (Brisbane, Qld. : 1890–1955), November 3, 1947: 7. Bailey was Labor Party Member of the New South Wales Legislative Assembly for the seats of Monaro and Goulburn between 1918 and 1925, an opponent of Jack Lang, supporter of amalgamation and a national union. He started out as one of Australia's best blade shearers (Buttigar Station) and was appointed as organiser for the AWU in 1901. He fought against conscription, was chair of the second No-Conscription Campaign Committee in 1917, encouraged government assistance for the poor, agitated for abolition of the Legislative Council, was chairman of directors for the Central Australian Gold Exploration Company and managing director of the successful Arnhem Land Gold Development Company; Parliament of New South Wales, "Legislative Assembly Former Members—Mr John BAILEY (1871–1947)."; Scott Stephenson "Bailey, John (Jack) (1871–1947)," Labour Australia, 2012.
27. *Report on Regional Boundaries*, 5; L.G. Kaleski, "The Erosion Survey of N.S. W. (Eastern and Central Divisions)," *Journal of the Soil Conservation Service of NSW* (April, 1945): 14.
 28. On a "trinity," see W. J. McKell, "Soil Conservation: Speech delivered by the Hon. W. J. McKell, M.L.A., Premier and Colonial Treasurer at Cowra on 10th October, 1941," (unpaginated). On a "national problem," see Association of Scientific Workers, *Soil Erosion and Water Conservation Conference: Summary of addresses, Sydney, 20th & 21st April, 1945: The Magnitude of our Soil Erosion Problem*, 2 (item is unpaginated).
 29. Kaleski, "The Erosion Survey," 14. At time of publication final maps were still being drafted.
 30. On Beadle see Janette-Susan Bailey, "War-time Political Ambition."
 31. NSW Soil Conservation Zones are mapped in "Soil Conservation Zones," *Journal of the Soil Conservation Service of NSW* 1 (July 1945): 36.
 32. Hugh Hammond Bennett quoted J. MacDonald Holmes, *The Erosion-pastoral Problem of the Western Division of New South Wales* (Sydney:

- University of Sydney, 1938) in Bennett, *Soil Conservation*, 935. On Holmes see G. P. Walsh, "Holmes, James Macdonald (1896–1966)," *ADB*. For earlier reporting and on South Australia see Francis Ratcliffe, *Flying Fox and Drifting Sand: The Adventures of a Biologist in Australia* (Sydney: Pacific Books, 1970).
33. On pastoralism (sheep farming) aboriginal people and overstocking in late nineteenth century New South Wales, see Heather Goodall, *Invasion to Embassy: Land in Aboriginal politics in New South Wales, 1770–1972* (Sydney: University of Sydney Press, 2008), 68, 72, 82–85.
 34. Noel C. W. Beadle, *The Vegetation and Pastures of Western New South Wales, with Special Reference to Soil Erosion* (Sydney: Department of Conservation of New South Wales, 1948). On fine native pasture, see Noel Beadle, "Soil Erosion in Western New South Wales," *Journal of the Soil Conservation Service of NSW* 1 (April, 1945): 1; Whalley Head, "Beadle, Noel Charles William (1914–1998)," Council of Heads of Australasian Herbaria, Australian National Herbarium; Breckwoldt, *Dirt Doctors*, 117–118.
 35. Barr and Cary, *Greening a Brown Land*, 112.
 36. McTainsh et al., *Wind Erosion*, 20.
 37. Thomas Dunlap, "Ecology and Environmentalism in the Anglo Settler Colonies," in *Ecology and Empire: Environmental History of Settler Societies*, eds. Tom Griffiths and Libby Robin (Carlton South, Vic.: Melbourne University Press, 1997), 79.
 38. McTainsh et al., *Wind Erosion*, 21.
 39. On stock routes, and transport needs, see Cooper, 210, the 1949 clause, 194, the 1901 Western Lands Act, 205. On drought relief, see McTainsh et al., 26, 8, formation of soil agencies, 19, combinations of overstocking, drought, and wind, 20, and on closer settlement, Waterhouse, "The Use and Misuse," 67, 69, 70.
 40. S. M. Wadham and G. L. Wood, *Land Utilisation in Australia, Edition* (2nd ed. rev.), (Melbourne: Melbourne University Press, 1950). On Wadham and Wood achieving cross disciplinary synthesis in four editions (1939–1964), see L. R. Humphreys, "Wadham, Sir Samuel Macmahon (1891–1972)," *ADB*; Humphreys, L. R., *Wadham: Scientist for Land and People* (Melbourne: Melbourne University Press, 2000), 119, 122, 125.
 41. Robert Bowman, "America Wakes to the Need for Soil Conservation: read by Professor S. M. Wadham at the 39th Annual Convention of the Chamber of Agriculture, Victoria," (Written by Robert Bowman as a Research Fellow at the University of California, 1941 (Victoria: Yearbook of the Chamber of Agriculture, 1941), re-printed by Soil Conservation Board of Victoria, 1941, 1; on causes, see 2. On the grazier,

- see Ratcliffe, "Preface to first 1937 edition," in *Flying Fox and Drifting Sand*, xiii, 315; Bennett, *Soil Conservation*, 935; Cooke, *Future of the Great Plains*, 63–67.
42. Bowman, "America Wakes," 6–7, as read by Wadham.
 43. Tom P. Taylor, "Soil Conservation Research Stations their Part in the Control of Erosion," *Journal of the Soil Conservation Service of NSW* 1 (1945), 21. On Taylor, see Roland Breckwoldt, *The Dirt Doctors: A Jubilee History of the Soil Conservation Service of NSW* (NSW: Soil Conservation Service of NSW, 1998), 100, 56; on 59.3 % American citations in the British Imperial Bureau of Science's bulletin *Soil Erosion*, see Showers, "Soil Erosion," 386. The CSIR noted in 1940, the "specialized assistance" given Australia by the US, see Stephen Powell, "Mothering," 252.
 44. "Agenda for Conference between Commonwealth and State Governments on non-theatrical exhibition of films, held at the State Lands Department Sydney, Wednesday 26th March, 1941," 6 (NAA).
 45. Serle, *From Deserts*, 153.
 46. McTainsh et al., *Wind Erosion*, 1.
 47. Alexa Weik Von Mossner, panel commentary, "Narrative and the Environmental Imagination: Conceptualising Human/Nature Connections from the 19th Century to the Present," (ESEH Conference, Munich, 2013).
 48. On grass "murder," see Archibald Macleish in "The Grasslands," *Fortune* 12 (November, 1935), 62, on war and battle, 60–61, the enemy, 190.
 49. Christina Twomey, "Trauma and the Reinvigoration of Anzac: An Argument," *History Australia* 10, no. 3 (2013): 85–108.
 50. The service of over 1000 aboriginal Anzacs in the same war has more recently been commemorated at the national level as part of that legend as has that of women and the service of animals. For examples see AWM, "Australian fatalities at Gallipoli"; AWM, "Indigenous Australian servicemen." AWM, "First World War 1914–18."; AWM, "Animals in War."
 51. On the US Homestead Act, see Fitzpatrick "Big Man's Frontier," 9, 11.
 52. Fitzpatrick "Big Man's Frontier," 12.
 53. "Comments by John Bailey," 7. On Narrandera, see 8, Western and Central Lands, 9.
 54. *Ibid*, 7.
 55. On "200 miles" and career prospects, see *Ibid* 10–11; W. G. Tweedie, "Federal Elections: Mr John Bailey," *Bombala Times*, April 20, 1917: 4, <http://nla.gov.au/nla.news-article134565552>; On Bailey's achievements, see Stephenson "Bailey, John (Jack)."
 56. Carter Goodrich, "The Australian and American Labour Movements," *Economic Record* 4, no. 206 (November 1928): 193–208 in Fitzpatrick

- "Big Man's Frontier," 8, and see 12; See also "Comments by John Bailey ex-MLA," (1947), 7–9; on the 1891 shearers' strikes, see Scott Stephenson, "Bailey, John (Jack) (1871–1947)," *Labour Australia*, 2012; "John Bailey Dead," *Worker*; see also Janice Cooper, "Land as Property or Natural Resource: The *Western Lands Act* of 1901–1910," *History Australia* 10, no. 3 (December 2013), 205.
57. Fitzpatrick "Big Man's Frontier," 12.
 58. On labor struggles and fear of "communists," see Taylor, "Again the Covered Wagon," 349–351; Worster, *Dust Bowl*, 136–137.
 59. Richard Waterhouse, "Agrarian Ideals and Pastoral Realities: The Use and Misuse of Land in Rural Australia," in *Great Mistakes of Australian History*, eds. Martin G. Crotty and David A. Roberts (Sydney, UNSW Press, 2006), 67, 69, on closer settlement, 70.
 60. George Farwell, "William Hatfield sees...the 'Vision Splendid' For Australia," *The Guardian*, November 17, 1944, (SLV).
 61. On late-nineteenth-century drought and overstocking, see Christine Adams, *Way out West* (Western Australia: Ocean Publishing, 2008), vi; Tom Griffiths, "One Hundred Years of Environmental Crisis," *Rangeland Journal* 23, no. 1 (2001).
 62. "Ambitious Plan: Converting Desert into Garden-Irrigation Scheme for Central Australia," *Canberra Times*, May 21, 1941.
 63. "Soil Erosion is Serious Problem: Much of Australia's Fertile Land in Jeopardy. Urgent Need for Action Before it is too Late," *Sunday Times* (Perth, WA), March 21, 1937.
 64. "U.S.A. Fights Soil Erosion," *Advertiser*, May 23, 1936.
 65. Cinesound Productions, *Victorian Drought: Mallee Country Facing Ruin*, 1938. NFSA, no. 111038.
 66. Breckwoldt, *Dirt Doctors*, 29–30.
 67. J. M. Powell, "Enterprise and Dependency: Water Management in Australia," in *Ecology and Empire*, 117. On SCS initiatives, Clayton's US trip, and US influences, see J. M. Powell, "The Empire Meets the New Deal: Interwar Encounters in Conservation and Regional Planning," *Geographical Research* 43, no. 4 (December, 2005), 349; Breckwoldt, 44.
 68. On *Rich Land Poor Land*, see Norman Wrigley, "An interview with the First Director of the Soil Conservation Service of N. S.W., Mr. E. S. Clayton," Transcripts of interviews by Norman Wrigley (February 2, 1978), unpaginated. NLA, Item: MS 9790 10/41; Breckwoldt, *Dirt Doctors*, 27.
 69. "Soil Erosion," *SMH*, July 13, 1937.
 70. "Anonymous" is quoted in Bennett, *Soil Conservation*, 935. Bennett was quoting from "The N.S.W. Soil Conservation Bill," *Journal of*

- Australian Institute of Agricultural Science* 4, no. 3 (1938): 121–123 (journal editor was agricultural scientist, Harold J. Hynes).
71. Bennett, *Soil Conservation*, 935–937. Also see “The N.S.W. Soil Conservation Bill.”
 72. SLV, Paula Montesano et al., “Dewar Wilson Goode Guide the Records,” (The University of Melbourne eScholarship Research Centre, August 2008).
 73. Lowndes, *Conserve*, 76.
 74. A. E. Heath, “Soils and Men,” *Journal of the Soil Conservation Service of NSW* 1 (1945): 11–12.
 75. On “tragedy” Chase, *Rich Land*, 113, 301. On “Murder,” see 62, on a “battle,” 60–61 in Macleish, “The Grasslands,” on “dead” grasslands, 59. On earth suffering, see Sears, *Deserts on the March*, 11.
 76. “Hold that Soil,” *Sun* (Melbourne, Vic), 13 January 1945; “Eleventh Commandment,” *Singleton Argus*, August 13, 1943.
 77. Kenneth L. Inglis, *This is the ABC: The Australian Broadcasting Commission 1932–1983* (Melbourne: Melbourne University Press, 1983), 115.
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 82. Heath, “Soils and Men”; Wallace quotation in Lowndes, *Conserve*, 68.
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 84. On “land utilization,” and Australian adaptation of US ideas, see, 67, Wallace, 68, American conditions as similar to Australia and parts of Africa and South America, Preface. On truths, social tragedy and devastation, 5 in Lowndes, *Conserve*.
 85. Clements, “Environment and Life,” 14; A. E. Heath, “Nature’s Balance,” *Soil and Water Conference*.
 86. Heath, “Nature’s Balance.” Footage from *Soil Erosion* nor other films is described in the program. Film *titles* were often confused with the *theme*

- of a film during this period. *Soil Erosion* could have been one of the many existing US or Australia films on the topic.
87. On wastelands, the extent of US tragedy, the Great War, a similar fate for Australia, and the US as evidence of this fate, see Lowndes, *Conserve*, 5–6.
 88. “The University of Glasgow Story–People: John Grierson.”
 89. On the resolution to establish a Commonwealth Documentary Films Council, see “Agenda for Conference,” 20, Grierson’s plan, 5, state committees 6, national viewpoints 7, national information, 15.
 90. Jo Fox, “The Queen in Australia (1954),” NFSA.
 91. Bennett, *Soil Conservation*, 935–937; “The N.S.W. Soil Conservation Bill.”
 92. Keith Newman, “Riddle of the Sands: Erosion Solution May be Buried There–Urgent Need for Scientific Assault,” *SMH*, December 19, 1944.
 93. Wilde, “Gilmore, Dame Mary Jean.”; Serle, *From Deserts*, 124; “Aborigines and Salt-Bush,” *SMH*, July 16, 1937; “Old Man Salt-Bush,” *SMH*, July 19, 1937. On Gilmore and Clayton, see “Tree Planting at Old Guildford,” *The Biz* (Fairfield, NSW), April 20, 1944.
 94. Mary Gilmore, “The Dust Bowl,” *SMH*, November 18, 1944. Her poem was framed by this story: Judy Tudor, “Our Jap ‘Colonists: the by-passed enemy in New Guinea,” *SMH*, November 18, 1944.
 95. Tim Bonyhady, “Drawings from the Scorched Heart,” *SMH*, December 24, 1994: 45.
 96. NFSA, “Ken G. Hall,” (Canberra: 2014); “Filmmaker Ken G. Hall dead at 92,” *Canberra Times*, February 10, 1994: 1; Ken G. Hall, *Directed by Ken G. Hall: Autobiography of an Australian Film-maker* (Melbourne: Lansdowne, 1977).
 97. Ray Edmondson, “The Voice of Australia: Cinesound Review,” *Metro* 137 (2003): 138–140.
 98. *Drought Grips Riverina* is the preceding title on the same reel which features opening credits. Australia is *Developing a Dust Bowl* is the second title on the reel. Although there is no second set of opening credits, it appears with its own opening title, and as it presents a new narrative with a new title page, I am treating the two as separate film titles for the purposes of discussion throughout these chapters.
 99. Cinesound Productions, *Drought Grips Riverina*, 1943. NFSA, no. 0679.
 100. Keith Newman, “Drought Losses Incalculable,” *SMH*, December 20, 1944.
 101. Keith Newman, with images by J. M. Leonard, “Erosion Brings Desolation to Wide Areas of Dry West,” *Sydney Morning Herald*, December 20, 1944.

102. Newman, "Erosion Brings Desolation"; "Australian Drought," *Life* (March 5, 1945): 65–67.
103. Deb Verhoeven, *Sheep and the Australian Cinema* (Melbourne: Melbourne University Press, 2006).
104. On record high pre-drought stock levels, see McTainsh et al., *Wind Erosion*, 21.
105. On impacts of drought on sheep numbers Australia-wide across 1940–1947, see Bruce Davidson, "Economic Implications of Drought Losses among Australian Sheep Flocks," *Review of Marketing and Agricultural Economics* 34, no. 3 (September 1966): 81.
106. Cinesound Productions. *Drought Grips Riverina* (1943), NFSA, no. 0679.
107. Newman, "Erosion Brings Desolation."
108. "In the Front Line at Kokoda," *The News* (Adelaide, SA), September 21, 1942.
109. On Gilmore, see Wilde, "Gilmore, Dame Mary Jean." On Parer, see Neil McDonald, "Parer, Damien Peter (1912–1944)," *ADB*. The island where Parer was killed is in the Palau group.
110. Mary Gilmore, "War," in *Under the Wilgas* (Melbourne: Robertson and Mullens, 1932), 102–103 (Note that the way the verse is divided creates a sense of tension and ironic meaning for the reader (or listener). On Australian women's responses to WWI, see Jacqueline Manuel, "'We are the Women who Mourn our Dead': Australian Civilian Women's Poetic Responses to the First World War," *Journal of the Australian War Memorial* 29 (November, 1996).
111. For commentary on the screening, see "No Fodder Reserves Available Relief Likely in Summer," *SMH*, November 8, 1944.
112. Leonard images in Newman, "Erosion Brings Desolation."; Newman, "Drought Losses."
113. Cinesound Productions, *Australia is Developing a Dust Bowl* (1943), NFSA no. 0679. Also see Beadle, "Soil Erosion in Western New South Wales."
114. Head, "Beadle, Noel Charles William (1914–1998)."
115. "On the Land: Soil Erosion in West," *SMH*, July 31, 1944.
116. Breckwoldt, *Dirt Doctors* 118. On Beadle's experimentation with contour furrows in the west see, 117.
117. On close-ups and mid-shots in newsreels, see Dunaway, *Natural Visions*, 45.
118. For contemporary arguments in the press about the Australian accent and "lazy jaw" see "Australian Accent," *Daily Advertiser* (Wagga Wagga, NSW), April 5, 1944: 2. On attitudes to regional pronunciation during the 1930s, see Goodman, *Radio's Civic Ambition*, 26.

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121. Jock Pick, *Australia's Dying Heart* (Melbourne: Melbourne University Press, 1942), 89. On individual interests versus soil protection, see Montgomery, *Dirt*, 176.
122. "A MAN-MADE DESERT," *Western Mail*, February 4, 1943.
123. *Soil Erosion: The Enemy Within*, NFSA, no. 75400, Production Date: 1942, release date: July 17, 1942.
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125. Campbell, "McMaster, Sir Frederick Duncan."
126. McMaster, "Our Natural Pastures."
127. Jock Pick (AIF), "Dust-Storm and Bedouri," *Chronicle* (Adelaide, SA: 1895–1954) May 7, 1942.
128. Coverage of the screening is from "No Fodder Reserves Available Relief Likely in Summer."
129. Ibid
130. On Crayton Burns see, "Vic. journalist dead," *Daily Advertiser* (Wagga Wagga, NSW: 1911–1954) September 19, 1952, 1.
131. Burns describes this as a documentary newsreel film in "Conference Urged on Erosion," *Argus*, November 17, 1944.
132. In "Conference Urged," Burns describes footage and voiceover from *Australia is Developing a Dust Bowl*; Fadden quoted from Prime Minister's Department, "Extract from House of Representatives Debate, 16 November, 1944: Inland Australia" sighted (signed) by J. J. Dedman, Minister for War Organisation of Industry and C.S.I.R. (SLV).
133. For Adermann's comments (November 17, 1944), see Commonwealth of Australia Parliamentary Debates, 17th Parliament, 2nd session, Volume 180 (26 September–1 December, 1944): 1894. For Gaha comments, page 1949, Smith's, 1973–1974, Courtice's, 2092, and Haylen's comments, 2117. Rodgers and Moir's comments from D. K. Rodgers, "Readers' Views," *Canberra Times*, November 24, 1944; Margaret Bridson Cribb, "Adermann, Sir Charles Frederick (1896–1979)," *ADB*; Northey, R. E. "Haylen, Leslie Clement (Les) (1898–1977)," *ADB*.

- On Gaha and Smith, see “Members of the Australian House of Representatives, 1943–1946,” *Wikipedia Free Encyclopedia*.
134. “Soil Erosion: Film Campaign Offer,” *The Canberra Times*, December 12, 1944. Calwell became first Minister for Immigration (1945); Graham Freudenberg, “Calwell, Arthur Augustus (1896–1973),” *ADB*.
 135. Barr and Cary, *Greening a Brown Land*, 111, also 112.
 136. “Soil Erosion,” *Narandera Argus and Riverina Advertiser* (NSW), January 16, 1945.
 137. “Conservation of Soil,” *SMH*, March 15, 1945. The idea of sin, employed to shock, raise awareness and gain public and government support, damaged conservationists’ credibility. Showers, “Soil Erosion,” 389.
 138. “Conservation of Soil.”
 139. “Fight Soil Erosion,” *Barrier Miner* (Broken Hill, NSW), December 13, 1944. The photographs described were not included in this article. They were merely described.
 140. “Fight Soil Erosion.”
 141. “Conservation of Soil.”
 142. *Ibid*.
 143. Toby Miller, “Economic Mind Devoted Life to Political Debate: Bruce Miller 1922–2011,” *SMH*, February 15, 2011. Bruce Miller is described as an “ABC war correspondent,” in *Australia’s Dust Bowl*—series of broadcasts; Singapore National Archives, notes on SP300/3 Item 706, “Singapore Pilot – the last trip.”
 144. Bruce Miller, “What the Drought Means,” 2, *Australia’s Dust Bowl* – series of broadcasts, 1. “To be broadcast 2FC 10.15 p.m. 15/1/45.”
 145. The words “of the land” are penciled in.
 146. Miller, “Australia’s Dust Bowl,” 1.
 147. *Ibid*.
 148. *Ibid*; Miller’s use of “farmers” is a broad reference to land-users.
 149. “Exploitary” is the term and spelling used by Miller.
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The Australian Constitution and State Politics: Creeping Deserts and Human Extinction in “Dust Bowl” Warnings of Impending Doom

Throughout the Dust Bowl years in the USA during the 1930s, “human erosion” narratives dramatized the idea of a soil/human interrelationship, along with the idea of permanent desert, to describe the downfall of civilization.¹ These stories centered on the Dust Bowl refugee and the idea of a new “man-made” American Desert. They were a response not only to drought and erosion but also to Depression-era poverty and displacement. The pioneering wagon, the impoverished American mother, abandoned homesteads, broken down windmills, the individual struggling against wind-borne dust, barbed wire, roads, tractors, and fences buried under drifting sands, dead cattle, and the bleached skull all indicated civilization locked into a process of decline to a permanent desert state that would bring with it, human extinction. The storytellers who constructed this imagery included writer John Steinbeck, economist and writer Paul Taylor, and photographers Dorothea Lange, and Arthur Rothstein whose controversial, *Steer Skull* portrayed the idea of a new American Desert (Fig. 3.4).

During the 1930s, Australians reported not only on the American Dust Bowl experience, but on the stories produced in response to it as well. Australians had read and reviewed the Steinbeck novel, *The Grapes of Wrath*, which had “sold out in Australia.”² They commented on Darryl F. Zanuck’s film version, judged as “the best picture of 1940.”³ Starring Henry Fonda and Doris Bowden, it was often accepted as a “true to life tale,” an impression based on the realistic acting, makeup, wardrobe,

and directing styles of the film, more so than any penetrating analysis of the facts.⁴ The *Australian Women's Weekly* described as universal, the "struggle of people" caught in tragic conditions, this time, the "disaster of soil erosion." The "Dust Bowl migration" narrative was also widely accepted at the time. Popular assumptions have since reflected Steinbeck's narrative while critics often treated the film as "documentary evidence." Steinbeck's fictional account tells readers that a large percentage of the refugees that headed for California were from Dust Bowl areas of Oklahoma. This has been exposed as a national myth by historians including Donald Worster who reveals the number was as low as 2–3%.⁵ Yet according to the Launceston *Examiner* in 1940, the film portrayed "no epic exaggerations" and offered "no substitute for Mr. Steinbeck's Biblical style."⁶ The reviewer emphasized "dust bowl" symbols of decline to evoke the following imagery: the soil/human interrelationship was indicated in references to the American "peasant," conquered by erosion and now a "nomad" of the "American desert." He described "primitive misery and modern wealth," where humans suffered "hopeless tragedy, agonising and incurable" and the only oases were "petrol pumps." The reviewer exposed a New Deal paradox. As Sarah Phillips has revealed, in "raising rural living standards...to urban industrial standards...the New Deal could be forcing the small farmer out."⁷ But for the *Examiner*, the film portrayed "a merciful Administration" providing "a promised land" of "peace and justice." Where? In a federal camp, in California.⁸

Despite this kind of reporting describing the US Dust Bowl, as we have seen, it wasn't until the late 1930s and the 1940s that Australians integrated "dust bowl" imagery into their own national story to treat it not only as an American story but also as an Australian reality.⁹ When they did, it was to be the first step to admitting a soil erosion problem of national proportions and the need for a corresponding national soil authority. In supporting this national vision, popular Australian literature, illustrated journals, newspaper features, and magazines, landscape painting and documentary films all dramatized the idea of human erosion—a world where human existence was dominated by desert.

American imagery, such as wagons and refugees—so symbolic of westward expansion and national exceptionalism, soon acquired Australian meanings. Australian settlement though was more than a story about westward expansion. Explorers of the early nineteenth century felt frustrated that the theory of a westward advance of civilization did not seem to fit the Australian continent.¹⁰ Due to the continent's arid center, the national

story became more one of settlement on the coastal fringes surrounding a much maligned “dead heart of Australia.” But in Australian imagery, ideas about “creeping deserts,” the Australian constitution, federalism, and state and rural politics converged with references to the US Dust Bowl and the Dust Bowl refugee—itsself a variation on American national exceptionalism and frontier myth. The “dust bowl” idea evolved, accumulating Australian meanings. Bolstered by this US national story, Australian desert myth changed. In their narratives, deserts that were creeping outward from the center or “dying heart” of the continent replaced any reference to a Great American Desert. Like New Dealers, storytellers used the symbolism of sand, religious figures, decaying houses and infrastructure, and impoverished women to promote the idea of soil and humans locked into a dual process of permanent decline. In the American case, unconventional images of women corresponded to soil erosion and to Depression. In Australia, images of women corresponded to Australian war-time fears over a “steadily declining birth-rate,” exacerbated by anxiety over an “empty” or arid center seen as under-inhabited by white Australians.¹¹

Australians borrowed from American imagery to describe their own soil carried away by the wind, leaving only “man-made deserts.” Their stories described all the elements of human civilization gradually declining one by one, along with the soil, with human extinction the end result. Experts described USDA publications such as *Farmers in a Changing World* as courageous for bringing human and soil issues together to discuss the “sociological aspects” of “farm planning.” This would have to be considered in Australia. Otherwise, the nation would see “the total destruction of our soil resources.” Without that top seven inches of topsoil they warned “both our people and our industries perish.”¹²

As Australian conservationists sought to achieve a national soil authority, they produced and promoted this kind of declensionist imagery. Conservationist politicians, writers, artists, photographers, and journalists created “dust bowl” stories about states, about regions, and about “the nation.” They toured south-eastern Australia and travelled to the US Dust Bowl, bringing back “dust bowl” narratives designed to give the public, too, a chance to “go there.” When the Australian public saw and heard these stories, it gave them a chance to virtually traverse the continent, even oceans, sometimes time frames in their imaginations, and witness the reality of “dust bowl downfall” for themselves.

At the time, the intensity of state or national patriotism, passion, and emotional and intellectual energy invested in Australian responses to this

ominous imagery raised new questions. Were these merely alarmist stories, playing on Australians' imaginations? Were they stories documenting alarming truths? Was "seeing really believing"? Or could seeing, through a tour to affected areas, result in denying? Were these stories exaggerations? Outright lies? Did they engender a belief, in the "soil menace" or insult affected communities, inspiring anger and skepticism? Could "stories" do more damage to communities than erosion itself? What were Australians to do? Believe them or deny them, attack them or support them? And what kind of role did cultural beliefs, including desert myth, play in the construction of these stories and their empowerment?

"REACHING SANDY TENTACLES INTO OUR GOOD LANDS": DESERT MYTH

In the 1930s, experts such as Victor Alldis and Francis Ratcliffe (for the CSIR) had tried to dispel the myth of "desert advance," describing it as "a product of the imagination only."^{13, 14} But well into the 1940s drought period, these ideas retained a hold over the Australian imagination. The "heart of Australia" was believed to be "dying" and "creeping forward... menacing the well-being of the [entire] country."¹⁵ This fear reflected the mistaken belief about stable sand dunes, that where sand drift had developed locally on properties, it was because the dunes were moving east to that location from central arid regions. Alternatively, it was believed that "permanent deserts" were forming locally on wind-eroded, semi-arid agricultural lands. Either way, well into the decade, Australian narratives portrayed dust storms and sand drift as clear evidence of the fact that human actions were sending the progress of permanent agricultural settlement into reverse.¹⁶

Australian pastoralist Jock Pick explained the meaning of the US story in *Australia's Dying Heart* (1942). Australia was more arid than the USA, he pointed out. If the rainfall and evaporation rates of the Great Plains could reach the same levels of the "man-made" Sahara, Sinai, and Gobi Deserts, what, he asked, was Australia's fate?¹⁷ The imagery Pick constructed explains why he was labeled an alarmist by some.¹⁸ Wind erosion he described as "the canker which is, slowly but surely, eating out the heart of the continent. Eating out its heart? Yes."¹⁹

Desert myth was sometimes employed to absolve whole regions of any human responsibility for soil erosion. Ralph Billis was an authority on pastoralism. He was a promoter of Victoria to prospective overseas settlers,

and a writer for the Melbourne *Argus*. In 1945, Billis argued that despite serious wind erosion problems in northern Victoria, dust storms were not a sign of wind erosion, rather a “Sign of Desert Encroachment”:

The Dead Heart is steadily creeping eastward and southward...It is dust from the interior, not so much Mallee and Wimmera dust, which has been blown to the coast and into the sea.²⁰

It was true that dust from the Lake Eyre Basin did blow across south-eastern Australia in the 1940s. But it is also true that dust storms originating in the Mallee and Riverina regions blew eastward to the coastal zone of New South Wales (Fig. 6.4).²¹

This kind of desert myth was also employed by conservationists including Commonwealth Government Minister for Information Arthur Calwell. He said he had been influenced by Steinbeck’s novel and by “pictures in the American magazines of the ‘Dust Bowl,’” when he stressed the urgent business of “Saving OUR Soil.” He lamented that “Australia has its ‘Dust Bowl’” and that this “dead heart of the Continent is spreading like an ink stain on blotting paper and reaching sandy tentacles into our good lands.”²² Desert encroachment may not be a mythical condition but when used to explain sand drift left behind by on properties by soil erosion, it becomes desert myth. The same applied when the idea of spreading deserts was used to argue that dust storms generated locally “originated elsewhere.”

Writers warned that human decay in “man-made desert climates” had reached catastrophic proportions on the Great Plains and now that process had started in Australia. Australians must take inspiration from America’s national effort to treat erosion. Otherwise, very soon, “creeping deserts” would smother eastern Australian towns and cities alike, destroying hope, destroying the nation, and finally contributing to global human extinction. But what kind of effect did state borders have on the makeup of these stories? And how, if at all, would those borders affect the drive for a national authority and the “dust bowl” imagery produced by it?

WIND EROSION, “DOWNFALL” NARRATIVES, AND STATE BORDERS

The proliferation of these “downfall” narratives was strengthened by a nationalist, centralist agenda, driven by the combination of a war-time federal Labor government under Prime Minister John Curtin, and a New

South Wales state Labor government, under Premier William McKell. The Commonwealth Government was striving to exercise more influence in its own war-torn region at the time, and the vision of a culturally mature, self-contained and economically independent Australia influenced popular opinion on a range of state and Commonwealth issues.²³ However, under the Australian constitution, soil conservation was managed by the states, and not a national authority as in the USA.²⁴ A second state suffering from severe wind erosion was Victoria at the southern border of New South Wales.²⁵ When conservationists' attempted a cross-state adoption of a transnational "downfall" narrative for the nation, state politics fractured their efforts. Despite the existing Australian constitution dictating otherwise, soil conservationists wanted to shift responsibility for soil from the states to the Commonwealth Government and establish a national authority.²⁶ Both New South Wales and Victorian conservationists adopted "dust bowl" narratives to promote it. But as discussed further on, in Victoria, their own Country Party (CP) Premier, Albert Dunstan, did not support them. What was the reason for this, and what were the wind erosion conditions in Dunstan's state of Victoria?

Even in the 1890s, there had been concerns about wind erosion in Victorian districts with lighter soil types. By the 1930s, it was accepted that wheat farms would suffer from some measure of erosion on paddocks left "fallow" (bare and exposed to the wind). The state already had a history of severe erosion suffering serious problems in the 1930s, while in the mid-1940s, dust storm conditions peaked. North-western Victoria became one of the "hot spots of wind erosion activity," with the region producing a "dust storm index" of "almost 6 times higher" than dust storm measurements recorded in the 2000s.²⁷ Along with severe war-time drought came "daily dust storms" that blew northern Victoria's soil across the Tasman Sea.²⁸ By the early to mid-1940s, conditions in the drier Australian wheat-growing regions using bare fallow created severe dust storms. In addition to these challenges, as in New South Wales, war-time manpower shortages meant conservation tasks such as rabbit control were neglected, exacerbating erosion, while rabbits infested "much of the grain belt."²⁹

Concerned Victorians raised the alarm. A 1939 Victorian Royal Commission expressed the opinion that "there were two menaces—fire and soil erosion," which must be "brought under control."³⁰ The Department of Crown Lands in 1939 warned a "blissfully ignorant" majority of Victorians about "the ravages of erosion."³¹ In 1944, the Victorian Soil Conservation Board created a map showing areas of acute drift-sand accu-

mulation across the north-western Mallee and Wimmera regions.³² The Victorian media warned “a dust-bowl” was developing in Victoria because “as droughts come round in their inevitable cycle, the man-made desert spreads.”³³ Victorian conservationists strove to integrate US story into their narratives and this could have been a very effective publicity tool. After all, it was not the New South Wales story, but the Victorian wheatlands story, that was most similar to the US Dust Bowl narrative of *The Plow that Broke the Plains*.

HORRIFYING PICTURES OF AN IMAGINARY DANGER? THE AUSTRALIAN MEDIA’S OBJECTIVES

The writers, film-makers, and editors who produced these “dust bowl” stories of soil and human decline defined it as their professional responsibility to do so.³⁴ They aimed to act as leaders of public opinion and accordingly, tried to promote the “soil menace” as “one of Australia’s greatest problems.”³⁵ They wanted to attract the public’s attention early, by consistently sounding an alarm. Again, their stories aimed to “fire” the imagination and create a national perspective. This, it was believed, would enlist public participation in soil conservation politics.³⁶

There was resistance to “downfall” narratives on three fronts, one of which became a major obstacle to the conservation campaign. Firstly, some scientists resisted downfall narratives. They urged Australians to create balanced stories based on scientific facts. Exaggerated imagery, they argued, would detract from the progress of soil conservation and damage the reputation of soil experts. Secondly, fearing there would be negative effects for their populations, many living in affected regions as well as some journalists resisted “downfall” narratives, calling instead for balanced reporting. The press, they argued, should consider the long-range capacity of a region, while looking to proven US methods of “eliminating dust bowls.” Thirdly, self-seeking politicians diminished the very idea of severe soil erosion. They ridiculed the science and mocked the media coverage, labeling it as nothing more than a scare campaign. These politicians promoted drought as “the only cause,” and promoted an optimistic soil conservation policy of “inaction”—Australians just needed to wait for rain, they argued, and wind erosion would disappear.

However, print, film, and broadcast media professionals believed their persistence was vital. They emphasized the need for “a bold national [conservation] policy.” That policy, they argued, would need to “back up

the parliamentarians,” who would then have to implement it despite the “inevitable opposition of prejudiced or interested persons.” Retaliating against accusations of a “scare campaign,” the press defined these terms. This was not about creating “horror” imagery to sell newspapers. They argued that “to scare people is to alarm them with horrifying pictures of an imaginary danger; but there is nothing imaginary about the menace of soil erosion.”³⁷ Certainly, they agreed, the volumes of media “stories of calamity and desolation” were alarming, but they were “no exaggeration.”³⁸ The Melbourne *Argus* argued that the term “campaign” suggested nothing more than “a sudden burst of purposive activity of an ephemeral character.” But there was “nothing ephemeral about the publicity which THE ARGUS” gave to “the grave problem of soil erosion.”³⁹

The intensity of the coverage over a short period, and the high levels of alarm in city newspaper coverage, reflected conservationists’ fears that time was running out to make an impact upon city audiences. Now “front page news,” erosion would soon become “another nine days wonder,” forgotten by the “town-dweller” before change could be achieved.⁴⁰ The best way to make a fast impact was to use the story of “America’s dust bowl.”⁴¹ Already well documented, its tragic outcomes had “shocked the world.” So surely it could be used to shock Australians too? The message was: “Wake up Australia! The soil is the basis of our existence.”⁴²

The function of images in these stories was considered to be particularly powerful. Film images or photographs were considered to provide “proof” that Australia’s “dust-bowl” was a reality.⁴³ The media could take advantage of the fact that recent dust storms reaching coastal cities had made “the public imagination” even “more receptive” to the “reality” of images and vice versa.⁴⁴ The combined impact of both the virtual and the real dust would surely inspire city populations. Then it was hoped that they would pressure the Federal Government to “fight” this “imminent national disaster.”⁴⁵ Two such dramatic photographs were included in an article by Bill Moore for the Adelaide *Advertiser* to stress the implications of erosion for civilization (its infrastructure). The images showed roads buried under ten feet of sand in “a new Desert,” while tree roots exposed to above the height of a grown man, accentuated the vulnerability of humans.⁴⁶

The intergenerational structure of US “downfall” narratives highlighted the fact that human and soil lifetimes were not naturally compatible, and Australian storytellers adopted this aspect. Today, this vast collection of stories, created over a mere decade, reveals the Australian contribution to what was an international alarm over those feared “dust bowls,” and what those “dust bowls” insinuated for civilization.

“WE MUST SAVE ‘THIS GOOD EARTH’ – OR DIE”: THE STORIES

Writing from the USA as a Rockefeller Fellow in 1940, Fred Alexander, Head of the Department of History at the University of Western Australia, penned the article “Human Erosion.”⁴⁷ Here he commented on Lange and Taylor’s imagery in *An American Exodus: A Record of Human Erosion*. Australians understood the book’s call for expansion and regulation of Californian agriculture and fair labor and living conditions. And they asked the question: What does the American experience portend for Australia? Alexander’s article for the *West Australian* included two Lange images from *An American Exodus* (Fig. 5.1). He commented that “conditions described in John Steinbeck’s novel...may or may not be exaggerated,” but Lange’s images were considered visual evidence reliable enough to indicate of Steinbeck’s dramatic evocations in the *Grapes of Wrath*, “that they have a basis in fact.”⁴⁸

The first Lange image accompanying his article was captioned, “Taking Part in the Modern American Exodus: A tenant farmer with six children on the track from Texas to California.” The second showed “Migrants from Oklahoma to California: A farmer and his family on the road” (Fig. 5.1).⁴⁹ Alexander clarified the significance to Australia. While “the problems of Australian agriculture, and industrial development, must always be studied in their own setting,” he noted that Australians would be watching to see “the solutions which Americans evolve” to this “outstanding economic and social problem in the South and West of the United States.”⁵⁰ They were indeed watching. By 1945, Australians noted that even American school children at junior levels were reproducing such “human erosion” imagery. The soil/human story was now a topic in their schools.

The symbol of the wagon abandoning a (water eroded) homestead, “to move farther west,” was drawn by American school student “Max.” The caption read “Uncle Sam has appealed to the children, through the schools, to study the causes and evils of soil erosion.” It featured in a Melbourne *Herald* article by anthropologist, Donald F. Thomson, who having served with the Royal Australian Air Force had taken up a position as Research Fellow at the University of Melbourne after the war.⁵¹ Thomson argued of the drawing that it showed how soil campaigns could impact at an early age. “Everyone has heard of the Dust Bowl country of America.” Theirs was “the greatest nation-wide campaign of all time” against “the menace of erosion,” now faced by Australia. Australians should learn “from Uncle Sam.” “We must save ‘this good earth’ – or die.”⁵²



Fig. 5.1 Above: Taking Part in the modern American exodus. Below: Migrants from Oklahoma to California. Images by Dorothea Lange in Fred Alexander, "Human Erosion," *West Australian*, March 1940

Integrated into “soil menace” narratives more broadly was one more important element and one more important character. Howard Finnell had headed “Operation Dustbowl” for the Soil Conservation Service near Dalhart, Texas in the 1930s and in the 1940s he was the director of Texas Panhandle experiment station. By 1941, Finnell could see the results of his agency’s hard work—with severely eroded lands being turned back to grass and significant reductions in acres planted to wheat. Rains came in 1941, while soon there was money to be made from war-time demands for wheat. Plainsmen, Finnell lamented, soon forgot that soil conservation was an issue, let alone one of national significance. He described the history of a boom and bust cycle on the Plains—of rain and record yields, then drought, erosion and abandonment. He feared another Dust Bowl would develop in the region, this time, bigger than the last. Like other conservationists at home, McKell watched the progress of the US project closely and even visited “the ‘Dust Bowl’ area at Amarillo, Texas” in 1945, as a guest of Finnell.⁵³ McKell would have been aware not only of improvements made by Finnell, but also the problems he faced as the 1940s progressed. Despite this, in order to sell the idea of a national effort to Australians, the “downfall” narrative was often sold to them with a permanent “happy ending.” Rather than the idea of any boom and bust cycle, the message of Dust Bowl recovery was integrated into Australian stories, and contrasted against US downfall imagery from the 1930s. The story went like this: Australia faced downfall too. But if like America, they approached soil as national matter, they too could conquer their “dust bowl desert” for good, and again see record yields.⁵⁴

McKell reported on his 1945 US trip for the *Sydney Morning Herald*. He had brought home inspirational lessons about America’s nationally coordinated approach, he said. All this was embodied within a “recovery” narrative supported by a transnational image. McKell noted that there was a difference between the US story—one of “extensive ploughing up of grasslands for wheat production” and the New South Wales story, where overstocking was the main problem. But he noted that “equally serious damage [to the U.S.] has occurred in N.S.W.”⁵⁵ He stressed that the USA had applied national solutions to treat the Dust Bowl, a “national” problem which was “also Australia’s problem.”⁵⁶ Included in the article was a photograph of a fence line buried under sand for miles in “one of the richest citrus belts in New South Wales.” It looks like an image of the US Dust Bowl. This implied a similar fate for Australia.⁵⁷ McKell stressed that

there were lessons for Australia indicated in the success of the national conservation program on the US Great Plains.⁵⁸

Australian newspapers campaigning for national action acknowledged the erosion problems of both Victoria and New South Wales. *Truth* was a sensationalist publication but the following story is representative of the broader media coverage on the issue of erosion. *Truth* compared dust storms of northern Victoria to the USA where “155,000 persons walked out of the ‘Dust Bowl,’” left destitute. Australia’s “creeping death” was “gradually increasing its strangulating grip on our fertile lands.” Farmers were abandoning “hundreds of holdings” in Australia’s “dust-bowl desert.”⁵⁹ But US state/federal cooperation had won “victory over the desert,” over “Black Blizzards,” and over crop failures, which proves that Australian governments must urgently emulate that effort.⁶⁰ US Dust Bowl and Mallee parallels were drawn in Robert Bowman’s *America Wakes to the Need for Soil Conservation*, while the Melbourne *Argus* reported on the presentation of Bowman’s paper to the Victorian Chamber of Agriculture in 1941. Australia’s Samuel Wadham was the speaker:⁶¹

A few remarks on Australian conditions may not be out of place. As a visiting American, I have been impressed by the “Dust Bowl” conditions of parts of your inner Mallee country on the dry margins of cultivation. It looks like the same causes though on a different type of land.⁶²

In 1944, Victorian State Government Minister, Sir Louis Bassau returned from a US Dust Bowl tour, and, the *Argus* reported, had expressed “amazement” at Premier Dunstan’s complacency over erosion.⁶³ Bassau tried to inspire Victorian Parliament to support a national effort, the “miraculous” effects of which he claimed to have witnessed in the USA. He explained that there had been “40 duststorms in 1935, 68 in 1936, and 72 in 1937.” But “the nation took a hand” (he meant that Congress acted), and the “‘The Dust Bowl’ was defeated by co-operative effort.” Fully “defeated”? Yes, he claimed. “When I visited the ‘Dust Bowl’ most of the people I saw said they had reached normal times again. The ‘Dust Bowl’ was no more.”⁶⁴

“One of the most gifted writers in the history of the Adelaide Advertiser,” in late 1944, Noel Adams toured 1500 miles of “drought-stricken areas” of south-eastern Australia to bring back a story. He travelled with South Australian soil conservator, Robert (Bob) Herriot. Their tour took in the Murray Mallee region, western New South Wales

Darling country up to Broken Hill, and across the NSW border into South Australia's north (Fig. 6.4). From 1941, Adams had served with the AIF with the 58th Anti-Aircraft Searchlight Company. Discharged in October 1942, he became accredited as a war correspondent for the *Adelaide Advertiser*, witnessing campaigns such as the Huon Peninsula campaign in New Guinea from December 1943 to January 1944.⁶⁵ Despite these experiences, when he encountered the west Darling country he was able to describe it as the most "tragic" stretch of dust-blown country he had seen. In the Victorian Mallee, Adams reported on erosion as the tragic process of civilization in decline with crops, then sheep, milking cows, and horses dying or being trucked south for agistment. Once-major towns left without horsepower were now a cluster of abandoned homes and churches, with roads engulfed by giant "desert" sand dunes.⁶⁶ He believed this imagery would "awaken" the public, "stir public opinion to its depths" and affect "prompt" Commonwealth and State action.⁶⁷ Adams may have returned from his tour with an Australian account, but he drew meaning from it by tacking onto it that classic and oft-repeated Dust Bowl anecdote, about Hugh Bennett of the American SCS: It was 1935 in Washington DC. Bennett knew a dust storm was approaching as he battled to enlist senate support for a US Soil Conservation Act.⁶⁸ The storm descended on the Capitol and had political impact. The Act was passed creating America's national soil service. And now, Adams warned:

The portent that Australia is observing is the equally sinister cloud of dust that ten years ago awoke people in Washington to a realization of what was happening in the "dust bowl" of the Middle West.⁶⁹

Washington's response, in "vast anti-erosion measures," he said, had "made a repetition" of the 1934 storms "impossible."⁷⁰ If Australia responded with a national project as had Washington, he believed, they could avoid seeing more of the "tragedy" Adams had witnessed.⁷¹

Equally dramatic warnings were penned by widely published Australian author, Elyne Mitchell who also held a national vision and in the 1940s, became one of a group of nationalist writers focused on the landscape.⁷² The *Sydney Morning Herald* published Mitchell's "Soil and Civilisation: Nations die as desiccation sets in" in 1944.⁷³ Her subsequent book, *Soil and Civilization*, was published in 1946.⁷⁴

Like Adams, Mitchell described "soil ruin" as a process of national downfall happening right before Australia's eyes until "no edifice of civili-

zation,” remained.⁷⁵ Surely, she stressed, Australians could not “be blind to the wind turning most of our wheat lands and merino sheep country into drifting sands” and “the steady seepage of our population towards the cities” (Figs. 5.2 and 5.3. See identical sheep image in Fig. 4.5).⁷⁶

But if such alarm was to be understood as more than a mere scare campaign what was its value? Storytellers such as Mitchell understood the importance of narrative to demonstrate a “recognizable pattern” of erosion



Fig. 5.2 The banks of the Darling River in western New South Wales (see maps in Figs. 4.1 and 7.1) described in Elyne Mitchell’s words as rising like “deserts that once were the gardens of Babylon and Ninevah.” Review of Elyne Mitchell’s *Soil and Civilization*, “Need we fall as Rome Did?” *Pix*, July 27, 1946



Fig. 5.3 “Landscape of death,” in “Need we fall as Rome Did?” *Pix*, July 27, 1946. This image appears to have been taken from Geoffrey Thompson’s photography for *Spectre of Drought* (Movietone 1938); *Victorian Drought* (Cinesound Productions 1943)

events across centuries.⁷⁷ The international group of authors she cited included Bennett, the USDA’s *Soils and Men*, Edward Falkner, David Lilienthal on the TVA Britain’s Jacks and Whyte and Australians Jock Pick and James McDonald Holmes.⁷⁸ Mitchell described the scientific and technological as both integral to nature, and to the religious and spiritual aspects of life.⁷⁹ Beginning her tale with Australian aboriginal legends, she moved on, linking US “technical knowledge of soil conservation” such as contour ploughing, to the cultural values of European Australians. In *Soil and Civilization*, Mitchell was asking: what would Christ’s teachings, T.S. Eliot’s *The Wasteland* or ancient Greek stories of Goddess Demeter mean in the context of Australian soil, fauna, flora, weather, climate, and industry?⁸⁰ What would they mean in the context of Australia’s entire history and Australia’s conservation future?

Mitchell constructed this kind of narrative because she believed that Australians had been at war fighting and dying for Australian soil, but dreaming of a foreign land—England. Australian pioneer myth, in the form of “dreams of England” she said, had unleashed progress and individual greed onto Australia’s soils.⁸¹ If through regional planning, Australians could feel the same attachment to their own land as they did to their cultural values from afar, Mitchell believed Australia’s surface

soil would be saved. "Creative fusion" between humans and soil could make soil conservation "the vital centre of the regional system."⁸² US Soil Conservation Districts were an example: in Australia just as "there are scattered throughout the U.S.A.," the "differences in local problems of erosion" should be solved regionally, by men who know their own land."⁸³ The regionalist approach of the federal US Soil Conservation Service was the change Mitchell aimed to inspire when she described her dust-blown history of the ancient world, taking her reader from "dust drifting and blowing" to "blot out the sunlight" of Persia to "the dust from the north that is, as I write, coating every house, every tree, every plant in the green Murray Valley" (Fig. 7.1).⁸⁴

Mitchell was describing the organic matter, nitrogen, phosphoric acid, and potash lost in each dust storm when she wrote that "the wind is the spirit blowing" but "we have turned it to a carrier of death." She turned to Christian stories to explain further. The wind "no longer" carried "the life seeds that man once thought were borne on the wings of the wind—the wind that seemed to be of the Holy Spirit, sent by God to Mary." She was also able to illustrate a literal human/soil interrelationship when she warned that now there was "fine dust in the lungs of the people and in their eyes...Drought is in the land and in the people." And finally Mitchell was able to give wind erosion moral and religious dimension. She described airborne dust as "the sin of civilization," while dust storms were "a result of man's rendering unto Caesar the things which are God's."⁸⁵

Mitchell was not alone in drawing on Christian themes. Australian modernist artist, Russell Drysdale drew on similar ideas to interpret erosion in his 1946 painting, *Crucifixion* which portrayed an image of "human erosion." Mother Earth or Madonna is seen in rags. Rising from the scorched earth in foreground, she is both grieving and dying, as soil or Christ, is crucified in the far background.⁸⁶ Newspapers described *Crucifixion* as "surrealism on the farm." The painting, they said, dramatized "the soil of Australia being crucified on a cross of erosion."⁸⁷ There were strong parallels in theme and style to the American, Alexandre Hogue's water erosion painting, *Crucified Land* (1939) and his commentary on "the Martyrdom" of both American soil and "Jesus of Nazareth."⁸⁸ But Drysdale created commentary on drought and erosion well before this when the *Sydney Morning Herald* sent him on tour with photographer, J. M. Leonard and journalist, Keith Newman in 1944 to portray "a great national problem."⁸⁹ To record erosion conditions, they covered thousands of miles of western New South Wales then entered northern Victoria.⁹⁰

Drysdale's sketches were published in the first of three features. In this series, Newman contemplated human history, sand dune formation, and overstocking in discussions of drought and erosion causes, remedies, and impacts. In "An artist's Journey into Australia's Lost World," he described touring over:

One long tragedy-track over scorched earth and the last 250 miles, from the western Riverina to Wentworth... where this impression is being written, was a nightmare journey through a day-long duststorm.⁹¹

Newman's narratives wavered between optimism and pessimism. Concerned about producing either "facile" or "alarmist" accounts, he struggled with "the difficulty of accurately reporting the drought":

One describes its enormous scope and intensity, properties where every hoof had died, the dust and long haulage even of household water, and in doing so creates the impression that the countryside is one vast desolation.⁹²

In contrast, visual interpretations of the same surroundings by Drysdale did not waver. When Drysdale corrupted familiar visual narratives of the Australian landscape, he was very consistent. John Mulvaney has explained how these, and other Australian landscape paintings of the time, affected the senses of the viewer:

Their images of the outback [unlike colonial portrayals] portray an environment which dominated human existence, rather than human endeavor subjugating nature. The sense of discomfort, drudgery, heat and loneliness of white settlers is pervading.⁹³

Drysdale sketched dying trees raising "supplicating arms, to rainless skies," abandoned homes, with windows "like black sockets whose eyes have perished with despair." He sketched an aboriginal burial ground, ancient time "exposed by the wind" and lying, symbolically "beside the bones of a sheep."⁹⁴ He portrayed the "skeletons of great trees" which had "died on guard duty against the desert."⁹⁵ We see "two frustrated victims of erosion. One, a staggering spectre evolved by nature," the giant exposed roots of a tree loom like a monster in the foreground while "paradoxically enough," diminished by its position in the far background we see a "dead" windmill. The caption describes them both as "contrived by inventive man and both impotent emblems of their environment."⁹⁶

From these sketches, Drysdale developed, *Walls of China* (1945). Also entitled, *The Walls of China (Gol Gol)* which hangs at the Art Gallery of New South Wales. Drysdale portrayed "The Great Wall of China" described by Newman as a sand hill "70 feet high," "two miles long," and "one-third of a mile." Gol Gol was the location of an early pastoral station on the Murray River while the area now known as Lake Mungo is world heritage listed (Fig. 6.4 near Mildura).

In this work, Drysdale was "the first to make a complete break with natural artistic landscape." Serle explains that he had "found reality again," through realism, expressionism, and surrealism. He explains the human symbolism of Drysdale's dead trees, carcasses, "desert," outback women, and the dark eyes of abandoned homesteads, streets, and hotels:

Experimenting with the forms and possible symbolic qualities of dead trees, roots, rocks, sand...He took up again the enduring theme of loneliness and melancholy in a hostile environment.⁹⁷

The work was widely celebrated by city audiences in terms of the development of Australian modern art.⁹⁸ Serle agrees, arguing that Drysdale's "innovatory importance" is "unlikely ever to be surpassed." He gave Australians a new way of understanding "the Out-back" and the relationship among soil erosion, drought, and people in "the return of an authentic national vision...approaching problems rich in human implications."⁹⁹

Among images of death and erosion, Drysdale included unconventional portraits of women. One of these included an image of a mother in the Balranald area of western New South Wales.¹⁰⁰ This image expresses a link between "desert" and a declining civilization. The woman has not left her home. Therefore, we can see the process of change brought by drought and erosion. She stands outside at the corner of her house. She wears a forlorn expression, a shapeless, wasteless dress and apron with shapeless sleeves and untidy shoelaces (most likely unusual for imagery of the time), while appearing to stare blankly into space. A shy young child, her daughter, shoeless in a shapeless little dress, clings to her skirts. The image suggests that soil and human decline are locked into a process that in human terms is experienced as suffering, loneliness, a loss of "humour," and possibly material poverty. The image indicates this mother and her daughter are not refugees...yet.

HUMAN EROSION ON FILM

The idea of a declining civilization was also dramatized in films made by Ken Hall for the national film-maker. Cinesound's *Drought Grips Riverina* and *Australia is Developing a Dust Bowl* promoted more than the idea of an immoral, overstocking farmer.¹⁰¹ They publicized the Commonwealth Government's agenda to achieve extended constitutional powers, including over soil conservation. An August 1944 referendum seeking those powers had failed. That November, these two films were screened to federal parliamentarians in continued pursuit of support for that vision. Along with a third film, Cinesound's *Victorian Drought*, they stressed that the lives of city dwellers, as well as country people, were dependent upon the soil.

Drought Grips Riverina displays clear visual references to the US Dust Bowl and the Dust Bowl refugee. We see an Australian family leaving the farm in the New South Wales Riverina. As in US newsreels of the 1930s, she appears healthy, clean, in fashionable, belted, floral frock, and closed-in shoes. Her hair is coiffed. Her children are well dressed, and she is attentive. Unlike Drysdale's women, she is symbolic of a civilization that so far remains intact—but she is being forced back from the front line of defense against national soil decay, by relentless drought, wind and, ironically, poor land use. Her domestic world, usually enclosed, now exposed, is piled up and carted off from the “desert” in the “wagon” and to an uncertain future: will the small farmer see the pioneering process start over again?

We see children, teddy bear, puppy, furniture all piled atop a wagon/truck, father on foot as the civilized family leave their homestead (Figs. 5.4 and 5.5). Only an empty road and bush lie ahead. What is left behind? Only ruins which warn that soil erosion destabilizes people and leaves once-happy homes, like ancient monuments, surrounded by desert sands and broken, half-buried wagon wheels. Cinesound created a “sequel,” showing that the desert sands of New South Wales were not the only threat to the survival of the Australian nation. Filmed by one of the daring heroes of Australian newsreel film-making, cameraman Geoffrey Thompson, Movietone films created *Spectre of Drought* in 1938.¹⁰² The film described a “dustbowl” developing in Victoria. The national film-maker now repackaged Thompson's *Spectre of Drought* sequences. All previous mention of a “dust bowl” was omitted. But the idea of a “dust bowl” was retained through image, sound, and narration and the influence of Pare Lorentz' *The Plow that Broke the Plains* and parallels to Hogue's



Fig. 5.4 Almost identical to the US imagery (Fig. 3.3). Australian “dust bowl” refugees in Cinesound Productions, *Drought Grips Riverina* (1943), National Film and Sound Archive, Australia



Fig. 5.5 Almost identical to US Dust Bowl imagery (Fig. 3.3). Australian “dust bowl” refugees in Cinesound Productions, *Drought Grips Riverina* (1943), National Film and Sound Archive, Australia

Drouth Survivors can be traced in this sequence of images. Newly named, *Victorian Drought: Mallee Country Facing Ruin* (1943) became “part two” of Cinesound’s expanding Australian national story.

In the sequel, conservation farmer Fred J. Hofmaier and rose gardener Mrs Hofmaier are featured surviving on their green conservation-farming oasis, which in turn is surrounded by desert.¹⁰³ Hofmaier drives over “30 feet of sand drift,” covering a road, while the main road to Mildura is seen buried (see map, Fig. 6.4). This is a warning that the nation cannot be saved by individuals alone. Hofmaier stands as an example of what could be achieved more widely with help from the state or Commonwealth Government. But he is not the average farmer. And as the film shows, farmers are already leaving the region. We see Clydesdale horses, vital to clearing irrigation channels, rail lines, and roads and keeping the Mallee watered and populated. But they are being trucked out for lack of fodder. Without a national conservation effort, the region will be “dead and buried as ancient cities were buried in the sand.” To symbolize this, farm technology lays waste on an abandoned homestead, shocking images show valuable donkeys and horses having died from thirst while sand dunes appear to rise and engulf homesteads as deserts encroach, a reminder of Lorentz’ and Rothsteins’ images of sand-buried homesteads in US Dust Bowl (Figs. 5.6 and 3.2). Finally, school children “our nation’s future” are seen leaving the Mallee.¹⁰⁴ Their future “is blowing away in the dusty air. They face migration or else.” The booming notes of a horror soundtrack remind us that this is the process of civilization in reverse, a “whirlwind” that without national action “will sweep this nation’s prosperity away.” No symbol of civilization is spared decay in this sequence. It ends with the warning that “death is in the air,” and a visual reference to extinction, and to Arthur Rothstein’s *Steer Skull* (Figs. 5.6 and 3.4).

Did the nation support this dramatic media alarm? Were the public “awakened”? High-profile Australians, among them Calwell and popular writer Ion Idriess, enthusiastically congratulated the *Sydney Morning Herald* for exposing the “horrifying” truth. At the same time, dust storms were now reaching coastal cities where people could witness them first-hand. This spectacle, combined with the impact of text, drawings, and photographs, would construct imagery so powerful in the imagination, it would surely “awaken the nation to the fast approaching ruin of one-third of our continent.”¹⁰⁵ The public voiced their opinions in the newspapers. In the Adelaide *Advertiser*, J.B. Burnett stressed that media images were “giving publicity to what I think, apart from the war, is the most serious

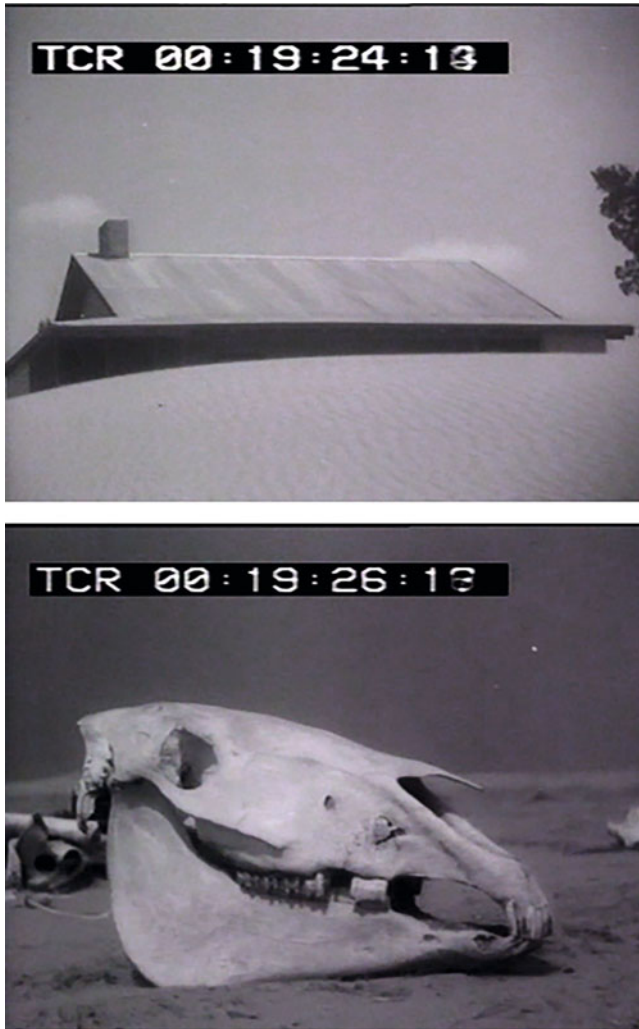


Fig. 5.6 *Above:* “The desert has come up from the good earth and stands at the settler’s door.” *Below:* “Death is in the air.” Cinesound Productions, *Victorian Drought: Mallee Country Facing Ruin* (1943), National Film and Sound Archive, Australia

problem facing many parts of Australia's future."¹⁰⁶ F.R. Johnstone of Prospect believed dramatic coverage had brought "the matter before the general public" for the "good of the country."¹⁰⁷ Burnett added that to "solve soil erosion, something must be done and "quickly before we go the same way as a score of other civilisations from the same cause, and be lost forever."¹⁰⁸ This narrative of "national downfall without national action" was also harnessed by New South Wales Premier William McKell to promote constitutional change. And of all the equivalent Australian conservation visions, that generated by the McKell government, was most similar to, and most strongly influenced by, the US national narrative surrounding the Dust Bowl. He drew on its power and used it to full effect, despite the central wind erosion issue in his state being different—overstocking of sheep rather than overploughing for wheat.

POLITICIANS, THE AUSTRALIAN CONSTITUTION, AND THE NATIONAL DOWNFALL NARRATIVE

As Premier from 1941 to 1946, William McKell sought to awaken politicians and city populations to soil as a front-page political issue affecting them directly.¹⁰⁹ On October 10, 1941 when he delivered a speech on soil conservation at Cowra, New South Wales, he described it as "a subject that lies very close to my heart," and then, inspired by American efforts, American authors, and by a trip to the heart of the US Dust Bowl he told a story about Australia's future.

McKell placed soil erosion into the nation's history from pre-pioneer settlement to the present. He raised the alarm to panic pitch describing the US, "the 'dust bowl' and its "appalling wastage" as "a prime example of man's shortsightedness," and a dire lesson to the nation. Australians he argued, "cannot contemplate calmly" the "human misery" resulting from this tragedy where "in Kansas alone," he stressed "5,000 families" would have to be "rehabilitated elsewhere." He asked, "are we here in Australia, with such an example as this before us, going to allow the same thing to happen here?" McKell did not want "calm" on this issue! There had been "little or no attempt" he argued, by "private individuals or by state governments" to find ways to serve both the nation's present and its future post-war future.¹¹⁰ To alarm Australians further, he borrowed the tale of a Nebraskan farmer from Stuart Chase in *Rich Land, Poor Land*. "One story comes vividly to mind," he said:

Asked why he was watching the dust storms so intently he replied – “I’m counting the Kansas farms as they go by.” Fortunately we have not got to that [same] stage in New South Wales.

There was no time to waste. “Australia have not yet got a ‘dust bowl,’” McKell warned “but we shall have one unless we act now.”¹¹¹ What would a future Australia look like otherwise, the newspapers asked? “Like the deserts of Asia and the dust-bowls of the United States.”¹¹² And what were Australians to do about this?

McKell was able to achieve his vision for soil conservation at the state level. He was able to achieve a regionalist vision by appointing a 1943 Regional Boundaries Committee for the subdivision of New South Wales into regional areas (Fig. 6.4).¹¹³ But he could not achieve a program at the national level without the cooperation of other states. By 1944, he was able to say that his government had kept their 1941 promise and taken the “grave responsibility” of erosion seriously just like “President Roosevelt [who] is an ardent conservationist.”¹¹⁴ His government had provided research funding despite war-time financial constraints. They had institutionalized the idea of conservation, amalgamating Water Conservation and Irrigation, Forestry and Soil Conservation into one Department, while McKell pressured the Australian states to duplicate “what my government has done.”¹¹⁵ But along with Prime Minister Curtin, State Labor leaders, Ministers including Calwell, and soil conservationists generally, McKell believed that constitutional change was needed if this level of cooperation from the states was ever going to be achieved.¹¹⁶

Under Curtin, the Labor Commonwealth Government sought this constitutional change. They called for fourteen powers to be transferred from the states to the Commonwealth to achieve post-war reconstruction and this included the control of water and soil conservation. At a 1942 Constitutional Convention, agreement from the states was unanimous, an arrangement that aimed to avoid a referendum in war-time. Corresponding bills were then to be passed by each state parliament. In his 1942 speech to the New South Wales parliament, during the second reading of the Bill, McKell framed the soil conservation issue in terms of current national crises. He argued in terms of an Australian constitution no longer relevant to the nation and its domestic war-time needs.¹¹⁷ He respected the framers of the nation’s constitution, but in 1901 he said, they could never have “visualised” the nation’s 1942 war-time crises: “tremendous” manpower problems, Australians killed by “enemy fire” on

their own soil or post-war planning challenges. And “what wonderment there would have been on their faces,” McKell explained, at the very mention of the concept of “the conservation of the soil.”¹¹⁸ But, he added, this was no excuse for the states not to act in 1942.

By the 1940s, dust storms were impacting on coastal cities including Sydney, where parliamentarians would have witnessed wind erosion conditions firsthand.¹¹⁹ McKell used desert imagery to take advantage of this, describing erosion as, “the greatest” of all current domestic war-time problems that would “grow until it leads to the eventual destruction of the country. The desert of Australia is coming closer to our coast every day” with soil erosion “spreading tremendously.”

McKell used the power of poetic repetition—words, and phrases—in a flourish, that dared other Australian states to defy his vision¹²⁰:

Who will suggest, who will suggest that it can be dealt with by the states alone? Who will deny that if the original framers of the constitution had the knowledge that we possess to-day of this problem they would have said: This is a matter of national importance, and one for the Commonwealth Parliament to deal with.¹²¹

The prospect for McKell’s vision looked bright at the 1942 Constitutional Convention. State Premiers had unanimously agreed to transfer state powers to the Commonwealth for the post-war period. The Victorian Parliament had passed the necessary transfer of powers bill in almost the complete form agreed upon at the Convention.¹²² However, Dunstan’s compliance was tactical.¹²³ Prime Minister Curtin was held in high esteem by the Australian people despite the war-time sacrifices he had asked of them. Dunstan knew that blatant opposition, “might have been politically unwise in a climate of extreme military danger.”¹²⁴ He found other ways of obstructing the proposed amendments. He attached a difficult special condition to the Victorian bill—one which ensured that it was never passed. His special conditions dictated that all states would have to pass the bill in a completely unaltered form. However, a deadlock in the Tasmanian Parliament prevented this.¹²⁵ Dunstan’s tactic meant that a referendum became necessary to achieve these extended Commonwealth powers. But this option was postponed by an impending trip to London by Curtin. And it was complicated by Curtin’s return, which came against the whole atmosphere of the June 1944 Normandy landing off the French coast. This has been described as “the greatest amphibious operation of all

time” and “the beginning of the end of Nazi tyranny in Europe”—not an ideal time to call Australians to a referendum.¹²⁶ In contrast, the *Canberra Times* reported on the McKell stance. Among areas that should be controlled by the Commonwealth “Mr. McKell cited soil erosion” which he called “the greatest scourge of the country.” Looking to Commonwealth Government control over post-war reconstruction was vital because “the dead heart of Australia is creeping, closer to the coast,” he said. “The check is left up to the States, when it is a work of national character and should be handled by the national authorities.”¹²⁷

The referendum on the Commonwealth Powers Act of 1942 was held in August but failed, winning only two states.¹²⁸ Nevertheless, conservationists did not give up their cause.¹²⁹ After all, the defeat of the referendum, which would have greatly expanded many powers of the Commonwealth, could not be put down to the one issue of soil conservation.

In December 1944, the *Argus* quipped, “Mr Dunstan was worse than naive if he misread the referendum results as a vote of confidence in the way the States had met soil erosion and other problems.” The *Argus* reported that the Minister for Information Arthur Calwell had attacked Dunstan’s stance. Calwell said the referendum result “would not be reassuring to at least six million people in three eastern states, who had seen hundreds of tons of their soil blown into the Pacific Ocean in the last few weeks.”¹³⁰

Dunstan was able to sustain this kind of opposition to national action on erosion. But how did he sustain it for the entire period of his premiership? Dunstan was commonly described in his time, as “having no fixed principles.”¹³¹ His primary objective was to retain the premiership. Across this period, there was no majority government in Victoria, creating an “unstable political environment.”¹³² It meant that minority parties such as the United Australia Party could influence decisions in parliament by forming alliances, rather than relying on numbers in parliament or on voter support.¹³³

In September 1943, Dunstan lost vital Labor support. He could now retain power only by forming a coalition between the CP and the conservative UAP.¹³⁴ However, the UAP opposed Labor’s nationalist vision—that vision included a national soil authority and wheat industry regulation, which was favored by the smaller wheat growers of the Mallee.¹³⁵ Dunstan’s party was now strongly controlled by “machine politicians.” They showed no loyalty to these small growers. Instead, many of them were happy to accommodate the interests of “Collins Street financiers,”

including racing personality John Wren, who was accused of controlling a “party within a party.”¹³⁶

Operating in this environment, Dunstan could ignore the wishes of the electorate, and evade the influence of political pressure groups and the media. Power belonged not to parliament, the executive, and the party organization, but “to this one man.”¹³⁷ Enjoying freedom from responsibility to the electorate, he could appease those “Collins Street financiers” by deferring the issue of responsibility for soil erosion to the Commonwealth.¹³⁸ In 1944, without notice, Dunstan replaced Chairman of the Soil Board H.G. Strom. Though Strom was widely published on river conservation, the scientifically unqualified E.J. (Ned) Hogan was appointed in his place.¹³⁹ After this, anti-soil conservation propaganda, along with soil neglect, proliferated in response to media alarm.¹⁴⁰ Neither Dunstan nor Hogan supported calls for a national authority. Neither contributed by supporting the findings of their own Soil Board, financially or otherwise. Their fullest contribution to the whole issue of erosion came in the form of anti-conservation and “scare campaign” propaganda. Writing for the Victorian State Executive of the Australian Communist Party, Gerard Blackburn attacked Dunstan’s stance. Blackburn was scientifically trained and had experience working in the Mallee.¹⁴¹ Dunstan, he argued, had appointed the anti-small-farmer Hogan, a discredited Labor “political corpse.” Neglecting the financial problems underlying erosion, Hogan had acted in the interests of “reactionary big business.”¹⁴² And it was they, Blackburn argued, who “sprang to the defense of Mr Hogan against the scientific organisations.”¹⁴³ But it was not only “scientifically unqualified corpses” who criticized narratives of desert decline.

“GLOOMY” NARRATIVES: RESISTANCE FROM POLITICIANS, SCIENTISTS, AND “THE MAN ON THE LAND”

When agricultural chemist, Geoffrey Leeper reviewed Mitchell’s *Soil and Civilization* for *Meanjin Papers* in 1946, he argued for scientific facts over narratives loaded with declensionist imagery.¹⁴⁴ Her work, he pointed out, had been “written before the breaking of Australia’s drought 1943-1945.” This, he argued, had “coloured the writers’ view...which has no foundation in fact, that Australia is becoming more arid.” On the value of Mitchell’s “downfall” narrative, Leeper argued that “this gloomy theme” had appeal for “any of us who are trying to arouse public interest in soil

conservation.” He added, “history is not as simple as that.” But Leeper did see some value of this kind of imagery:

the whole problem of how to arouse people to action without exaggerating the danger is evident in this book. Erosion is bad enough already but to talk of (p. 78) of “the wind turning most of our wheatlands and merino sheep country into drifting sands” is wild exaggeration.¹⁴⁵

Leeper was aware that Mitchell’s objective was not a “scientific” remedy for erosion, but a narrative he described as “romantic and mystical.” But he found it “difficult to find any clear meaning in these words.” Mitchell’s narrative could not establish technical solutions or coerce “non-co-operators.” Scientific answers were needed, he stressed, and “city-trained [scientific] men do not care whether Nature is infinitely wise or not.” *Soil and Civilisation* was written by “a nature-worshipper” who “hates erosion” and therefore could not make a rational contribution to debate over “conquering erosion.”¹⁴⁶

Both Leeper and Wadham believed that scientific facts were dramatic enough to restore balance to the debate, without denying the source and severity of the dust storms. They refuted Dunstan’s “belittling” claims of a scare campaign by producing “fairly conclusive evidence” from “RAAF aeronautical observations.” This evidence showed that a 10,000 ft wall of dust over Tocumwal in the New South Wales Riverina had blown from the Mallee and not from central Australia.¹⁴⁷

But Dunstan had allies in rural Australia where affected rural populations feared portrayals of their region and people in permanent decline.¹⁴⁸ They feared stories exposing the severity of erosion conditions because¹⁴⁹ negative stories like this could effect a loss of land values by ignoring how the land might return to a productive state after the drought. And they feared stories warning that “uneconomic” settlements were “blowing away” and would have to be abandoned and returned to their “natural state.”¹⁵⁰ An enraged CP representative questioned the Minister for Information over the origins of imagery he had seen in the *Illustrated London News*. Portrayals of “Australia’s Dust-Bowl Problem” showing “dying sheep and sand flying over fences” he argued, were “very much like descriptions of German concentration camps.”¹⁵¹

Artist Russell Drysdale was also attacked by affected communities and politicians for promoting the idea of a decaying civilization—in imagery connecting “the ravages of drought,” deserted and derelict buildings, and

“untidy women.” Influenced by surrealist Salvador Dali, Drysdale’s goals, however, were “realism,” meaning that he wanted to capture a true sense of the experience of drought, not to create a traditional interpretation flattering the farmer, wife, or nation.¹⁵² But in their assessment of Drysdale’s drought paintings, these audiences expressed a genuine yearning for an end to portrayals of hopelessness and human/soil decline. They sought portrayals promoting the long-term potential of their regions, not “surrealistic interpretations of dead trees” which might be misunderstood by city audiences with no knowledge of life on the land.

The *Sydney Morning Herald* reported on comments by the “Minster for Lands, Mr. Tully” who had accused Drysdale of “touches of exaggeration of the existing desolation. When good rains fall” Tully added, “Mr Drysdale... will, if he revisits these scenes, doubtless be astonished at nature’s response.”¹⁵³ Graziers responded to calls for soil conservation cooperation by attacking the media coverage. The *Herald* and *Daily Telegraph*, they said, showed “complete ignorance... and incorrect information” on wind erosion, by creating the impression of an almost irreclaimable and uninhabitable dustbowl.” The media were depicting “a Gehenna of misery and desolation... dejected and hopeless men wandered amidst the engulfed ruins of their homes, while sad, gaunt women stood by clasping their starving babies to their withered breasts.”¹⁵⁴ For soil erosion to be interpreted in such human terms, grazier, L.S. Rix argued, was “an untrue picture, a distortion of fact.”¹⁵⁵

Drysdale’s painting, *The Cross of Erosion*, also attracted a negative response from Frank Forster, of Milparinka Pastures Protection Board in Tibooburra, north-western New South Wales (Fig. 6.4). Forster argued that Australian artists should be promoting national progress by portraying conservation and regeneration, not “decay” in paintings exhibited at overseas exhibitions.¹⁵⁶ Fearful of forced resettlement, Guy Petch of Meribah, in the Mallee, argued against Adams’ coverage of Mallee erosion for the *Adelaide Advertiser*. He said Adams had created “the worst possible account of the conditions prevailing.” Petch added, “so unless we are blown out they’ll never get us out.”¹⁵⁷

Resistance to the idea of a “soil menace” came from politicians too, who found advantage in supporting country resistance to the media alarm. This is what changed national and state narratives. In 1945, as Chairman of Victoria’s Soil Conservation Board, Hogan planned a tour of eroded areas. Dunstan was also due to take a tour soon after, and “critics were keenly awaiting his return” to hear of “his latest observations on the erosion menace.”¹⁵⁸

Both Dunstan and Hogan took a preconceived “impression” with them on tour. But what did this “impression” look like? Hogan had attended a 1944 meeting with CSIR soil scientist, Ronald G. Downes, who had just completed a soil survey for the Victorian Soil Board, and later became celebrated for his service to science.¹⁵⁹ When Downes briefed Hogan, he described the symbols for various kinds of soil erosion that he had mapped. Hogan responded by asking, “and what is the symbol for ‘no erosion’, Mr. Downes?”¹⁶⁰ The causes of erosion, Hogan replied, were drought and wind alone. This was the “impression” both took on tour. But could these tours change the Dunstan/Hogan perspective and engender an unshakeable belief in the dangers of “the soil menace”? After seeing conditions firsthand, what kind of “impression” did they return with, and were their critics to be disappointed?

Hogan took the preconceived “impression” of “no erosion” on tour. And when he brought that very same “impression” back, the *Herald* ridiculed it. Hogan reported having witnessed only one dust storm and it blew from the south, the *Herald* noted. This, Hogan said, “proved” that dust blew “Back and Forth,” across Victoria on northerly and then on southerly winds and did not originate in the Mallee region at all. His views “clashed,” the *Herald* pointed out, with those of his own Soil Board.¹⁶¹

And what of Dunstan? What kind of “impression” did he return with after his tour? The *Herald* reported, “Premier Says Erosion Exaggerated—Tours North, Fails to Find ‘Menace.’” Dunstan had “toured back roads as well as highways, in the northern districts” but “had seen no covered fences or struck any impassable roads.”¹⁶² Rather than “deserts” the “impressions gained” by Dunstan, reportedly included the “indomitable pluck” of “determined” settlers.¹⁶³ Under “gruelling” conditions, they waited for a “glimmer of hope”—but not for the Premier to pay attention to erosion. He said they hoped for the Commonwealth to deal with the problem of a low-guaranteed price—and for rain to bring “record yields.”¹⁶⁴ Farmers had told him “much more harm had been done by the ‘scare campaign’ than by erosion.”¹⁶⁵ Dunstan insisted that with Commonwealth money and a shower of rain, “the soil menace,” a mere “figment of the Australian imagination” would quickly disappear.¹⁶⁶ Campaigners reminded the Premier however that conservation measures were aimed at conserving moisture when rain finally did come. They advised him that for a premier to ignore the US Dust Bowl completely was to ignore the whole issue of wind erosion. And they urged that lessons must be taken from how the “U.S. Defeated Soil Erosion.”¹⁶⁷ When Wheat Board Member A.C. Everett criticized Dunstan, the *Army News* reported on his argu-

ments, stating that: “Mr. Dunstan had completely ignored the experiences of the dust-bowl in America. He had no national vision; for him the sun rises on the Dandenong Ranges and Sets on the Werribee Plains.”¹⁶⁸ The *Argus* bellowed in agreement: “Perhaps the PREMIER is not perturbed by these alarming facts *but we are*.”¹⁶⁹

DUNSTAN: AN “OSTRICH-LIKE” SYMBOL FOR “NO EROSION”

While Dunstan located himself at the center of an optimistic narrative about “droughts coming and going,” the efforts of Victorian conservationists were deflected from taking part in the uniform adoption of a transnational narrative. Instead, they were diverted into bickering over whether or not erosion actually existed at all. Conservationists were forced into a relationship with the persona Dunstan had created—one of calm, common sense in the face of unmitigated panic. His image did remain central to narratives constructed by conservationists—but they turned the tables in order to redefine the symbolism of this man. Campaigners portrayed Dunstan as an “ostrich-like” symbol for “dust bowl-downfall,” itself a sign of the human/soil interrelationship dangerously out of balance. This symbolism made Dunstan integral to the very narrative of decline he denied. It can be seen in the following three sets of imagery. Produced by the *Argus* and the Australian Communist Party, together they communicate how Victorians perceived the essence of their struggle for reform—often as a battle against just one individual.

Armstrong’s cartoon for the *Argus* “Visibility Restricted!” shows Dunstan driven by obstinance, seen as an ostrich with its head buried in sand drift. Sleeves rolled up, working hard at denial, Dunstan is seen blinded by, as well as central to, the “desert” he has created. As he squints into a raging sand storm, his thought-bubble reads, “Can’t see any erosion for this darn dust!” “DUNSTAN ADMINISTRATION” is written on the ostrich’s behind.¹⁷⁰ In *Necessary Principles*, even Wadham noted Dunstan’s “ostrich-like attitude towards erosion, which is little short of marvelous.” Those “offenders” he argued, who would have been financially disadvantaged by conservation legislation, were the ones who had pressured Dunstan into this inaction.¹⁷¹

On the cover of the Australian Communist Party’s *Dunstan and Soil Erosion*, the premier’s name was plastered across an image of “creeping desert sands” seen swallowing up a homestead. Blackburn provided the narrative: “for years past the Victorian Mallee has been known as a

dust-bowl” blowing soil “far and wide over south-east Australia.”¹⁷² The Dunstan contribution, he said, included neglect of state fodder reserves, starving the soil board of funding, ignoring “scientific missions in USA and USSR,” and turning a blind eye to “overseas conservation methods, films, and other publicity.”¹⁷³ Afraid for his political career, Albert Dunstan, he argued, had degenerated into nothing but a “self-conscious babbler,” who shunned “publicity that could be used to develop support for real efforts to control erosion.”¹⁷⁴

The imagery constructed in another Communist Party pamphlet, *Victoria in Peril from Drought, Fires and Premier Dunstan*, also made Dunstan central to the “downfall” narrative (Fig. 5.7).¹⁷⁵ The combination of image, title, and content was a comment on Victorian struggles to achieve urgent reforms under his government. This included delays in establishing Country Fire Authority recommendations by a Royal Commission, and Victoria’s Soil Conservation Board (1940).¹⁷⁶ “Blinded” by denial the Premier squints into the face of catastrophe—bushfires, dying stock, farmers “facing complete ruin,” and towns transporting water. There was only one solution to all of this: for the sake of the nation, Victorians must “get rid of this individual and his government of big business and the UAP.”¹⁷⁷

HAPPY ENDINGS: SOLUTIONS TO THE LONGER TERM EFFECTS OF “DUST BOWL” ALARM

Recklessly, optimistic narratives did not eliminate the idea of a soil menace or a “dust bowl.” They contributed to both soil and social neglect. Downfall narratives also had some long-term negative effects—even as late as 1951, the “downfall” narrative seemed to have no end. But many believed a “happy ending” could be provided by the US example, and a bit of help from the media.

Communities affected by erosion, along with sections of the press, realized that a balanced, long-term assessment of their regions’ capacities needed to be made by soil conservationists—and it had to be matched by balanced media assessment of regions’ longer term social capacities. Mervyn Weston, a journalist for the Melbourne *Argus*, was one of those people. He believed a story focused on American successes in the US Dust Bowl would help.¹⁷⁸

In 1946, Weston toured the Mallee wheatlands for the *Argus*. He returned with a new story. It was a transnational one written in defense of the Mallee and its people: “Those mistaken people,” who wanted the

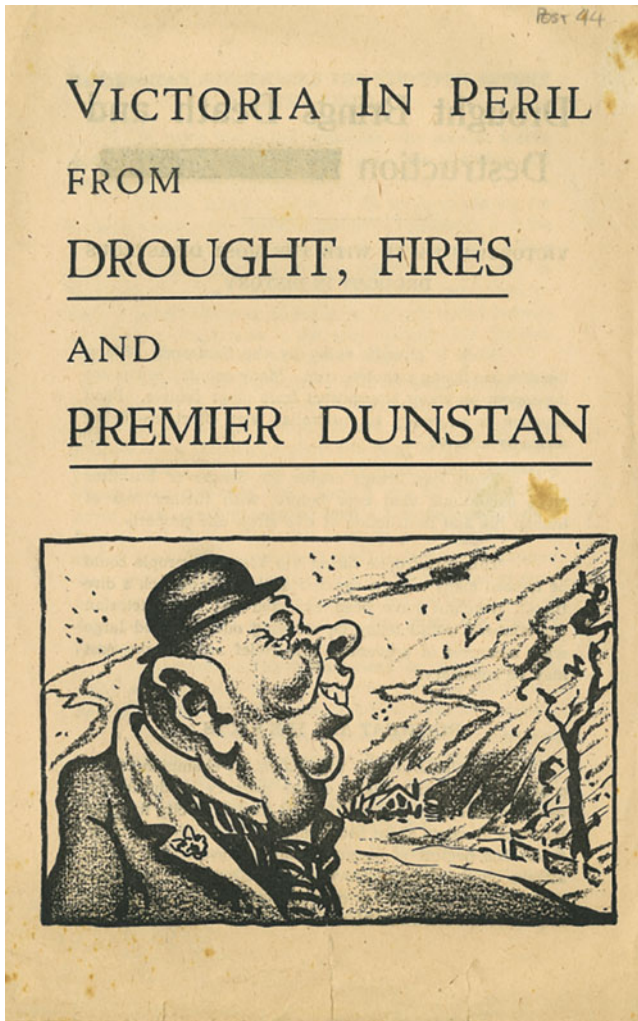


Fig. 5.7 Communist Party of Australia, *Victoria in Peril from Drought, Fires and Premier Dunstan* (Image courtesy Monash University Library, Rare Books Collection)

Mallee “turned back to scrub” he warned, “should remember ... that the wheatlands of USA and Canada, which it was wildly suggested in 1937, should be given back to the Indians” were now yielding “millions of bushels.”¹⁷⁹

Mallee people, Weston argued, were not “pariahs,” or “poor souls living in an earthly Hades.” Photographs of conditions had often been taken by “well-meaning photographers who get down on their stomachs to make pictures of drifting sand look even more spectacular, more tragic,” and in “No Place Like Mallee, Says Wheatgrower,” his interviewee, conservation Farmer Fred Hofmaier confirmed Weston’s arguments that “abysmal ignorance of so many city people,” meant these kinds of images were accepted as fact.¹⁸⁰ The Mallee had been “misrepresented” in narratives of “hopeless pessimism and reckless optimism” and the people yearned for an accurate assessment of their region and its potential.¹⁸¹ The media, Weston continued, portrayed the Mallee in cycles. It was “‘hell’ in times of drought, and “a paradise” when it rained, but never a place where sound agricultural innovation reaped rewards. He constructed a success story around the work of Howard Finnell, who Weston explained, was currently being celebrated as the “Wizard of the Dust Bowl.”¹⁸²

In his “success story,” Weston explained that Finnell had achieved a great deal on the Plains, and now “resented the inference that the lessons of the Dust Bowl had not been learnt.”¹⁸³ But Weston failed to acknowledge Finnell’s concerns that the “lessons learned” were quickly being forgotten—indeed, as Finnell feared, another “Dust Bowl” was soon to come in the 1950s. Weston overlooked this, taking some suitably positive quotations from Finnell, to construct his transnational “happy ending.” His version of Finnell’s message was that there would be dust storms and drift, but “Never a return to the ‘Dirty Thirties.’” If Finnell was right, Weston argued, then the Mallee and its people too, would fully recover. Weston assured readers with comparative images of “desolation” versus productive farms one year later in both the Mallee and in South Dakota.¹⁸⁴

In 1951, the *Argus* published “Mallee not a Dust Bowl Now.” It showed that the social impacts of declensionist media stories could outlast the impacts of the actual erosion itself. It was six years after the end of the drought that the Mallee Regional Committee set out to influence the press. Protesting against “bad publicity given the region in the past,” including impressions of “starving Mallee kids,” the Committee invited journalists to construct a narrative end to the story of “dust bowl” decline once and for all. But how would they orchestrate the writing of such an “ending”? The committee announced they would “invite journalists to tour the Mallee to show them the real picture.” The aim of this tour was to contrive a “real” picture, to construct an “end of the story” and invite journalists to witness it and write about it. Whether or not this trip was

ever undertaken is not clear. What is clear, however, is that the Committee believed that it would be the power of imagery constructed by writers, and not simply the reality of drought recovery in the region, that would finally create an end to their “dust bowl” experience. But what exactly would that picture of recovery look like in this “real” end to their “human erosion” story? The Committee describes it. The Mallee, they said, would look like a “land of milk and honey.”¹⁸⁵

A NATIONAL SOIL CONSERVATION SERVICE?

Noel Adams of the *Advertiser*, Minister for Information Arthur Calwell, Ken Hall of Cinesound films, Mervyn Weston of the *Argus*, and Premier William McKell all believed in the power of “human erosion” imagery to raise an alarm, and awaken the Australian public to “the soil menace.”¹⁸⁶ As Elyne Mitchell expressed it, conservationists believed that “propaganda and advertising” would help “stem the tide of soil erosion.”¹⁸⁷

McKell was able to promote support for soil conservation activity in New South Wales, and sustain it, despite the restrictions war imposed. But the soil conservation campaign occurred at a time when the Victorian premier refused to act. He turned his back on the significance of the US experience and stifled attempts to deliver jurisdiction over soil conservation to the Commonwealth. Victorian conservationists finally “got rid” of their premier in September 1945. Due to “exasperation at Dunstan’s political deviousness,” he was forced to resign when his government was refused supply.¹⁸⁸ The prospects for soil conservation in Victoria improved after Dunstan’s demise, and this was helped along by a change of state Government to Cain Labor in 1945. In 1950, a Soil Conservation Authority replaced the Soil Board and a Research Division was established. Downes was one of the first members appointed, and he oversaw a statewide program of land use surveys from 1954.¹⁸⁹ By the 1950s, experts including Wadham reported that finally, the “chronic” Victorian erosion problems of World War Two had “been at least checked.”¹⁹⁰

McKell proposed an Australian Soil Conservation Service at a 1945–1946 Premiers’ conference and here he referred to a copy of the US Soil Conservation Act. Next to each clause in the corresponding bill, US legislators had quoted a relevant precedent. McKell used this to illustrate that in the US, “the same problem of State jealousies had been expected,” yet it had been overcome.¹⁹¹ But what did all this portend for the national campaign? The Australian states agreed to confer on the issue but acted separately.

As Sam Clayton later recalled, instead of taking a united approach, each state sent representatives to the USA to study soil conservation methods—despite previous information gathering tours by other states.¹⁹²

In the end, was all of this enthusiasm over the power of imagery misplaced? Were the national aims of soil conservationists finally achieved? Tim Bonyhady sums it up:

Although there were all manner of political promises the NSW Government announced that it would legislate to give its Soil Conservation Authority new powers to control overstocking, all the States agreed to liaise on a national approach to soil conservation, the Commonwealth's Minister for External Affairs, Bert Evatt, was keen to establish a Federal Soil Conservation Authority—nothing happened.¹⁹³

As discussed in the next chapter, it was water agencies and river diversion enthusiasts who eventually dominated soil narratives, and motivated support for a national project. Images of “engineered modernity” were touted as a water conservation remedy to “dust bowl deserts” and this put the nation’s soil conservationists further on the defensive. During this war-time period, increased Commonwealth powers were achieved by the federal Labor Government in the area of water conservation, by turning to constitutional “defense powers.” But for the soil, a national conservation service was never achieved.

NOTES

1. See Cronon, “A Place for Stories,” 1357–1363.
2. “‘Grapes of Wrath’ Raises Big Storm,” *Australian Women’s Weekly*, January 20, 1940.
3. “‘Grapes of Wrath’ Best 1940 Film,” *Courier-Mail* (Brisbane, QLD), January 1, 1941.
4. “Grapes of Wrath,” *Examiner*, November 16, 1940.
5. Worster, *Dust Bowl*, 59, 61, also 50–51; Kenneth M. Sylvester and Eric S.A. Rupley, “Revising the Dust Bowl: High above the Kansas Grasslands,” *Environmental History* 17, no. 3 (July, 2012): 603–633.
6. “Grapes of Wrath,” *Examiner*.
7. Phillips, *This Land This Nation*, 11.
8. “‘Grapes of Wrath’ at Princess,” *Examiner* (Launceston, TAS), November 23, 1940.
9. “Erosion Menace Threatens Millions of Acres,” *Truth*, September 11, 1943.

10. Dixon, *The Course of Empire*, 95 on the theory of civilisation, 1–2.
11. Powell, “Mothering,” 162.
12. Samuel Wadham, *The Land and the Nation* (Melbourne: Stockland Press, 1943), 90, on perishing see 12. See Samuel Wadham, *Climate and Soils in Relation to Agriculture/notes on climate prepared by S.M. Wadham; notes on soils prepared by G.W. Leeper; notes on soil conservation prepared by R.I. Herriot* (Melbourne: Ministry of Post-War Reconstruction), 1946, on “perishing resources” 85, farm planning, 99.
13. Calwell, “Saving our Soil.”
14. V.R. Alldis, *Soil Erosion* (Young: Witness Print, 1936–1937), 40. Also Ratcliffe, *Flying Fox and Drifting Sand*, 294–295.
15. T.E. Field, “Abstract from an address to the National Council of Woolgrowers, Melbourne, 9 June 1943,” in F. R.V. Timbury, *Battle for the Inland* (Sydney: Angus and Robertson, 1944), 90.
16. On ideas regarding the stages and signs of civilization, see Dixon, *The Course of Empire*, 1–2.
17. The Sahara’s rainfall is described as “less than ten inches and an evaporation rate varying from 100 inches upwards,” the Gobi Desert with similar rainfall, and evaporation rates of “more than six inches,” in Pick, *Australia’s Dying Heart*, 11.
18. Erle Cox, “Dust and Diplomacy,” *Argus* (Melbourne, VIC), February 20, 1943.
19. Pick, *Australia’s Dying Heart*, 48. Note that just as in verse, the punctuation in Pick’s expression, as in other works of simple prose, creates meaning.
20. R.V. Billis, “Dust Sign of Desert Encroachment,” *Argus*, March 19, 1945; “Mr R. V. Billis, pastoral authority, dies,” *Argus*, November 18, 1947.
21. McTainsh et al., *Wind Erosion*, 15.
22. Calwell, A.A. Calwell, “Saving our Soil is our Problem,” *Horsham Times* (VIC), September 18, 1945; Graham Freudenberg, “Calwell, Arthur Augustus (1896–1973),” *ADB*.
23. Richard White, *Inventing Australia: Images and Identity 1688–1980* (Sydney: George Allen & Unwin, 1981), 149, on “war aims,” post-war planning and developing Australian nationalism, see 153.
24. Powell, “Mothering,” 221, and see 62, 221–223, 230, on CSIR Division of Soils, 244. On the Australian states and soil management, see Keith O. Campbell, “The Development of Soil Conservation Programmes in Australia,” *Land Economics* 24, no. 1 (Feb, 1948).
25. On aboriginal Victoria, see Richard Broome, *Aboriginal Victorians: a history since 1800* (Crows Nest, NSW: Allen & Unwin, 2005); also see Gammage, *The Biggest Estate on Earth*.
26. Jock Pick comments in “Soil Erosion of National Importance,” *Advertiser*, November 27, 1944.

27. McTainsh et al., 33.
28. Barr and Cary, *Greening a Brown Land*, 133.
29. On severe storms, see Barr and Cary, 132, the grain belt, 133.
30. G.T. Thompson, *A Brief History of Soil Conservation in Victoria, 1834–1961* (Victoria: Soil Conservation Authority, 1979), 15.
31. Thompson, *A Brief History*, 16.
32. The difference between drift sand accumulation in drought versus non-drought periods is shown, and on fallowed versus non-fallowed land on State Regional Boundaries Committee map, “Soil Erosion: hazard and Known Incidence,” 1944. On the Board’s establishment, see Tom Griffiths, *Forests of Ash* (Cambridge: Cambridge University Press, 2001), 45; “Soil Erosion,” *Alexandra and Yea Standard and Yarck, Gobur, Thornton and Acheron Express*, January 3, 1941; Gerard Blackburn outlined the Dunstan government’s resistance to a board in *Dunstan and Soil Erosion* (Melbourne: Victorian State Committee, Australian Communist Party, 1945), 4.
33. “Nature Fights Back: Settlements Blow Away in Sand and Dust,” *SMH*, November 22, 1944.
34. “Erosion is a Real Menace.”
35. “Erosion is a Real Menace,” *Argus*, December 29, 1944.
36. On dramatizing national viewpoints, see NAA, Series: SP107/1, Item: Bundle 2, Title: Correspondence re films, cables, “Agenda for Conference between Commonwealth and State Governments on non-theatrical exhibition of films, held at the State Lands Department Sydney,” Wednesday March 26, 1941, 7; “Soil Erosion is Not somebody Else’s Problem,” *Advertiser*, April 14, 1944.
37. “Erosion is a Real Menace.”
38. “National Menace of Soil Erosion,” *Truth*, September 4, 1943.
39. These capital letters are the original emphasis given by the *Argus* editor.
40. “Half the Country is in the Air!” *Western Mail* (Perth, WA), November 30, 1944.
41. “The Menace of Lost Soil,” *Age* (Melbourne, VIC), November 22, 1944.
42. “Half the Country is in the Air!”
43. Bill Moore, “Clouds of Warning,” *Advertiser*, November 22, 1944.
44. Wadham agreed. *Climate and Soils*, 87.
45. Moore, “Clouds”; Also “National Menace of Soil Erosion,” *Truth*, September 4, 1943.
46. “Soil Erosion in Southern New South Wales,” *Advertiser*, November 21, 1944.
47. Writing from the USA as a Rockefeller Travelling Fellow.

48. Fred Alexander, "Human Erosion: an American Exodus," *West Australian*, March 23, 1940.
49. Ibid; Lange and Taylor, *An American Exodus*, 109, 128.
50. Alexander, "Human Erosion."
51. Howard Morphy, "Thomson, Donald Finlay Fergusson (1901–1970)," *ADB*.
52. Donald F. Thompson, "We can Save this Good Earth," *Herald*, March, 1945.
53. For McKell on Amarillo, see "U.S. Fight Against Soil Erosion Has Lesson For N.S.W.," *SMH*, October 23, 1945.
54. On Finnell, see Worster, *Dustbowl*, 226; Johnson, *Heaven's Tableland*, 274–275, boom/bust cycles, 279; Ken Burns, "The Dust Bowl, a Film by Ken Burns: Biographies, Henry Howard Finnell," (Florentine Films and WETA, 2012).
55. "U.S. Fight."
56. The image is not given an exact location. "U.S. Fight."
57. "U.S. Fight." On McKell's April–September 1945 trip, see William McKell, *Official visit of the Premier of New South Wales to Great Britain, The United State of America, Canada and Brazil, April to September, 1945* (Sydney: Government Printer, 1945).
58. "U.S. Fight."
59. "Erosion Menace Threatens," *Truth*, 11 September, 1943.
60. "Erosion Menace Vital National Problem," *Truth*, September, 25, 1943.
61. Bowman, "America Wakes," read by S.M. Wadham, 3, Goode Collection, SLV. As noted in "Agriculture Conference," *Argus*, April 19, 1941.
62. Bowman, "America Wakes," 5; "Agriculture Conference."
63. At the Victorian Wheat and Woolgrowers' Association conference; J.B. Paul, "The Premiership of Albert Dunstan," Masters thesis, University of Melbourne, Dept. of Political Science, 1961, 377; R.C. Duplain, "Bussau, Sir Albert Louis (Lou) (1884–1947)," *ADB*.
64. "How US Defeated Soil Erosion," *Argus*, December 19, 1944.
65. Malcolm Saunders, "Adams, Noel Darwin (1906–1989)," *ADB*; Roseworthy Old Collegians Association, "Roca Award of Merit 1967–Robert Herriot OBE," (November, 2006).
66. Noel Adams, "Erosion Devastates Mallee Areas," *Chronicle*, December 14, 1944.
67. Noel Adams, "Desert in Mallee Country," *Advertiser* (Adelaide, SA), December 7, 1944. On Adams and on colleague, Stewart Cockburn, enthused by the impact of Adams' coverage, see Saunders, "Adams, Noel Darwin (1906–1989)." On prompt action, see Adams, "Erosion Devastates."
68. Showers, "Soil Erosion," 390.

69. "Middle West" is not a reference to the Midwest. During this period, it appears to have been commonly used by the media to indicate the Dust Bowl on the southern Great Plains.
70. Noel Adams, "Arresting the 'Disease of Soil Erosion': Lessons of 1,500 Miles Tour," *Advertiser* (Adelaide, SA), December 15, 1944.
71. Noel Adams "Soil Erosion in Murray Mallee," *Chronicle*, December 7, 1944.
72. Jane Butler, "Mitchell, Sibyl Elyne (1913–2002)," Australian Womens' Register.
73. "Soil and Civilisation: nations die as desiccation sets in," *SMH*, September 9, 1944.
74. Elyne Mitchell, *Soil and Civilization* (Sydney; London: Angus and Robertson, 1946).
75. *Ibid*, 30–31.
76. On exports, see *Ibid*, 31, population loss, 79; On "Ninevah" as quoted by "Need we fall as Rome Did?" *Pix*, July 27, 1946. See *Ibid*, 8.
77. Showers, "Soil Erosion," 374.
78. The TVA was a New Deal planning model for maximum use, multi-purpose resource use across the Tennessee River basin; James McDonald Holmes, *Soil Erosion in Australia and New Zealand* (Sydney: Angus and Robertson, 1946), 54.
79. Mitchell, *Soil and Civilization* (1946), 100. On such writers as "spiritual feminists," see Patzel, "The Soil Scientist's," 212.
80. Jill Ker Conway describes Eliot's American "deserts and whitening bones," as resonant for Australians in *The Road from Coorain* (New York: Knopf, 1990), 41; On Greek mythology, Demeter and "*Mother Earth*," see Patzel, "The Soil Scientist's," 207; On Australian indigenous flora and fauna only recently central to conservation studies, see Robin, "Ecology: A Science of Empire?," 71–73.
81. On "cultural cringe," see Tom Griffiths "Ecology and Empire: Towards an Australian History of the World," introduction to *Ecology and Empire*, 1–16.
82. On "fusion," see 84, "that spiritual quality which is life," 31, the "regional system," 83 in Mitchell, *Soil and Civilization* (1946).
83. *Ibid*, 83.
84. *Ibid*, 11.
85. On regional planning, see 83, the ancient world, 11, death winds, 56, Holy Spirit and "fine dust," 55, sin 11, Caesar, 44. *Ibid*.
86. On soil and Christian symbolism, see Feller et al., "The Representation of Soil," 5–11.
87. "Surrealism, on the Farm," *Northern Times* (Carnarvon, WA), March 8, 1946; Russell Drysdale, *Crucifixion* (1946), Art Gallery of New South Wales.

88. White, "Alexandre Hogue's Passion," 67.
89. Keith Newman, "Drought Lands' Varied Pattern Falling Birthrate of the Trees Menaces the Future," *SMH*, December 18, 1944.
90. Tim Bonyhady, "Drawings from the Scorched Heart," *SMH*, December 24, 1994.
91. Keith Newman, "An Artist's Journey into Australia's 'Lost World,'" *SMH*, December 16, 1944.
92. Newman described settlements "virtually wiped out" while nearby irrigation settlements prospered, in "Drought Lands."
93. John Mulvaney, "Visions of Environment: An Afterview," in *The Humanities and the Australian Environment, Occasional Paper No 11*, ed. D.J. Mulvaney, Academy of the Humanities Symposium, 1990, 112.
94. On how heritage protected aboriginal burial grounds portrayed by Drysdale, see Mulvaney, "Visions."
95. Newman, "Drought," Keith Newman, "Riddle of the Sands: Erosion Solution May be Buried There – Urgent Need for Scientific Assault," *SMH*, December 19, 1944.
96. Newman, "Riddle."
97. On naturalistic landscapes, see Serle, *From Deserts*, 166, surrealism, symbolism, and themes, 167.
98. Bonyhady, "Drawings."
99. On Drysdale's innovation, see Serle, *From Deserts*, 167, national vision, 171. On patron of Australian modern art, Keith Murdoch of the *Herald*, choosing Drysdale for this project, 163.
Newman, "Drought Lands'."
Newman, "Riddle."
100. Newman, "Riddle."
101. Created as cinema newsreel films for *Cinesound Review*.
102. Thompson (as sound engineer) filmed Healesville/Black Saturday bushfires (1939), a 32 Squadron Hudson air accident (1942) and devised road safety films. "Hazardous Lives of Newsreel Cameramen," *SMH*, October 16, 1939; "New Films Reviewed," *SMH*, July 29, 1946; AWM, photographic collection, notes on Item: AC0066; On Healesville, see Tom Griffiths, "An Unnatural Disaster?" *History Australia* 6, no. 2 (2009).
103. Hofmaier (Rosebery West, south of Mildura) promoted American disc plough technology. "Advertising," *Pinnaroo and Border Times*, January 10, 1946. For Hofmaier's portrait/biographical information, see end-note 117; And "SOIL EROSION," *Riverine Herald* (Echuca, VIC: Moama, NSW: 1869–1954) April 19, 1947, conservationist Harold Hanslow promoted wise use of tractors to conserve soil; On Hanslow at war with Dunstan, see Jan McDonald, "Hanslow, Harold (1882–1958)," *ADB*.

104. At Kiamal, Ouyen district, populations are described declining from 1100 (1925) to 180 (1943) where newspapers from the early-mid 1930s described fierce dust storms; See Richard Waterhouse, *The Vision Splendid: A Social and Cultural History of Rural Australia* (Fremantle: Curtin University Books, 2005), 201, 204; On US cases, see Worster, *Dust Bowl*, 103, 123, 240.
105. Bonyhady, "Drawings."
106. J.B. Burnett, "Views and Comments," *Advertiser*, January 4, 1945.
107. F.R. Johnstone, "Views and Comments," *Advertiser*, January 16, 1945.
108. Burnett, "Views."
109. Australian Labour Party, *Five Critical Years: The Story of the McKell Labour Government in New South Wales, May 1941–May 1946* (Sydney: Australian Labour Party, 1946), 1.
110. McKell, *Soil Conservation*.
111. "have not" is McKell's wording.
112. *Rich Land Poor Land* (1936) was later published as a chapter in the 1941 USDA Yearbook. William McKell, "Soil Conservation: Speech delivered by the Hon. W.J. McKell, M.L.A., Premier and Colonial Treasurer at Cowra on 10th October, 1941," (unpaginated). On deserts of Asia, see "Warning by Premier On Erosion," *SMH*, November 20, 1944.
113. David Clune, "The McKell Style of Government," in *The Achievements of Sir William McKell*, ed. Michael Easson (Sydney: Allen & Unwin, 1998), 122.
114. McKell, *Soil Conservation Speech*.
115. Amalgamation was promoted in McKell's general policy speech, May 10, 1944. See State Records NSW, Guide to the records for "Department of Conservation (1944–1949) Conservation Authority of NSW (1949–1975)." McKell, *Soil Conservation Speech*. On duplicating at the national level, see "Warning By Premier."
116. Australian Labour Party, *Five Critical Years*, 40.
117. On desired uniform state laws, see Con Hartnett, *Curtin and McKell, Architects of Regionalism in Australia*, Interim edition (Tighes Hill, NSW: Hunter Valley Research Foundation, 1984), 61.
118. McKell, *Speech Delivered*, 6, on "conservation of the soil," see 7.
119. McTainsh et al., *Wind Erosion*, 17.
120. McKell, *Commonwealth Powers bill*, 7. On the effects of poetic repetition, see "Modern & Contemporary American Poetry: Repetition," (Philadelphia: University of Pennsylvania Department of English, 2007).
121. McKell, *Commonwealth Powers bill*, 7.
122. Hartnett, *Curtin and McKell*, 61.
123. J.B. Paul, "Dunstan, Sir Albert Arthur (1882–1950)," *ADB*.
124. Hartnett, *Curtin and McKell*, 61.

125. Ibid.
126. Hartnett, *Curtin and McKell*, 62, 64; Commonwealth Government of Australia, *You and the referendum*, (Canberra: Commonwealth Government of Australia, 1944).
127. "Move To Kill Referendum," *Canberra Times* (ACT), November 26, 1942.
128. This was the Constitution Alteration (Post-War Reconstruction and Democratic Rights) 1944 referendum.
129. "How US Defeated."
130. "Problem of Soil Erosion," *Argus*, December 12, 1944. The referendum passed in SA and WA, not the eastern states mentioned by Calwell.
131. Antony Lamb, "Of Measures and Men: the Victorian Country Party, 1917 to 1945," PhD diss., Swinburne University of Technology, (Melbourne, 2009), 294.
132. "between 1917 and 1952." Lamb, "Of Measures," 5.
133. On "heavy" overrepresentation, see Costar, "Albert Dunstan: The Jumping Jack Premier," in Paul Strangio and Brian J. Costar, *The Victorian Premiers 1856–2006*, eds. Paul Strangio and Brian Costar (Annandale, NSW: Federation Press, 2006), 224; Also B.D. Graham, *The Formation of the Australian Country Parties* (Canberra: Australian National University Press, 1966), 259–260. On minority party influence, see Lamb, "Of Measures," 5, guaranteed supply, and disproportional influence of "the corner party," 7–8.
134. Lamb, "Of Measures," 283. On the link between conservative "pro-British attitudes," and US competition with Britain for a share of world markets, see Richard White, *Inventing Australia*, 150.
135. Being pro-Labor, the Victorian Country Party (VCP) was unlike the CP in other states, (6). The VCP was born of "harsh" Mallee and Wimmera farming conditions. Costar, "Albert Dunstan," 223. On pro-Labor small Mallee farmers turning against Dunstan, see R.F.I. Smith, "The Scullin government and the Wheat Growers," *Labour History* 26 (May 1974), 55.
136. Paul, "The Premiership," 339; Also "£100 Challenge Made," *Barrier Miner*, July 29, 1948. On Wren, see also James Griffin, "Wren, John (1871–1953)," *ADB*; Blackburn, *Dunstan*, 6. On the influence of financiers, see Lamb, "Of Measures," 292.
137. On Dunstan's lack of responsibility, see Lamb, "Of Measures," 6, who explains "cooperation between non-Labor parties "federally and in other states was not replicated in Victoria," 5.
138. Lamb, "Of Measures," 292.
139. Among Strom's coauthored publications was *Report on Creeks and Breakaways from River Murray adjoining Barmah State Forest Comprising*

- 72,000 acres with N.G. Ferguson (1940). In *A Brief History*, 37–38, Thompson discusses Hogan's appointment; See also "Soil Erosion," *Alexandra and Tea Standard and Yarck, Gobur, Thornton and Acheron Express* (Vic.), January 3, 1941. Blackburn outlined the Dunstan government's resistance to establishing the soil board, in *Dunstan*, 4; Pam Jonas, "Hogan, Edmond John (Ned) (1883–1964)," *ADB*.
140. On progress Strom made over 1944 and comparative lack of progress made after 1945, see Thompson, *A Brief History*, 38.
 141. As described by Edward. F. Hill, foreword to Blackburn, *Dunstan*, 2. By the 1970s, Blackburn had coauthored a number of soil studies for the CSIRO.
 142. UAP Minister in the Dunstan minority Government "Mr. Trevor Oldham," the "Director of several wealthy companies in Melbourne," is named along with Wren, in Blackburn, *Dunstan*, 9.
 143. *Ibid.*
 144. Geoffrey W. Leeper held research and teaching positions in chemistry, in the Faculty of Agriculture, University of Melbourne 1930–1962. He authored "four books—two on trace elements, one on soil chemistry and one on soils" including *Introduction to Soil Science* (1948). G.J. McCarthy, "Leeper, Geoffrey Winthrop (1903–1986)," *Encyclopedia of Australian Science* (October 20, 1993).
 145. G.W. Leeper, "Soil and Civilization," by Elyne Mitchell," *Meanjin Papers* 5, no. 3 (1946): 257–258. The page number "(78)" is part of the Leeper's original wording.
 146. Leeper, "Soil and Civilization," 257–258.
 147. Claims by Wadham (University of Adelaide) and Leeper (University of Melbourne) are quoted in "Soil Erosion Warnings not a Scare: Experts Tell Premier of Victorian Menace."
 148. "Nature Fights Back." "Australia's Dust Bowl: Pictures in London Journal," *Age*, May 3, 1945.
 149. See "Nature Fights Back."
 150. *Ibid.*
 151. Mr. Abbott (Country Party, NSW) quoted in "Australia's Dust Bowl: Pictures."
 152. On the influence of Dali, see Serle, *From Deserts*, 168.
 153. "Men Still Seek Land," *SMH*, December 28, 1944. Tully was a Member of the NSW Legislative Assembly from May 30, 1925 to May 9, 1946; Parliament of New South Wales, Members: "Mr John Moran TULLY (1885–1966)."
 154. "Conservation of Soil: Grazier's Urged to co-operate," *SMH*, March 15, 1945.
 155. *Ibid.*

156. Tim Bonyhady, "The Cross of Erosion," *Australian Humanities Review* no. 6 (June–July 1997).
157. Guy Petch, "Experts Urge Drastic Action on Erosion," December 30, 1944; "Murray Mallee," *Advertiser*, December 22, 1944.
158. "Board Opinions differ on Soil Erosion," *Herald*, March 9, 1945), Goode Collection, SLV.
159. A University of Melbourne student of Samuel Wadham in the 1930s, Ronald G. Downes' coauthored works for the CSIR including, T.J. Marshall and R.J. Downes, "The Black Soil Flats near Lake Alexandrina and Lake Albert," (Adelaide: Council for Scientific and Industrial Research, Division of Soils, 1941). He worked for the Division of Soils between 1939 and 1950. Awards recognizing his achievements included the Hugh Hammond Bennett Award (1981) of the Soil Conservation Society of America; Nick Uren, "Downes, Ronald Geoffrey (Geoff) (1916–1985)," *ADB*. Department of Environment and Primary Industries, "SCA early studies and regional land-system studies," Victorian Resources Online (2011).
160. On "no erosion," see Thompson, *A Brief History*, 34.
161. "Soil Board Chairman Says: When Drought over Erosion will Stop," *Herald* (date illegible), Goode Collection, SLV.
162. "As a result of his inspection and his personal contact with farmers." See "Board opinions differ on Soil Erosion." "Premier Says Erosion Exaggerated: Tours North, Fails to find 'Menace,'" *Herald*, March 14, 1945, Goode Collection, SLV.
163. "Premier Says Erosion Exaggerated."
164. Opposition Leader, Mr Cain, was quoted in parliament, on Dunstan's "evasiveness" regarding erosion in "Premier Evasive on Soil Erosion, Mr Cain Says," *Argus*, March 14, 1945.
165. "Premier Says Erosion Exaggerated."
166. Ibid.
167. See discussion of grass cover needed in "More Danger to Wimmera than Mallee," *Argus*, December 19, 1944 "How US Defeated."
168. "Everett Slates Dunstan on Soil Erosion," *Army News* (Darwin, NT), March 5, 1945; Also see Duplain, "Bussau, Sir Albert Louis (Lou)."
169. The capital letters and italics are the newspaper's own emphasis.
170. Mick (Harold Barry) Armstrong, "Visibility Restricted!" Today's Armstrong, *Argus*, January 10, 1945; A cutting of this cartoon can also be found in the Goode Collection, SLV. It includes a handwritten note below it, written in black pen and signed by soil conservationist Dewar Wilson Goode, that says "Dunstan was the Country Party Premier of Victoria and could see no wrong [the word 'that' is crossed out] in anything the farmer could do D. Goode." In "Premier Minimises Erosion:

- Views after Tour,” March 14, 1945, the *Herald* noted Dunstan’s observation: “there was bound to be some soil erosion in drought time, but the sand drift was not as bad” as in past droughts.
171. S.M. Wadham, *Necessary Principles for Satisfactory Agricultural Development in Australia* (Adelaide: The Hassell Press, 1946). Joseph Fisher Lecture in Commerce, University of Adelaide, July 5, 1946. Wadham noted that Dunstan, as someone “responsible for directing its so-called control,” had neglected the soil, 12. For Dunstan/ostrich caricature, see also Thompson, *A Brief History*, 13.
 172. Gerard Blackburn, *Dunstan and Soil Erosion* (Melbourne: Victorian State Committee, Australian Communist Party [hereafter CPA], January, 1945), 3; Also see *Dunstan against the People*, (undated), on page 14, where the CPA argued: “Dunstan’s activities have been confined to purely destructive and carping criticisms of the Federal Government.”
 173. Blackburn, 8.
 174. Blackburn, 9.
 175. CPA, Victorian State Committee, *Victoria in Peril from Drought, Fires and Premier Dunstan* (Melbourne: Victorian State Executive of the Australian Communist Party, 1947) [sic] The correct date of this pamphlet would have to be prior to Dunstan’s 1945 resignation.
 176. Paul, “The Premiership,” 369, notes that regarding bushfires, “possibly no attempt would have been made in this direction at all by the same Government, had not the State experienced another bout of severe bushfires the previous summer.”
 177. CPA, *Victoria in Peril*. The national interest was discussed by Hill, in foreword to Blackburn, *Dunstan*, 2.
 178. On Weston, see W.L. Hetherington, “History of Promotion of Poll Dorsets.” *Poll Dorset Journal* (September 2010), 50; Mervyn Weston, “*The Australian Red Poll Breeders’ Guide* (Melbourne: Red Poll Cattle Breeders’ Association of Australia, 1949).
 179. Mervyn Weston, “Let’s Revise our Outlook on the Mallee,” *Argus*, October 5, 1946.
 180. Mervyn Weston, “No Place like Mallee, Says Wheatgrower,” *Argus*, August 13, 1946. See Hofmaier portrait in “Miracle of the Mallee,” *Argus*, August 22, 1946.
 181. Newman had acknowledged this need for balance in his *SMH* accounts.
 182. Weston, “Let’s Revise.”
 183. In “Let’s Revise,” Weston considered “pessimism”: An Oklahoman agricultural writer toured the “Dust Bowl” he says, and reported: “The Dust Bowl will blow again. God, not man, laid the dust.”
 184. Weston, “Let’s Revise.” In *Heaven’s Tableland* (1946) Dust Bowl farmer, Vance Johnson lamented that after the US drought, farmers had neglected soil conservation, while severe dust storms did return in the 1950s.

185. "Mallee Not a Dustbowl Now," *Argus*, September 20, 1951.
186. "Problem of Soil Erosion," *Argus*, December 12, 1944.
187. Mitchell, *Soil and Civilization*, 100.
188. Costar, "Albert Dunstan," 224. A weak Victorian Labor Party only formed its first majority in 1952. Lamb, "Of Measures," 5.
189. Uren, "Downes, Ronald Geoffrey." See also Department of Environment and Primary Industries, "SCA early studies and regional land-system studies."
190. Samuel Wadham, R. Kent Wilson and Joyce Wood, *Land Utilisation in Australia* 3rd edition (London; New York: Cambridge University Press, 1957), 151, on recovery from erosion, 152. Regarding developments by the 1950s including superphosphate fertilizer as "the main conservation treatment for soil," after war rationing ceased, see Barr and Cary, 133; Tyrrell, *True Gardens*, 225. Tyrrell describes wheatland expansion destroying "large amounts of native bush that could co-exist with cattle."
191. Wrigley, "Interview... Clayton."
192. Ibid.
193. Bonyhady, "Drawings."

Dust Storms and “the Despair of the Housewife”: War-Time Wind Erosion as “Natural Disaster”

During World War Two, Hazel Hogan lived on an Australian wheat farm in the drought and erosion-stricken region of the Victorian Mallee. After one too many dust storms, and one too many struggles to clean up, she told her husband she was leaving for the city on the next morning train. Her story, told in this chapter, reflects the tensions that existed within “dust bowl” narratives about the place of women either as enduring figures or as victims of soil erosion—sometimes both. To examine these tensions, this chapter investigates how storytellers combined ingrained ideas about women, with actual observations of environmental conditions. These storytellers constructed both negative and positive images of wind erosion’s impacts upon women, and in turn, these struggled for dominance in popular narratives.

Though there was much that was specific to the circumstances of the drought-affected regions of Australia, international authorities commented on the plight of women like Hazel as a broader, even global phenomenon. Influential reports presented a gloomy picture. In 1939, a world survey of soil erosion published by Britain’s Imperial Bureau of Soil Science authors Jacks and Whyte expressed highly gendered ideas about the impacts of “dust bowls.” The title of their work *The Rape of the Earth* indicated a female earth corrupted by humans. But the contents also indicated the impacts of wind erosion upon humans, and this included women in affected communities “both on the farm and in nearby towns.” The “effect of soil drifting and blowing” they described as “extremely

depressing and demoralising.” And in gendered terms, this meant “fine dust penetrates through the smallest openings and gradually covers everything indoors, floors, furniture, bed and food, to the despair of the housewife.”¹ Life under such conditions, Jacks and Whyte argued, indicated much more than a series of temporary setbacks for humans. They stressed that these conditions were about the “maladjustment of human communities to their environment.” Humans, they explained, could not sustain the “rapid re-adjustment” required in such a “continually deteriorating environment” and if they could, the result would “scarcely conform to the conception of an advancing civilization.” Rather, they argued “the net movement is away from...a civilised state.”²

IN AUSTRALIA: STEINBECK’S MOTHER JOAD AND RUSSELL DRYSDALE’S “DROUGHT WOMEN”

Created during the 1930s, Steinbeck’s portrayals of the relationship between women and wind erosion in *The Grapes of Wrath* had similarly pointed to decline. Australians had seen and commented on this controversial American imagery. Australian newspapers expressed awe at Steinbeck’s ability to portray the reality of hunger, migration, and unemployment. But portrayals of women as impoverished were not considered believable—one was described as “too savage to quote.” This may have been referencing one deeply moving scene portraying an exhausted young woman. She has suffered a stillbirth, is producing milk, and struggles with the decision to breast feed a starving man. But this was described as “one of the most horrible and unconvincing” scenes in the book.³ The *Australian Women’s Weekly* observed that Californian “Ladies’ clubs and uplift societies” offended, had damned Steinbeck’s book as “filth” while others had defended it “as a social document of first-rate importance.”⁴ But for the *Weekly*, the relationship between humans and “soil [that] is poor” and “silting back to the desert,” had exposed in Steinbeck’s story of “dust refugees” the “heroic figure” of Ma Joad. “She is the land and all it stands for.” She was “the land mother, a woman of the farm, plain, fat, the family drudge as well as its ruler...” She was “indomitable, courageous, valiant... brave against defeat, despair and famine.”⁵ Joan McLeod reviewed Zanuck’s film version of *The Grapes of Wrath*, for the *Women’s Weekly* in 1940 (Fig. 6.1). Writing from Hollywood, she described mother figure, Ma Joad as a “buffer” against which “waves of trouble” were broken. She



Fig. 6.1 “Women’s courage shines in stark film,” *Australian Women’s Weekly*, 1940. Ma Joad is seen in the foreground in a scene from Zanuck’s film version of *The Grapes of Wrath*

was a celebration of women’s “strength usually unsung” in the middle of the “sufferings of the American dust bowl.” For McLeod, it was “this aspect of the film that will stir the imagination of women” with “poignant meaning” because in this story, an entire family is “driven off the land by soil erosion.” Writing in the second year of World War Two, McLeod explained that “what Ma Joad does is what women the world over are doing for their families—taking the bumps and coming up smiling.”⁶

Like the narratives of Steinbeck, and Darryl F. Zanuck in his film version of *The Grapes of Wrath*, the work of influential Australian artist Russell Drysdale also questioned traditional interpretations of the relationship between women, their courage, and the land. In sketches made during his 1944 drought tour of western New South Wales with Keith Newman for the *Sydney Morning Herald*, Drysdale constructed gendered narratives of decline—they described the state of the soil and the state of humans and their civilization, together, locked into a process of decay. And they were often controversial, seen as sullyng familiar visual narratives of women that the Australian public felt comfortable with.

Some of Drysdale, Lange, and Steinbeck's women are gaunt and some of them are fat. Either way their imagery challenged, and was seen by many to corrupt the traditional and popular image of the housewife and mother. Their imagery conveyed the fact that women were *affected* by drought and erosion conditions and the pioneering conditions of life in the outback or on the Great Plains. Sketched at Deniliquin in western New South Wales, Drysdale's *Drover's Camp* is evidence of this break with convention. The drover's wife is portrayed surrounded by few possessions—in a later painting, only one bag. She has no “tidy doorstep” with which to demonstrate her domesticity, no broom in hand, no tidy figure, unlike Mrs Hofmaier, no rose garden. There are no four walls with which to protect civilization from “desert.” There is just a strong, big, body, grounded confidently in the land. But for their horses, nothing lives.⁷ Drysdale's reappraisal of the ideal image of the attractive, tidy wife in a trim frock, is seen clearly in a further development of the work, *The Drover's Wife*, 1945. Here her large body, feet, arms, and hands “untidily” fill the space—not with a sense of impoverishment or decay—but with calm. Geoffrey Serle has explained that Drysdale's outback women “stand calm and dignified, strong and patient, rebuffing loneliness.”⁸ One critic affirmed of the painting that Drysdale had “interpreted the eternal verity of the outback.” And while *The Drover's Wife* now hangs in the Australian National Gallery, in the 1940s, not all agreed that female dignity and strength should be portrayed this way.⁹ A contradiction which offended many commentators, she appears to be part of “the desert” (an uncivilized place) and yet at the same time, she remains civilized. Rather than controlling nature and holding the desert in check, this woman has been *changed* by “wild nature.” And yet she is not “gaunt.”¹⁰ She is not a “starving refugee.”¹¹ Critics offended by the work seemed to be asking “what would happen if Australian civilization gave up on the very idea of civilizing nature, only to be reshaped by those forces, into a nation of ‘hefty’ women in ugly dresses?”

Drysdale developed the image further in *Woman in a Landscape* (1948).¹² But the *Sunday Herald's* “Candid Comment” captioned the image as “‘Hideous’- or ‘Simple and Revealing?’” adding racial commentary to describe how Drysdale had:

Shocked the good people of Adelaide with his Melrose prize-winning painting... There is much more woman than landscape in the picture... One wonders what grazier Alexander Melrose, who made the bequest, would have thought of the hefty dame in the shapeless frock as an outback type.

A pastoralist's wife, from round about Alice Springs, vows that never in 17 years outback has she seen a white woman "with such hideous proportions and apparel." But another lady is enraptured with the "simple and revealing" fall of drapery; admires the stance; and thinks the hand is "firmly disposed." As for the feet: "Consider them so strong and patient." (And so flat.) A bushman's terse comment: "Strewth!"¹³

Keith Newman accompanied Drysdale on tour and provided the text for the *Sydney Morning Herald's* feature articles. Newman was just one who feared that too many negative stories would swamp the public with an exaggerated picture of erosion—and the links between soil and human impoverishment. Populations affected both by erosion and by these stories also yearned for an end to what they perceived as this kind of exaggeration. They wanted an end to portrayals of their region as an "uninhabitable dustbowl" and it was not only images of large, sturdy women in these "dust bowls" that offended. These communities had also called for an end to depictions of "sad, gaunt women" who "stood by clasping their starving babies to their withered breasts."¹⁴

At this time, there was a strong association between this kind of imagery, state programs, and popular fears. Joy McCann notes that by this period, rural communities had been "dissipated by two decades of economic depression, war and drought."¹⁵ The catchcry "populate or perish," corresponded to a fear of "the drift to the cities."¹⁶ This imagery also corresponded to programs designed to meet the population goals of the state and the needs of individual mothers—the lives of rural women, as much as those in the cities, were touched by modern ideas regarding "the scientific aspects of parenting." These ideas belonged to "broader international theories of human development" that acknowledged the impact of environmental factors upon the lives of ordinary mothers and children. For example, from the 1920s, public health programs taught about nutrition for pregnant women. They gave instruction in the fundamentals of hygiene to try and protect Australians from diaphorrea, infant blindness, diseases such as typhoid, diphtheria, and tuberculosis, from morbidity and mortality in birthrates, and to try and control syphilis, in epidemic proportions by 1935. New approaches to motherhood and family planning were becoming part of everyday life. Grounded in ideas from both the sciences and the social sciences, "mothercraft" offered instruction to women based on the fact that all knowledge necessary to mothering did not exist intuitively.¹⁷ By the 1930s, rural household science courses

were run by state government departments offering instruction to women in the “domestic arts,” including the nutritional aspects of cooking.¹⁸ A baby bonus payment was offered to mothers from 1912, but it “was exclusive reflecting the cultural aim of a general living standard, and the also the racial goals for a ‘white’ nation.”¹⁹ It was not offered to Asian or Aboriginal women.²⁰

These ideas affected women across the nation during the 1940s, including those living in the southeast. In 1940, birth control lectures were advertised as touring rural areas.²¹ But the aim was to “space” births not to discourage Australia from growing a healthy white population of large families—whether struggling under drought conditions or not. In the 1940s, as Hazel Hogan herself noted, a Country Women’s Association (CWA) Baby Health Centre Caravan and a dental van visited the Mallee region, while a CWA Home Science Van provided a “splendid service” to those learning the art of housekeeping.²² All this was at a time when Australians were worried about a “steadily declining birth-rate.”²³ The nation looked to the well-being of women for its future. Meanwhile, CWA members were among those expressing the fear that a “drift to the cities” would take not only women but morality, and rural social sustainability along with it.²⁴

WOMEN: DRIVING A WEDGE BETWEEN ERODING SOIL AND ERODING HUMANS

Those living in affected regions expressed a fear that the reputation of erosion-affected communities, particularly women, would suffer from negative press coverage, while along with them, journalists including Newman also expressed such sentiments. Many of the stories recounted here provide evidence of a conscious attempt by writers to create “balance” in the media coverage where they saw too many stories about “uninhabitable dustbowls” and “undeserving people.” When writers argued against these negative portrayals, they were trying to drive a wedge between the idea of eroding soil—and that of the civility and morality of the people. The way that writers did this was with gendered narratives focused on housewives coping—the aim was to defend regions against calls for resettlement and attacks on the character of the people that lived there. In their stories, the symbol of the housewife functioned to drive a narrative divide between soil erosion conditions—and the condition of humans. Her presence in these stories therefore tended to absorb any alarm over civilization’s downfall or “human erosion.”

However, it is important to note that this narrative distance was not always constructed consciously by writers. Reflecting deeply ingrained beliefs about women, implicit in these stories is the tradition of celebrating the nation-building role of pioneering women, in need of little more than "good humor" and the "feminine virtues of craft, care and efficiency" to tame a "savage" frontier.²⁵ Based on writers' observations of environmental conditions, in these stories however, this implied self-sufficiency was often coupled with the contradictory, conscious assertion that women needed help if the progress of the Australian nation was to endure. These stories provide evidence of a contradictory set of beliefs operating at the heart of the one idea of a "dust bowl." The accounts recorded here reiterate the contradictory symbolism so prominent in US narratives where the idea of unmanageable "desert-like" conditions that are worsening daily, and the idea of women and their homes managing and adapting to "return to normal" each day, exist side by side. And although writers constructed this contradiction, none commented on it, if they were aware of it.

In Australia, as we have seen in the US case, in these stories, the experience of housewives and mothers facing dust storms was portrayed in terms of heroic but feminine toughness, overcoming a series of "natural disasters." This experience was held up against the "easier lives of women in Australian cities."²⁶ These conceptualizations imposed meanings on the lives of women, because in this imagery our tidy housewives symbolize "civilization holding wild nature in check," while being only temporarily affected by the effort. As Tom Griffiths has recently written, in contemplating human conceptualizations of "unnatural disaster," it is today still "hard for humans to accept, and therefore to remember, that nature can overwhelm culture."²⁷ But in these narratives, "desert advance" does not overwhelm. It appears neutralized by "the care and graces of home life."²⁸

Hazel Hogan, a housewife herself in Victoria's northern Mallee, wrote gendered narratives which shifted between these two ideas—that of soil and human civilization as inseparable in the process of decline—and that of civilization standing apart from the process of soil erosion. Hogan was well known throughout her region and a widely published author of daily serials, articles for women's magazines, city, regional, and international newspapers including the Melbourne *Argus*. Her writings provide an expression of one woman's experience of living through erosion across the World War Two drought period. But penned for a variety of audiences, they do much more than that. Her various musings expose the desert/housewife contradiction at the heart of erosion narratives—her work is representative of the

wider body of work created by journalists of the period including Keith Newman, Bruce Miller, and Noel Adams discussed here.²⁹ Their work reveals a story of people who were processing these very contradictory possibilities in the 1940s.

Sometimes in blatant opposition, but often subconsciously, these journalists responded to narratives of decline, by constructing counter-narratives of housewives holding the desert in check with progressive domesticity. These narratives brought a measure of balance to media coverage—but they also had the effect of masking women’s real need for support. Often in the same stories, these writers also constructed contradictory coexisting narratives portraying women as tormented by “desert-like” conditions. These did raise public awareness of the fact that under such conditions, the temperament of the housewife and her broom were not enough to sustain civilization—she needed various kinds of support. Yet either way, although there is no escape from descriptions of “desert-like” conditions in these narratives, Australian civilization is not portrayed as being under any *permanent* environmental threat.³⁰ Rather, at the core of these housewife narratives is the idea of dust storms and sand drift as one aspect of a “natural disaster,” and a “temporary setback.”³¹

“NATURAL DISASTER”

There had been Australian dust storms, sand drift, and severe drought before, and similar descriptions of “dust to eat” in the news across previous drought decades.³² So what is different about the stories recounted here of Australians battling drought and erosion conditions? Severe erosion during drought periods had affected the same region during the 1890s, 1901–1903, 1920s, and the 1930s. But we know that during the 1940s, dust storm activity peaked.³³ A Labor push for extended Commonwealth powers and united conservation effort produced “dust bowl downfall” narratives and the defensive response. War-time restrictions and manpower shortages, coupled with an increased production demand, left people on the land, particularly women, laboring under extraordinary conditions, drought or not. Women and children struggled with labor that the strongest men, absent in the armed forces, would normally do. And all this was occurring during a period where a “moral and civilized” woman’s place was still considered by the Association of Australian Housewives to be in the home, and not, as they argued, “in gainful occupation.”³⁴ There were post-war population and employment debates enhanced by an enthusiasm

for modern services and technology. Modernity was bringing change, or at least dreams of change to the mother and housewife with American achievements inspiring visions of regional planning and hydroelectric-powered homes. All of this underscored the stories recounted here, where dust storms and sand drift were treated as extreme weather events and one unpredictable aspect of a broader "natural disaster"—that of drought.³⁵ This understanding was expressed at a Conference of Commonwealth and State Ministers in Canberra, in late 1944, where all states and the Commonwealth agreed to a drought relief program. Though Victorian Premier Albert Dunstan was famous for his inaction on soil erosion, on "drought" particularly on requesting Commonwealth action (money), he was not slow to come forward. He spoke at great length on the matter, describing desperately needed drought aid for Victorian farmers, though he had been criticized for seriously neglecting all of this himself. Dunstan defined drought as a national emergency, threatening harvests, human and animal life, and most seriously, a "drift from the land." Meanwhile, Prime Minister Curtin described drought as an "Act of God." It was a threat to the "efficiency of the war effort," to meeting United Nations food production quotas under their Relief and Rehabilitation Plan, and to the needs of a coming post-war world. Curtin agonized over drawing any measure of resources from those "immediately available for the war." He added, "I do not feel in a very generous mood."³⁶ However, based on this understanding of drought and erosion as extraordinary, Act of God, or "natural disaster," Curtin agreed to provide over two million pounds in drought aid to New South Wales and Victoria. It was this same idea of wind erosion, as natural disaster, which removed all sense of any human culpability from the war-time housewife narratives described here.³⁷ Meanwhile, stories stressing the morality and hard work of the "natural disaster victims" receiving these millions helped to reinforce the Australian public's acceptance of such war-time expenditure.

The meaning of drought to the human experience has been redefined since the 1940s. According to Tim Sherratt, drought is now defined as a "normal" or an "inevitable" reality and feature of the Australian climate (rather than extraordinary—an Act of God or disaster).³⁸ But Sherratt has pondered the meaning to humans of the idea of "inevitable" drought: "what does this mean" he asks "to those struggling with the immediate effects of drought?" Just because it is "inevitable" over the long term, "is it any less of a disaster" in terms of impacting on the individual's daily life experience?³⁹

The gendered narratives discussed here raised similar questions. They stressed that due to war-time drought coupled with manpower shortages, not only the soil, but also the domestic environment had changed—yet women and their families were adjusting and coping every day.

HOUSEWIVES AND MEANING: THE STATE OF THE ENVIRONMENT AND THE STATE OF CIVILIZATION

City audiences were able to draw two strands of information from housewife narratives. The first was environmental. They read of “unprecedented” and “fierce duststorms raging” across the landscape in the summer of 1944. But they *understood* the severity of those environmental conditions when they read about changes to ordinary domestic routines.

It was no doubt much easier for many city readers to develop a sense of concern over drought and erosion when the story was contained within the four walls of a house “just like theirs.” Readers understood the daily and weekly routines of women working in the home under ordinary environmental conditions. How much sweeping was considered to be normal for one day? People knew this. How often did women spring clean? How frequently did city housewives block the cracks in windows to keep out the dust, or use a shovel instead of a broom? Society knew the answers to these questions and could interpret changes to the daily working conditions of housewives in environmental terms. To further illustrate the severity of conditions to its city readers, the media compared the lot of city housewives under “dusty conditions” to that of country housewives under “desert-like conditions.”

Housewives often faced many dust storm events in succession over a short-term period of weeks, and many of these storms lasted for a period of hours. The day after each dust storm was experienced as a day of “recovery from disaster” or “readjustment.” This cycle of recovery and readjustment was rapid and often continued across a summer season. Its repetition meant that women in affected regions, tried to match their schedules to the “timetable of nature.” In doing this, their routine became an exaggerated version of a normal day or week. But it was the degree of good humor employed along with that effort which gave readers a way of measuring something else—the stability of their civilization.

The collection of stories presented in this chapter emphasizes the severity and the duration of drought (i.e. it is “*like* a desert”).⁴⁰ They emphasize that there is severe soil drift and there are severe dust storms—and yet,

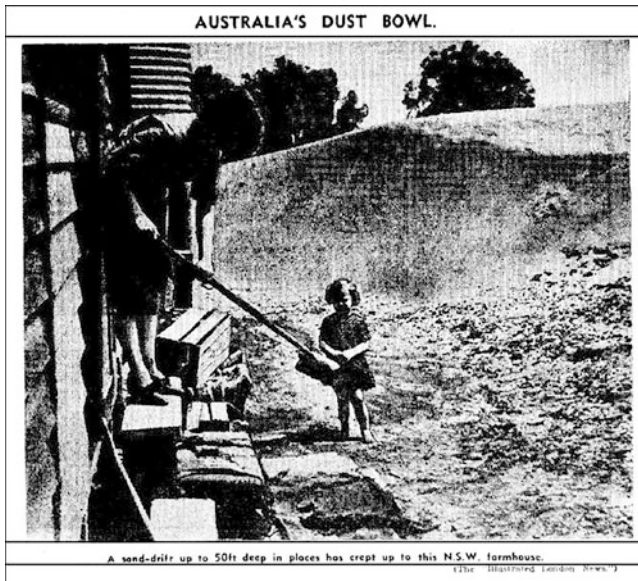


Fig. 6.2 The print in this 1945 newspaper story is very dark, but shows an Australian housewife in her “very best heels,” broom in hand, from “AUSTRALIA’S DUST BOWL,” Agricultural Section, *Western Mail* (Perth, WA), August 2, 1945. “A sand-drift up to 50ft deep in places has crept up to this N.S.W. farmhouse.” The image had appeared in *Illustrated London News* (January 1945)

“civilization” is staying on track and coping. Echoing US Dust Bowl narratives, our Australian housewife adjusts in good humor, through accelerating daily efforts. On the sandy doorstep of her domestic world, broom in hand, she appears poised on the precipice of civilization, an enduring force of resistance against daily waves of dust and encroaching “desert” (Fig. 6.2).⁴¹

These were stories about women who lived in homes located in places which, under the right conditions, had *always had the potential* to blow. In the 1940s, the right conditions were upon them, and the soil was certainly blowing—under conditions that did not conform to Jacks and Whyte’s “conception of an advancing civilization.”⁴² But gendered narratives reassured Australians that it was sand and dust that was “invading” the stable four walls of the human habitat—rather than humans that had unsettled the stability of the soil. Here, the “civilized women of the south-east”

would cope, holding the desert at bay, and returning the home and its surrounds to “normal” after each dust storm event. All that was needed was a bit of temporary support from the nation.⁴³

NEWS OF HOUSEWIVES WITH NEWS OF THE WEATHER

New South Wales/Victoria dust events as located by the Australian media across 1939–1947 are mapped in Fig. 6.4.⁴⁴ The areas marked with unbroken diagonal lines show dust events that were reportedly generated from onsite or from offsite and reached other locations. Broken lines show dust events reportedly generated offsite. These conditions peaked on key dates across spring and summer 1944. Drought conditions intensified across the state peaking between the 14th and 20th November 1944. Dust storms reached the coast and beyond, newspapers describing “a pall over the whole of the eastern half of Australia,” with southern New South Wales “enveloped in dust” (Figs. 6.3 and 6.4).⁴⁵

Across January 1944 until late as 1946, housewives shared news content with “black-outs” where visibility was described as nil, a “pall” over regions sometimes giving way “to deep red dust.”⁴⁶ News stories described



Fig. 6.3 George. D. Butterworth, President, Hay (NSW) Chamber of Commerce, A dust storm descends upon Hay, in the New South Wales Riverina. The roofs of homes can be seen as light patches in the foreground while “the upper edge of the dust is clearly defined.” In C.M. Blandford, “Some Further Remarks on Dust Storms,” *Journal of the New South Wales Soil Conservation Service* 4, no. 1 (January, 1948). State Library of New South Wales

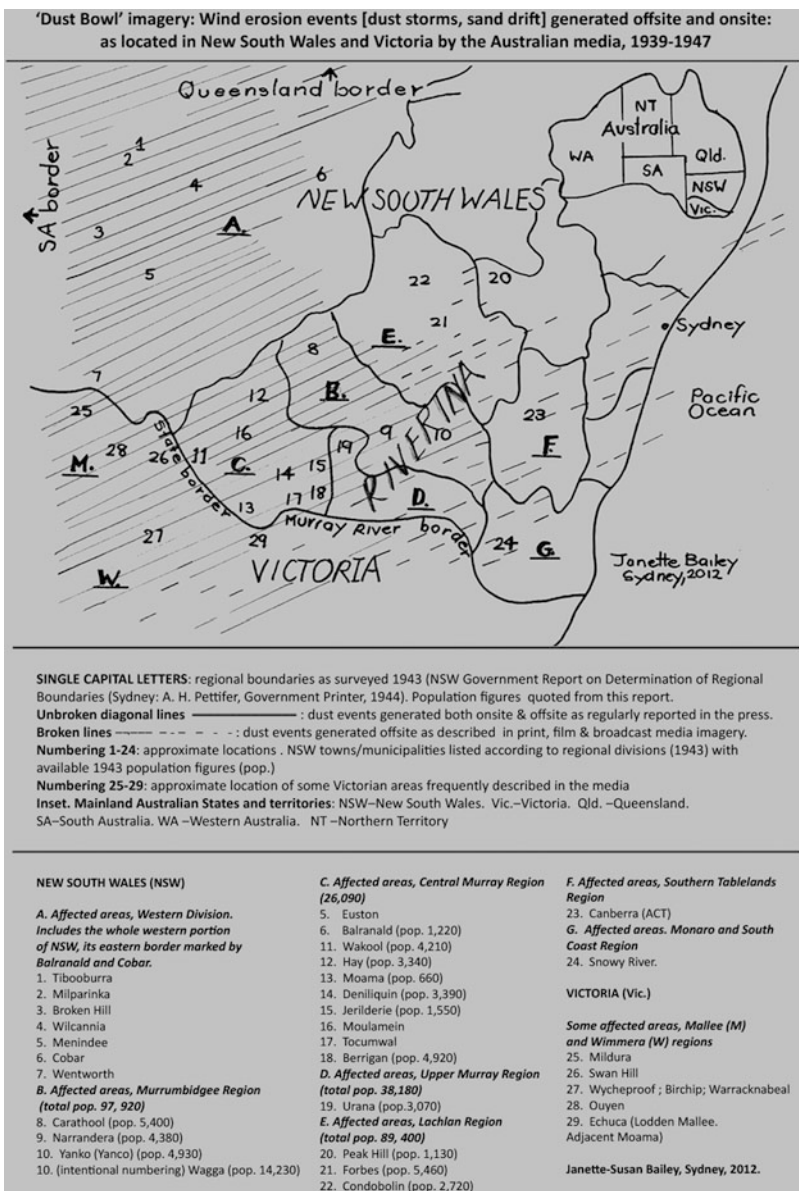


Fig. 6.4 Janette-Susan Bailey, “‘Dust Bowl’ imagery: wind erosion events [dust storms, sand drift] generated offsite and onsite: as located in New South Wales and Victoria by the Australian media, 1939–1947,” Sydney, 2012

conditions for housewives alongside record temperatures, bushfires, stifling heat, “anxiety about domestic supplies,” even “kangaroos moving in to Balranald in search of increasingly low supplies of water.”⁴⁷ At Menindee and Broken Hill in western New South Wales, severe red dust storms and a “total blackout” were described while “sunglasses and goggles were the order of the day.”⁴⁸ City visibility was described as restricted. Heavy dust had closed Broken Hill aerodrome and canceled Melbourne and Adelaide plane services. And housewives? They were “not attempting to clean up until the dust has passed, and when it has they will have an unenviable job ahead of them.”⁴⁹ But there was no doubt they could do it.

In October, the *Sydney Morning Herald* defined “2 Days of Howling Wind and Dust” as a “Clean-Up Headache for Housewives.” Descriptions of “the longest” or “worst” dust storms “ever known,” suggested the entire history of dust storms on the Australian continent since European settlement, even beyond, and came with news of how “masses” of women were coping.⁵⁰ The Weather Bureau was quoted: “most of the disturbance came from the desert country in the interior of South Australia, swung round in a great cyclonic circle and came into the Mallee from the south, picking up clouds of local dust as it advanced.”⁵¹ Domestic conditions made the severity of conditions even clearer to the reader: “After one of the worst duststorms the Mallee has ever had, thousands of housewives in the north-west worked hard to-day cleaning shovelfuls of dust from their homes.”⁵²

Along with the ABC war correspondent and journalist on the home front, Bruce Miller, Keith Newman, Howard S. Palmer, and Nancy Hall visited homes in the region and they described the wife and mother enduring “uncivilized” conditions surrounded by “fences sanded up” and “water courses brimming with sand.”⁵³ But the women themselves were not described as uncivilized.

In 1944, Miller took a 1500 mile tour of western New South Wales. He traveled through the Riverina and southwest areas of New South Wales, which he described as “still for the most part, without rain.” On this “Mobile Unit Trip” through New South Wales, Miller recorded a series of interviews broadcast to city audiences and internationally for the Office of War Information.⁵⁴ His aim was to “find out how the people were standing up to hardship and what measures were being taken to hold our soil.”⁵⁵ Maybe now Australia’s city populations Miller urged, might really understand “the advance of the desolation that a Dust Bowl brings” and they might influence parliaments to action.⁵⁶ With this in mind, Miller’s

field unit recorded interviews not only with wheat farmers, graziers, and shopkeepers, but also with wives and mothers.⁵⁷

Audiences knew the difference between a broom and a shovel. They understood the role of a mother in the home. They knew how to manage housekeeping and how to prepare a meal. Audiences understood normal visibility levels inside the home and they knew what changing bed sheets involved. So when they listened to Miller's radio programs, they could read the changes to these ordinary domestic tasks as a measure of how severe environmental conditions really were.

"What the drought means," Miller explained could be "measured by its effect on human lives: that is, by the amount of human suffering it causes." And it had caused a great deal, he explained, creating a gap between "prosperity and destitution, between ignorance and education for the children, drudgery and civilized living for the mother."⁵⁸ Audiences were also able to measure the effect of such drought conditions on the fortitude or "good humour" of women. Despite the suffering, "country people" Miller explained, "describe the effect of drought on their stock or their crops, but they won't talk much about their personal trials, especially the women."⁵⁹ Journalists knew that these women often masked the reality of their daily domestic hardship. When Miller asked Mr Houen how many stock he would lose to the drought, he answered "Oh I think I'll lose the lot."⁶⁰ But when Miller asked Mrs Houen to define "the country woman's attitude—feeling about the drought?" She answered: "Well, the people I've met and talked with lately just swapped yarns and everybody's really humorous about it ... nobody's grumbling. Everybody's laughing at their difficulties."⁶¹ Mrs Bray described laundering under dust storm conditions without complaint: "next day both these sheets wanted scraping before they were washed, I can assure you."⁶² In other words, it may not be possible to measure the severity of environmental conditions by what country women said. But, it was possible to measure that severity if journalists described those personal trials along with descriptions of drought, heat, dust storm, and sand-drift conditions.

A 1944 feature on "soil erosion in southern NSW" described encroaching desert and abandoned homes along with an account of "domestic trials" in the Mallee written by Nancy Hall.⁶³ The subheadings of her story provide a telling combination of society's priorities under drought and erosion conditions: "Tanks Dry," "Bakes Cake," and "Sheep Dying." By formulating a story around a child suffering pneumonia, Hall also revealed the impacts of dust levels on daily activity: "a car ran off the road five times while bringing a little girl to hospital" and:

it took half an hour to take her a few hundred yards. Storms like that happen almost daily here. The temperature today was 107. Visibility was not more than a few hundred yards. But to local people this was almost a pleasant day.

Hall described the home of Mrs Violet Jansson after a blackout, which she explained was a full-blown dust storm.⁶⁴ Its severity was clear when she described dust “inches deep against the inside walls of the house.” She added that dust was often ingested. Cups of tea filled with sand. When Jansson baked her husband a cake under these conditions, she said it would “have to be a chocolate cake, so he won’t know how much dust is in it.”⁶⁵

DRIVING A WEDGE BETWEEN SOIL AND HUMAN EROSION: CIVILIZED PEOPLE—UNCIVILIZED CONDITIONS

Portrayals of housewives in these stories produced less controversial interpretations of women’s courage and resilience than Drysdale or Steinbeck’s imagery had done. Although Newman accompanied Drysdale on tour, his imagery along with others’ presented here was not attacked for portraying women as uncivilized, “gaunt,” or unfashionably “hefty.”⁶⁶ The problem was though that in seeking to achieve narrative distance between the idea of “soil erosion” and the condition of civilization, writers constructed often ridiculous imagery of physically inexhaustible, emotionally unbreakable superwomen. While traveling “on the road to ‘The Great Wall of China’” an extensive formation of sand dunes at Gol Gol, Newman, and Drysdale visited Carawatha station. Though Newman found Mrs Watts tormented, he also insisted: ⁶⁷

On Carawatha’s pine ridges there are many dead trees among the living, and now the dust blows through the thinning screen with a density which plagues the life out of Mrs. Watts, although it has not yet eroded a particle of her house pride or good humour.⁶⁸

Newman recounted even sillier stories that sat very much at odds with the declensionist Drysdale images that his text accompanied:

The women joke of things which make housekeeping a heart-breaking job such as dust so deep on floors that a broom cannot tackle the job of removal. The dust is first scraped into heaps, carried out in buckets, and wheeled away in wheelbarrows. The broom is only a finishing instrument. Yet even on mornings after duststorms I never saw a dirty house.⁶⁹

So was civilization safe in the hands of the uncomplaining rural housewife? Certainly, Hall assured readers. After each dust storm, housewives had washed their homes "spotlessly clean." The next day "the dust was back again." But, Hall insisted, good humor remained intact. "Women like Mrs Jansson who can joke in these appalling conditions, shame city housewives who complain about war-time inconveniences."⁷⁰ Hogan agreed. Temperament was enough: "one has just got to grin and bear it and clean up."⁷¹

Writing of the "trials of women in drought areas" for the Melbourne *Argus*, Howard Palmer asked, what "in all this welter of heat and dust" had "made it possible for the northern women to carry on"? He described a modern Mallee in a story designed to defend the integrity of its people. The two modern "boons of water and refrigeration," Palmer claimed, proved that stories of starving Mallee families, carting water for miles with no modern conveniences were an exaggeration. Rather, water came from "domestic and stock water supply through the dams of the State Rivers and Water Supply Commission." The second "great boon," he described as the kerosene refrigerator, which even made "ice blocks to drop in the beer (if any)." What did all this indicate of the people of the region? Invited in "out of the dust and the wind," Palmer found women adapting famously.⁷² He "marvelled" at the "drought-year lunch menus" that "these women produced at five minutes' notice," There was cold roast lamb, mashed potatoes and salad, wine, coffee, rhubarb and ice cream, and stewed plums and junket with cream, all taken "straight from the refrigerator."⁷³

Writing of "housekeeping in the Mallee" for the Melbourne *Argus*, Hogan described the same conveniences, to defend her region against narratives of a civilization in decay—along with the soil. Hogan's stories did not acknowledge the human contribution to erosion and fiercely defended her region's reputation, while targeting prospective post-war settlers in Britain's *Farmer's Weekly*. They aimed, as Hogan put it to "dispel" that media myth. "Oh, you know what I mean" she argued, "you've seen pictures of them scores of times." She referred to media claims that Mallee people lived in a desert, merely clinging to civilization in "tumbledown shanties constructed of hessian and kerosene tins." However, she wrote firmly, "forget It. We don't."⁷⁴

Winter seasons, or the end of drought periods, brought respite from dust and the hardship it imposed. This was a paradise where "we live comparatively, like kings" while eating no rabbit and carting no water.

“A healthy crowd” Hogan argued, they lazed by roaring winter fires made from the roots of the local Mallee eucalypt, while dreaming up winter menus to suit “the men’s fancy.” These included “baked potatoes....lots of rich gravy” with “apple pies and cream and feathery dumplings.”⁷⁵ Meanwhile, modernity meant “quite a number of homesteads” possessed “water laid onto the house, sewerage, flower gardens, refrigerators or cool safes, motor cars, telephone and wireless.” In one, there was “a hot water service.” In another, there was even “a kerosene bath heater and a washing machine!” Hogan described neighbors enjoying green lawns, even cultivated roses.⁷⁶ And there was more. Women of this wholesome paradise produced beautiful crafts of the local Mallee tree roots, while utilizing (but certainly not wearing) sugar bags or hessian.

Hogan described the benefits of the tractor bringing “modern Mallee farming.”⁷⁷ She boasted too, of the local firewood industry. This was a last prospect for earning an income for many in the region. The irony of her pride in the wood industry is clear where Hogan described the imperishable and utilitarian nature of Mallee roots—apparently unaware that their removal was a contributor to wind erosion. “A stack of Mallee roots is an every day sight on a Mallee farm. Indeed, on our own farm we made fences of them (for shelter from biting winds).” In addition to this, she said:

Clever fingers can fashion quite a number of things from Mallee roots, rustic seats, chairs, ornaments being just a few named off hand. I, myself, have placed a few around the garden here and there. Time, wind or rain cannot hurt them...Travellers on the road at night...think nothing of curling alongside a warm, Mallee log fire...Aye, Mallee roots. The very thought of them warms one through and through.⁷⁸

There may be dust storms and sand drift, Hogan admitted, but they were natural events that could not be avoided by anyone and they could be something of which to be really proud. She described soil raised into blackout dust storms in the Mallee, even at her own “front door.” These would “travel far and wide” bringing “trouble for us all.” Hogan boasted that “Mildura, Swan Hill, the fruit-growing settlements of the Murray Valley, Sea Lake, and the Wheat Belt, the Wimmera, and even Bendigo... all get flogged with Mallee dust as summer marches on.” In her efforts to defend her region from media attacks, Hogan also later denied vehemently that storms originated near her own front door, arguing that they came from “Central Australia and NOT the Mallee.”⁷⁹ There was also

much to be thankful for. Some types of disasters might kill you, Hogan explained, but dust events would not lead to human fatality, at least in the immediate sense. For Hogan, this indicated that the relationship between the dust storm and the housewife was sustainable over the long term. She explained of dust storms:

It's clean dirt...Not like the filth and stench of flooded areas. If we wanted to, we could walk on floors an inch thick with dust but you couldn't do that in a flooded home. So, in spite of the labor dust storms cause us here in the Mallee, we have something to be thankful for. And, at its worst, sand won't kill us.⁸⁰

No matter how contradictory her claims, Hogan portrayed her region as a paradise in "normal times." In these narratives, a bit of summer hard work, toughness and good humor, modern services, and a change of seasons made it easy to adapt again and again to those extraordinary times producing relentless dust storms. Yet in attempting to do this, Hogan's contradictory writings revealed that there really was much more to adapting to erosion. Palmer agreed, warning city readers: "don't envy the Mallee housewife her pork and cream." She suffered from the dust and not only that but isolation from shops, from doctors, and company, he added. And as Hogan stated, "we have another tale to tell, entirely, during summer—and a drought. And, strange as it may seem, we here still live to tell that tale."⁸¹ So just what was that other tale Hogan lived to tell?

HOUSEWIVES' NEEDS: THE TORMENT OF WIND EROSION CONDITIONS

The problem was that women were not all adapting to erosion and drought conditions and many were leaving the land. Housewives confided in Howard Palmer their dreams of a better life. Many women "tell me they would far rather get out of the Mallee than stay. But they stay on."⁸² Some had left, Palmer revealed, "but many remain, and they merit our respect and our thanks."⁸³

Was Hogan to be one of those who stayed? And what would be needed to support her? In 1943, Samuel Wadham (University of Melbourne) and a member of the Rural Reconstruction Commission wrote of the sociological aspects of farming as a way of life. Wadham argued that women in rural areas including the Mallee, needed more than just "good humor"

if families were to remain. Rural living conditions, he explained, were particularly important to social sustainability. A modern domestic environment would keep women on the land, along with their contribution of child-bearing, home management, and child-rearing. However, standards of living for rural women, Wadham pointed out, were wanting, and this was a contributor to that “general drift of population towards the city in recent years.”⁸⁴ He described most districts as having some very comfortable homes but also “a regrettable number of houses which cannot be regarded as giving the women who run them a real chance of a reasonable life. We have to think not only of farm houses but of the houses of married farm workers.”⁸⁵

As Bruce Miller observed, poor living conditions coupled with dust storms and war-time labor shortages had left women in need of various kinds of support if they were to decide to stay on the land. When Miller interviewed Mrs Houen in the Riverina, she agreed that modern appliances and services were in urgent need. Launching an appeal to “city people” who “influence parliaments,” she described a lack of modern conveniences.⁸⁶ Country families were missing out on “modern developments in building.” Most homes were “built of galvanized iron,” while without a refrigerator women were “very badly off,” as were those without water supply. It was also “very difficult to get a telephone on to an out back place.”⁸⁷ The Houens could not meet the cost of a phone connection, which for Mrs Houen meant “a terrific strain if anybody’s away.”⁸⁸ Hogan described her own farmhouse as “sadly in need of repair,” and felt “not so fortunate, still clinging to kerosene lamps” and using “fire irons.”⁸⁹ As Wadham explained, “a contented country side” would never be achieved by imagining “tough he-men” and their wives happily living on farms with “no refrigerators, no electric lights, no equality of educational opportunity” and with no decent kitchen.⁹⁰ “The most important room on the farm is the kitchen, and you cannot keep a family on the farm unless the woman in charge has a reasonable life.”⁹¹

Unlike Mrs Houen in the Riverina, Hogan claimed that modern electricity, water supply, and up to the minute appliances characterized the lifestyle for housewives in her region as equally progressive as anywhere else. Mallee housewives “keep our homes tidy and clean” just “the same as housewives the world over,” she claimed. But it was hardly the same process. Housewives in erosion-affected areas experienced inadequate systems for coping with both the “average” dust storm and major “black-outs.” Hogan described her strategy for managing the days following

"the average dust storm." She protected her hair from sand with a towel. She employed mops, buckets, and brooms to clean every surface, beginning with the ceiling and walls—with the refrigerator the only "dust-proof blessing."⁹²

In her contradictory accounts, Hogan conceded that across the summer, women's tempers became "frayed." They felt trapped in "*a losing game*," and were "*almost beaten*." She said, "*we cannot cope*"; just do a "clean-up" after each onslaught, and save our energy between whiles."⁹³ Houen also described an unmanageable timetable after each storm. She described the state of her home: "Well it looked as if it had stood for two years uninhabited in a desert."⁹⁴ And she added that a three-fold effort was required to recover from a storm, only possible with additional help from her son and husband. Without them "it would have taken us fully three days—it has previously."⁹⁵

In January 1945, "The Week from the Woman's Angle" in the Melbourne *Argus* also addressed women's need for support from family in order to cope with wind erosion conditions. Topics of interest included ironing shirts to make them look brand new, fashion, knitting patterns, Tasmania as a "housewives' paradise," women university graduates, and concerts under London air-raid conditions. The pages following (full of advertisements for women's products) included a series of photographs of Australian naval and Air force personnel serving in the Pacific. Under the subtitle, "Australian Pilots Fly in Burma," were images of the war against Mallee erosion. The combination of meanings in this imagery suggests that although fathers and other able-bodied men are away serving, the soil, under stress from drought and erosion, has not been left fully "un-manned" as children assist on the family properties. Children, such as fifteen-year-old Ken Jilbert, worked heavy ploughs for "eight to ten hours a day" in an effort to "save fathers' property from Mallee drift." Others, like Phylis and Aylis O'Brien, labored to water the few animals for domestic use their family had remaining that had survived the drought.⁹⁶

On tour for the Adelaide *Advertiser*, Noel Adams contemplated "the disease of soil erosion" and as he did he wondered at the relentless physical stressors forced upon women. He was a highly regarded writer, well versed in the story of the US Dust Bowl, and adept at constructing transnational imagery. Yet despite the similarities between US and Australian narratives portraying women, like other storytellers described here, Adams drew no parallels to American women's experiences at all. Perhaps, it was a conscious attempt to avoid evoking the Lange kind of imagery that portrayed

women as beaten, thin, and homeless. Perhaps, he was simply not aware of it. But as the “worst storm in memory” “raged” on, in what Adams described as a “seeming desert,” he wrote: “what these storms mean to the women in the country may be left to the imagination. So frequent are the storms that many have but finished sweeping the house to clear the dust, when it comes swirling through them again.” He added, “the country is under a pall of sand. It seems strange that anything can live in it.”⁹⁷ And when women did, they were often afforded the respect of the press.

Journalists recognized that for women to cope, not only the help of family but also holiday respite, and volunteer domestic assistance or help from the Women’s Land Army were urgently needed.⁹⁸ The Broken Hill Press called on authorities to provide a train so that “dust bowl prisoners,” could escape and the “harassed housewife” could seek Christmas respite. They also recognized the importance of the support of children or husbands not serving in the armed forces. Along with the respect and support of the public, all these were treated as essential, if women really were to cope with the tormenting timetable of erosion.⁹⁹

In early 1945, in the Melbourne *Argus*’ “Week from the Woman’s Angle,” Palmer addressed the need for respite in an appeal to female city populations:

“Dust,” cries the city home manageress. “I don’t know where it comes from. There can’t be any left in the Mallee.” Well, ladies, there is, I assure you. Plenty. I have just completed a tour of the Mallee, my prime preoccupation being the effects of wind in erosion and sand drift. That is a national problem but there is a side to the story of the winds of the north that will appeal directly to you.¹⁰⁰

Palmer drew into his imagery a sense of the immediate effects of repeated events, the three-week time frame of the group of dust storms, and the history of such events over a human lifetime. He wrote, “Never, even in the memory of the oldest women of the north had so much dust covered the house.” As westerly winds persisted over three weeks, he added, “the Wimmera wife and the Mallee mistress of a normally shining home,” cleaned away the dust, but “like sweeping water. You wipe it away, and it is still there.” Erosion had forced housewives into an endless cycle of cleaning they couldn’t sustain. Many husbands were “really worried about the workload forced onto their wives.” Some were sending them with the children “away for some weeks to the seaside. The seaside where it is cool, and where the sand stays put.”¹⁰¹

In the same women's pages, in late 1944, the *Argus* columnist known as Vesta Junior reported on "help for women in drought areas," in the form of such holiday respite.¹⁰² This was a "very urgent service" needed for affected housewives, who she described as "struggling against" worsening drought "with truly heroic courage." Drought may have forced some to resettle, she stressed. But for those "independent, energetic people" who stayed in these areas, her interviewee, Mrs Norman Welsh, of the CWA suggested a "system of volunteer domestic help is sorely needed." Why? Vesta Junior explained: "this drought means as much as plague and pestilence, fire and flood." During the war, however, the CWA holiday home was "temporarily handed over to service women." So Welsh called for the CWA to "evolve a system" providing for needy women, in well-staffed "holiday camps." She insisted: "It must not be said of us that we hearkened to the call for help from China, Greece, India, and blitzed lands overseas, but were deaf to the suffering of our own people in our Own land."¹⁰³

How much of this respect, thanks, physical and emotional support from husband or family, holiday respite or electric-powered liberation did Hazel Hogan experience? When Hogan described her strategies for surviving not just an ordinary storm but a "black-out," her optimistic tone changed and her defenses fell. At home with only her trusted dog Michael for company, a blackout descended.

Her husband, "the Breadwinner" and "the men" were out. As usual, Hazel tied her hair up in a towel to prevent a head full of sand and covered her mouth with a wet handkerchief. The room darkened. She could not see "the clock...the mantelpiece nor the walls opposite." There was no air inside. "Half blinded" she felt her way to the stove, turned it off, made it outside to a shed, and chose "a pile of wheat bags" to shelter behind where "at least I found some air which is more than I could say of the farmhouse."¹⁰⁴ She longed for the men to return. Remaining alone for what appeared to be hours, "sleep was impossible...my nerves were a jangle. I was thoroughly sick and tired of my loneliness and the storm."¹⁰⁵

The "hungry men" who "don't like to return to deserted farmhouses even in a dust storm," returned. Even under such conditions, she said, "the Missus is supposed to dig up some sort of a meal." This meal of course could not be prepared due to the fact that there was no air in the house and Hogan "lay out there in the dirt and sand." She was angered when she realized that the men had taken shelter "in the pub" while around her, farmhouse "chimneys have caved in [and] rooves blown off." Her husband returned to find Hazel shaking, still hiding, in tears and covered

from head to toe in dirt mixed with sweat, her protective handkerchief a muddy rag. Hogan lamented that he expressed no concern for her health or safety. He simply demanded “TEA!”¹⁰⁶

How did Hogan respond and how did she cope? Hazel supposed that “anxiety, and crawling along the road for 15 miles in a blinding dust-storm, hadn’t improved his temper or appeased his hunger.”¹⁰⁷ She nonetheless threatened to leave for Melbourne on the next morning train. Many others had done so. The CWA worked to provide holiday accommodation in Melbourne so that women in Hazel’s predicament could have much needed break. So what was her strategy for coping? Did she leave? No. Hogan acknowledged the inevitability of facing more storms over the summer adding that it was “best to grin and bear it...And, oh well, no use making a fuss.”¹⁰⁸ She had one more important strategy for coping with this “inevitable reality.” Hogan centered her thoughts around the war effort:

I feel rather comforted at the thought that I, merely a clog—and a very small clog—in the wheel of industry necessary to feed and clothe and warm a war-torn hungry world, am doing my bit as a soldier settler’s wife here in the Australian wheat belt. This sorry world needs every Mallee farmer, every grain of wheat, and every farmer’s wife.¹⁰⁹

So Hazel Hogan remained.

Hogan’s defensive writing clearly aimed to disconnect a degraded environment and the human experience of it, from the character, morality, intelligence, and progressiveness of the women of the Mallee. But in a letter composed to “Uncle Bob,” she began to reveal that she did not after all feel “the same as housewives the world over.” The summers of dust storms, blackouts, and drought that Hazel Hogan had lived through, understandably rendered in her imagination dreams of a better life, and the comforts of civilization she did not truly believe existed for her in the Mallee: “I’m woman enough to realize that I’ve missed much of the good things of life coming here,” she said. Hogan exposed one last coping strategy, her dreams of “a prosperous, well populated” town near “Old Man Murray.”¹¹⁰

if possible in an all verandahed, fly wired bungalow home complete with modern car, orchard, a tidy lawn and flower garden, plenty of water, large mallee root fire, and with my books, wireless, and a comfortable bank account always at hand—plus a couple of dogs, of course—my boon companions. Telephone, sewerage, and good roads.¹¹¹

And there would be "masses and masses of tall-growing hollyhocks... growing against a high wall."¹¹² In the final section of her letter, Hogan returned to the daily reality of her domestic environment—and to optimism:

The men are almost on my doorstep, and there's cold roast leg of lamb, mint jellup (my own brew which the men say they prefer to beer)...lettuce and tomato salad...We still have a hot dinner mid-day here on the farm. At least the men do.... Until my next,

THE MISSUS.¹¹³

THE "CULTURAL" OR THE "NATURAL" DISASTER

During World War Two, the Australian media constructed gendered drought and erosion narratives which aroused considerable protest.¹¹⁴ Russell Drysdale's "desert" images offended popular perceptions of how a woman's strength ought to be portrayed. Similarly, gendered US Dust Bowl imagery strongly offended some, while the *Australian Women's Weekly* celebrated Steinbeck's non-traditional portrayals of women's strength. But when Australian newspapers more generally reported on conditions at home, they were able to construct less controversial imagery that the general public could accept.

What did these gendered narratives seek and what did they achieve? Many of these writers passionately believed that collectively, their stories, whether focused on downfall or on coping, would raise awareness of soil erosion as a national issue, achieve constitutional change, and lead to a national soil authority. This goal was never achieved. Through these gendered narratives specifically, they also sought to achieve a measure of balance in the media coverage. They strove to raise public awareness of the implications of wind erosion for ordinary people. Here, they succeeded. They gave the public a reason to support war-time drought-aid expenditure. For affected regions, they provided a "defense" against calls for reclamation of "marginal" land and against narratives potentially compromising to the reputation of women and their families and hence to the very idea of white Australian civilization. Above all, their stories showed people then, as they still do today, that soil erosion was a complex human experience. The struggle imposed on women and their everyday domestic routines, while living under such extreme environmental conditions, demonstrated that erosion could not simply be considered an issue about the

human neglect of the soil. They also highlight the problem of how deeply ingrained ideas about women can influence perceptions of disaster. They show us that when soil erosion is treated as a *natural* disaster—that of drought—women should not be portrayed as domestically invincible bastions of civilization in order to reassure populations. These stories serve as a warning that gender myths should not be used to explain away the possibility of human culpability, nor to protect the interests of regions or individuals. Perhaps, wind erosion must also be understood in the immediate, short- and long-term sense, as a *cultural* disaster.

NOTES

1. G.V. Jacks and R.O. Whyte, *The Rape of the Earth*, 182. Published by the Imperial Bureau of Soil Science. Robert Orr Whyte was a New Zealand trained agronomist and Honorary Secretary of the British Grasslands Society from 1945 to 1950, see *The New Scientist* (October, 29, 1959): 830. Reference to the importance of the US publication, *The Future of the Great Plains* is on 292–293. On Jacks and Whyte's vision for ecology, see Jeyamalar Kathirithamby-Wells, *Nature and Nation: Forests and Development in Peninsular Malaysia* (Honolulu: University of Hawaii Press, 2005), 175.
2. Jacks and Whyte, *The Rape of the Earth*, 37.
3. John Steinbeck, *The Grapes of Wrath* (New York: Penguin, 1976), 617. "The Grapes of Wrath," *Central Queensland Herald* (Rockhampton, QLD) March 7, 1940: 3.
4. "Grapes of Wrath Raises Big Storm," *Australian Women's Weekly*, January 20, 1940.
5. "Grapes of Wrath' raises big storm."
6. Joan McLeod, "Women's Courage Shines in Stark Film," *Australian Women's Weekly*, May 25, 1940. Supplement: The Movie World.
7. Newman, "Artist's Journey."
8. Serle, *From Deserts*, 167.
9. "Candid Comment," *Sunday Herald*, May 22, 1949; Russell Drysdale, *The Drover's Wife* (1945), National Gallery of Australia, <http://artsearch.nga.gov.au/Detail.cfm?IRN=76616>.
10. "Conservation of Soil: Grazier's Urged to Co-operate," *SMH*, March 15, 1945.
11. She is not gaunt, even if the bag she is holding indicates her intention to leave.
12. Russell Drysdale, *Woman in a Landscape* (1948), National Gallery of Victoria, 1999.

13. "Candid Comment."
14. "Conservation of Soil: Grazier's Urged."
15. Joy McCann, "History and Memory in Australia's Wheatlands," in *Struggle Country: The Rural Ideal in Twentieth Century Australia*, eds. Graeme Davison and Marc Brodie (Melbourne: Monash University Press, 2005), 3.3. On failed World War One soldier settlement leading to 1930s abandonment, and federal government resettlement programs for Victorian and Western Australian areas deemed "marginal," see Waterhouse, *Vision Splendid*, 201, 204. On World War Two birthrates, wartime relationships, and abortion, see Anne Summers, *Damned Whores and God's Police: Women's Lives in Australia*, 2nd rev. edition (Victoria: Penguin, 2002), 465.
16. Powell, "Mothering," 142.
17. Powell, "Mothering," 144.
18. "Woman's Realm," *West Australian* (Perth, WA), February 8, 1935.
19. Powell, "Mothering," 87.
20. Powell, "Mothering," on population objectives see 144, scientific parenting, 99, human development theories, 99 and 141–142, "human habitats," 103, illness and mortality, 91, infant blindness, 92, disease prevention and mortality, 94, nutrition, 138. On high maternal death and still births rates between 1931 and 1932, see Summers, *Damned Whores*, 454, the syphilis epidemic and efforts to eliminate it, 437. On nineteenth century ideas about the dangers of education for women, see Summers, *Damned Whores*, 363, 372–373, 381, motherhood as a "special vocation" in need of "scientific training" and on the influence of the first basic wage in Australia upon the division of labor, 383, 385, on child endowment payments of the 1920s, 438, on the Family Endowment Act (1927), 439. See also Kerreen M. Reiger, *The Disenchantment of the Home: Modernizing the Australian Family 1880–1940* (Melbourne: Oxford University Press, 1985), 84–103, on "scientific" housekeeping, 74–75, the role of women's popular literature, 76.
21. "Birth Control Lecture," *Barrier Miner*, March 21, 1940.
22. Hazel V. Porter, "The Breadwinner, Michael and Me" (Victoria, 1948), 152. NLA MS 1040. Foreword pages describe this as a "biography of my own pioneer life in the Mallee," and her married name as "Mrs. J. P. Hogan."
23. Powell, "Mothering," 162; Joy McCann, "History and Memory in Australia's Wheatlands," in *Struggle Country: The Rural Ideal in Twentieth Century Australia*, eds. Graeme Davison and Marc Brodie (Melbourne: Monash University Press, 2005), 3.3.
24. McCann, 3.4; Kate Murphy, "Rural Womanhood and the Embellishment of Rural Life," in *Struggle Country*, 2.10.

25. Brigid Hains, "Mawson of the Antarctic, Flynn of the Inland: Progressive Heroes on Australia's Ecological Frontiers," in Griffiths and Robin, *Ecology and Empire*, 154. On domesticity in the wilderness, see 163, 164.
26. On European women's preference for towns and cities over the frontier, and national myth celebrating the "masculinity" of bush life, see Grace Karskens, *The Colony: A History of Early Sydney* (Crows Nest, New South Wales: Allen and Unwin, 2009), 330–331.
27. Griffiths, "An Unnatural Disaster?," 35.1–35, 35.5. On the history of preceptions of catastrophes as "unlucky" natural events victimising humans, see Christof Mauch, introduction to *Natural Disasters*, 4; Christian Pfister, "Learning from Nature-induced Disasters: Theoretical Considerations and Case Studies from Western Europe," in *Natural Disasters and Cultural Responses*, eds. Christof Mauch and Christian Pfister, 18. For discussion of "natural disasters" more recently perceived as "both physical events and social or cultural occurrences," see Mauch, Introduction in *Natural Disasters*, 4.
28. "Pioneer Women," *Argus* (Melbourne, VIC) June 16, 1934 describes President Hoover unveiling "The Pioneer Woman," in Oklahoma and the debt owed to "the settler's wife" by settler societies for the strain they had endured.
29. This contradiction is described in earlier chapters focused on the US experience.
30. Neville Nicholls, "Climate and Cultural Connections in Australia," *Australian Meteorological Magazine* 54 (2005), 317.
31. Tim Sherratt, "Human Elements" in *A Change in the Weather: Climate and Culture in Australia*, eds. Tim Sherratt, Tom Griffiths and Libby Robin (Canberra: National Museum of Australia Press, 2005): 5.
32. For histories and personal accounts, see full references in the bibliography for: Tom Griffiths, "One Hundred Years of Environmental Crisis," 9–10; Don Garden, *Droughts, Floods and Cyclones*, 278; Geoffrey Blainey, *A History of Victoria*, 133; Myrtle White, *No Roads Go By*; Francis Ratcliffe, *Flying Fox and Drifting Sand*, 254, 279.
33. McTainsh et al., *Wind Erosion*, 32.
34. Powell, "Mothering," 161.
35. On cumulative effects of recurring disasters, see Pfister, "Learning," 19.
36. Among the resolutions were that "Tentative estimates of the requirements of each State discussed by the conference were: New South Wales, £1, 100,000; Victoria, £1,000,000; South Australia, £19,00,000, these amounts being subject to review." Attending were "Prime Minister and Minister for Defense, J. Curtin, J. M. Fraser, Minister for Health and Social Services, C. W. Frost, Minister for Repatriation and Minister in

- Charge of War Service Homes. Premiers W.J. McKell represented NSW and A.A. Dunstan Premier and Treasurer with A.E. Lind represented Victoria. Conference of Commonwealth and State Ministers held at Canberra, October 3–5, 1944. Proceedings of the Conference (Commonwealth Printer, 1944).
37. On perceptions of "natural disaster," see Mauch, Introduction in *Natural Disasters*, 4.
 38. Sherratt, "Human Elements," 5.
 39. Ibid.
 40. See Neville Nicholls for a discussion of cultural aspects in "Climate and Cultural Connections in Australia," 309–319.
 41. "AUSTRALIA'S DUST BOWL," Agricultural Section, *Western Mail* (Perth, WA), August 2, 1945.
 42. Jacks and Whyte, *The Rape of the Earth*, 37.
 43. Nicholls discusses the impacts of climate upon culture. "Climate and Cultural Connections," 317.
 44. Note that in media weather reports and stories of the 1940–1947 period, NSW areas popularly identified as a "dust bowl," even before and after the time period defined on this map (1939–1947), would have fallen primarily into the entire Western Division and the Central Murray region (Riverina irrigation districts and including the "dust bowl" centers of Balranald, and Jerilderie, Deniliquin, and Wakool). But they also fell into the Murrumbidgee and Upper Murray regions. Subdivision of the Western Division had not been recommended due to weak community interest, sparse population, limited industry potential, and the lack of major water conservation facilities. A "dust bowl" tended to describe the whole Division, including Broken Hill, Wentworth, and Wilcannia.
 45. "Heat and Dust in Sydney," *Argus* (Melbourne) November 14, 1944; "Hot Blast from the Inland," *SMH*, November 14, 1944: 1; "Worst November Day for Years," *SMH*, November 17, 1944: 3. "Stock Dying in Parched West of State," *SMH*, November 14, 1944; B. Blomfield, *The Rolling front of a Major Dust Storm* (Hay, New South Wales) in C.M. Blandford, "Some Further Remarks on Dust Storms," *Journal of the New South Wales Soil Conservation Service* 4, no. 1 (January, 1948), 37; CSIR, *A [New South Wales] South-western town being enveloped by the dust storm* in Blandford, "Some Further Remarks on Dust Storms," 39.
 46. "Black-Out in Broken Hill," *Argus*, January 31, 1945.
 47. "Duststorm Blasts Inland: Breeze Protects Sydney," Dewar Wilson Goode Collection, SLV.
 48. "Menindee Had Blackout Storm," *Barrier Miner*, February 1, 1945; "Dust-storms, High Winds, Fires, Heat: Weather Cycle on its Vicious

- Course Again," *Herald* (Melbourne), December 18, 1944; "Severe Duststorm at Barrier," *Recorder* (Port Pirie, SA), April 9, 1945.
49. "City Again Blacked Out By Dust Storm: All Planes Cancelled," *Barrier Miner*, March 16, 1946.
 50. "2 Days of Howling Wind and Dust," *SMH*, October 19, 1944.
 51. On Mallee soil types vulnerable to erosion, see M. Barson, "Wind erosion in Australia," Caring for our Country Sustainable Agriculture fact sheet. Department of Agriculture, Fisheries and Forestry, 2013, 1.
 52. "2 Days of Howling Wind and Dust."; "Towels on Cots to Beat Dust," *Sunday Mail* (Brisbane), December 17, 1944.
 53. Bruce Miller, "What the Drought Means," 2, *Australia's Dust Bowl*—series of broadcasts (Australian Broadcasting Commission, 1945), 1. "To be broadcast 2 FC 10.15 p.m. 15/1/45." National Archives of Australia, Series: SP300/3 Item: 750. Bruce Miller, "First Drought Broadcast," 1, *Australia's Dust Bowl*. Broadcast details: "7.50 p.m. 2FC 6.12.44."
 54. Miller, "What the Drought Means," 5.
 55. Ibid, 1. Broadcast details include "OWI broadcast to Europe and Asia."
 56. Ibid, 2.
 57. Ibid, 1.
 58. Miller, "First Drought Broadcast" 1, *Australia's Dust Bowl*.
 59. Miller, "Interview with Mr Houen by Bruce Miller on the Dust Storm," 2. *Australia's Dust Bowl*.
 60. Ibid, 2.
 61. Miller, "Interview with Mrs Houen," 1.
 62. Miller, "Talk by Ken Bray," 1. *Australia's Dust Bowl*. Broadcast details: "7.50 p.m. 2FC Friday, 8.12.44."
 63. Possibly a pseudonym.
 64. "Soil Erosion in Southern NSW"; Nancy Hall, "Sick Child Caught in Storm," *Daily Telegraph* (Sydney), November 17, 1944, Dewar Wilson Goode Collection, SLV.
 65. Hall, "Sick Child." Also see Glennis Irene Johnson, *Mallee Girl: A Memoir* (Heath Ridge, WA: Glennis Irene (Johnson) Dees, 1999), 119.
 66. "Conservation of Soil: Grazier's Urged." "Candid Comment."
 67. Wife of Aubrey Watts; Newman, "Riddle."
 68. Ibid.
 69. Newman, "Drought Lands'."
 70. Hall, "Sick Child."
 71. Porter, "Breadwinner," 205.
 72. On Palmer, see Melbourne Press Club History (Melbourne Press Club, 2014).
 73. Howard S. Palmer, "Trials of Women in Drought Areas," *Argus*, January 16, 1945. On modernity as both a time period and a concept, see

- Christof Mauch and Kiran Klaus Patel "Modernities: Competition versus Convergence," in *The United States and Germany during the Twentieth Century: Competition and Convergence*, eds. Christof Mauch and Kiran Klaus Patel (Washington, DC: German Historical Institute; New York: Cambridge University Press, 2010), 5–6. See Johnson, *Mallee Girl*, 119–120 on refrigerators, and crackling telephones during storm emergencies.
74. Porter, "Breadwinner," 73.
 75. Hazel V. Porter, "Housekeeping in the Mallee," *Argus*, November 20, 1945.
 76. On appliances, see Porter, "Breadwinner," 152, gardens, 73
 77. Porter, "Breadwinner," 152.
 78. Porter, "Breadwinner," 156.
 79. On "trouble," see *Ibid*, 206, her list of affected districts, 156, origins of dust storms, 206.
 80. *Ibid*, 207.
 81. Palmer, "Trials." Porter, "Housekeeping."
 82. Palmer, "Trials." On women's courage required to stay, see Johnson, 117–122; Conway, *The Road from Coorain*, 75–76.
 83. Palmer, "Trials."
 84. On "only 12,000 of 83,000 farms in New South Wales" electrified in 1947, see Richard Waterhouse "Rural Culture and Australian History: Myths and Realities." Inaugural lecture given to the Arts Association on September 19, 2002. *Arts* 24 (2002): 84–85.
 85. Wadham, *The Land and the Nation*, 98.
 86. Miller, What the Drought Means, 5.
 87. *Ibid*, 7.
 88. *Ibid*.
 89. Porter, "Breadwinner," 254.
 90. S.M. Wadham, "Reconstruction and the Primary Industries," (Series) Realities of Reconstruction 7, (Melbourne; London: Melbourne University Press and Oxford university Press, 1944), 12–13.
 91. Wadham, *The Land and the Nation*, 98; See McCann, (3.4) on rural "modernisation, decentralisation and civic progress."
 92. In "Breadwinner," Hogan describes "the average dust storm" in Porter, 203, the refrigerator, 205.
 93. *Ibid*, 205.
 94. Miller, What the Drought Means, 5. See discussion regarding "disaster" in Pfister, "Learning," 19.
 95. Miller, "Interview with Mrs Houen," 1.
 96. "Australian Pilots Fly in Burma," *Argus*, January 16, 1945: 11; On families coping with war-time manpower shortages, see Porter, "Breadwinner," 11.

97. Noel Adams, "The Disease of Soil Erosion," *Adelaide Chronicle*, December 21, 1944.
98. Vesta Junior, "The Week from the Womans Angle: Help Women in Drought Areas," *Argus*, September 26, 1944; Hogan complained in "The Breadwinner," that the Women's Land Army did not come out to the Mallee, working instead, in irrigation areas. On the Australian Women's Land Army (established 1942), see Summers, *Damned Whores*, 461.
99. "Dust Bowl Prisoners," *Barrier Daily Truth* (Broken Hill, NSW), October 17, 1944.
100. Palmer, "Trials."
101. Ibid.
102. Junior, "The Week."
103. Ibid.
104. Porter, "Breadwinner," 271.
105. Porter, "Breadwinner," 273; See Johnson's account of her mother's experience of a two day storm, in *Mallee Girl*, 119.
106. Porter, "Breadwinner," 273–274
107. Ibid, 277.
108. Ibid.
109. Hogan is referring to a "cog in the wheel," in Porter, "Breadwinner," 285. All underlining is Hogan's own emphasis.
110. "Old Man Murray" refers to the Murray River.
111. Porter, "Breadwinner," 285.
112. Ibid.
113. Porter, "Breadwinner," 286. The "men" she refers to are the farmworkers who work, and perhaps live, on the Hogan property.
114. On this theme, see Mauch, introduction to *Natural Disasters*.

PART 3

Water and “Dust Bowls”: American
Imagery Converges with the
Australian

“Battle of the Rivers,” Battle of the Stories: Dust Bowls, Dams, TVAs, and a Snowy Mountains Scheme

The preceding chapters have told the story of how one idea of a “dust bowl” evolved, accumulating new meanings as it wove its way through Australian narratives of the 1940s.¹ Often dramatic, often nationalistic, “dust bowl” narratives cultivated the idea of human erosion in expanding man-made deserts, to raise Australians’ awareness of serious wind erosion and to buoy various political, social, and conservation agendas. Writer Hazel Hogan, journalists Howard S. Palmer, Noel Adams, Bruce Miller, Bill Moore, Crayton Burns, popular magazine the *Australian Women’s Weekly*, each wrestled the idea of a “dust bowl,” and its complex and often contradictory narrative possibilities, into stories. And these were often aimed at achieving a national soil conservation service. Signifying the potential threat of a terrible future for a nation overcome by “desert,” “dust bowl” narratives attempted to connect to, and capitalize on, fears over climate fluctuation and related catastrophe, which Australians already held in their imaginations. Among them was Ken Hall who enters the story again here, while the work of Australian documentary film-maker John Heyer is introduced and Mervyn Weston and Keith Newman’s work again briefly features. Their storytelling reflects another set of ideas that emerged to co-exist with “dust bowls” in stories of the same period. This was a time when a sense of national identity was evolving in line with optimistic post-war dreams of river diversion, dam-building, irrigation, and hydro-electric schemes, all understood as “water conservation” at the time. Australians tried to motivate support

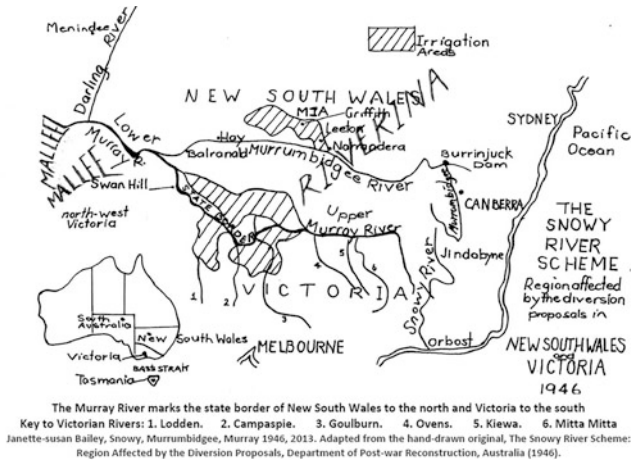


Fig. 7.1 Janette Susan Bailey, “Snowy, Murrumbidgee, Murray 1946. Adapted from the Department of Post-war Reconstruction’s 1946 hand-drawn original, *The Snowy River Scheme: Region Affected by the Diversion Proposals*,” Sydney, 2013. Irrigation areas are marked in diagonal stripes. In New South Wales, these areas include Narrandera, Leeton, and Griffith in the Murrumbidgee Irrigation Area to the north (Riverina region). The Murrumbidgee waters eventually meet the lower Murray River. The Murray marks the New South Wales/Victoria state border. In Victoria, the Loddon and other rivers are marked. The Murray flows for 2530 km rising in the Australian Alps, flowing through New South Wales and Victoria, then through South Australia to the Southern Ocean. The Snowy River can be seen rising in New South Wales in the Australian Alps. In the far lower right corner, the Snowy can be seen to drain through East Gippsland to Victoria’s south-east at Orbost, and into Bass Strait (then the Tasman Sea). Eventually, 99 % of Snowy River waters were diverted west.

for a post-war, nation-building scheme centered around diverting the waters of Australia’s Snowy River which flowed from the Australian Alps in New South Wales and south into the state of Victoria (Fig. 7.1). All of this occurred as the Commonwealth Government strenuously sought to extend its constitutional powers through national works projects.² They had not only soil but also water conservation in their vision while it was water agencies that dominated debate over soil conservation and regional planning developments.³

There has been debate over diversion of Snowy River waters before—as early as in 1884.⁴ But the story of the “dust bowl” idea, the Snowy, and a post-war plan for the nation began in 1941, with William McKell. As Premier during the 1940s, McKell became an influential character in the Snowy debate, urging for control of the river to remain in his state’s hands. While New South Wales Labor opposition leader, he made water conservation a key election priority at the state election of 1941. McKell campaigned for a “twenty-year program of construction to transfer westwards the water that flowed to the sea from the Great Dividing Range.”⁵ This included the waters of the Snowy River.⁶ That same year, John Curtin was sworn in as Australia’s 14th Prime Minister.⁷

After the fall of Singapore to the Japanese in 1942, Prime Minister Curtin declared the “battle for Australia.”⁸ Following his announcement, Japanese attacks on the Australian continent began at Darwin on February 19, 1942. The events of 1942 magnified Australia’s fear of “vast empty spaces” turning to desert, of existing desert going to waste, of their relative isolation, and of further foreign invasion. As Australians entered the drought period, these fears combined with perceptions of an “end” to the US Dust Bowl and dreams of watering and powering arid lands with US style, large-scale engineering schemes.⁹

In May 1943, the Commonwealth Minister for Post-war Reconstruction, J.B. Chifley, called for proposals from the states for a post-war national works program with the twin goals of “water conservation and the extension of electrical facilities,” while in August, the Curtin government was returned to office with a majority. In response to Chifley’s call, New South Wales was the only state government to submit a proposal to the National Works Council, and it was a plan created by their own Water and Soil Conservation Advisory Committee.¹⁰

In response, major campaign arguments erupted over the best way to utilize Australia’s water resources for national development. Among rival proposals was Victoria’s vision for the waters of the Snowy River, while a Queensland vision promoted by popular writer Ion L. Idriess and Fred Timbury (Mayor of Roma in south-western Queensland) involved watering a vast area of inland Australia through the Bradfield/Idriess Scheme to “kill the dust bowl of Australia.”¹¹ Their plan was based on Australian civil engineer J.J. Bradfield’s 1938 design, while their evocation of “dust bowls” to try and sell it bordered on the fanatical. However, the meteorological and soil science as well as the economics stood against their claims,

with renowned geologist Cecil T. Madigan warning as others would, that “Idriess is a journalist of whom no notice should be taken at all. He just takes other people’s ideas and writes them up.”¹² These and other schemes vied for Commonwealth funding and public support.¹³ Each campaign generated print, film, and broadcast media narratives and lobbied the Rural Reconstruction Commission to promote their cause. They each coupled “dust bowl” symbolism with that of enormous dams, in imagery that often romanticized the possibilities for engineered control over nature.¹⁴ But the Commission decided that a plan for the Snowy River would be the most worthwhile for national development.¹⁵ The New South Wales vision for Snowy River waters was to divert them west to alleviate drought impacts in the Murrumbidgee and expand its irrigation area (the MIA), established at Yanco in 1912. This was the proposal that began a “battle” over Snowy River waters between New South Wales, Victoria, Snowy shires, and the Commonwealth.¹⁶ The Murrumbidgee Valley Water Users’ Association (MVWUA, established 1939) supported the New South Wales plan.¹⁷ The Victorian Government opposed diversion of the Snowy into western New South Wales for irrigation purposes. They prioritized regional planning and hydro-power for Murray River Valley development. That campaign was supported by the Murray Valley Development League (MVDL, established 1944) and it aligned with the interests of Snowy River communities in both states, who were also strident opponents McKell’s Murrumbidgee vision (Fig. 7.1). As Premier of New South Wales, McKell established the Snowy River Investigation Committee, which in 1944 advised that the national priority should be just as he had envisioned it. They advised rural production and settlement achieved via irrigation and water supply by diverting the Snowy westward and not, as the state of Victoria would argue, to the Murray River to the benefit of both states.

Debate raged across the decade until 1949 as the Commonwealth tried to settle on the nature of a final Snowy Scheme.¹⁸ All sides drew on US national narratives to endow Australian myths and ideas with significance that would bolster their agendas and fortify their Australian nationalist credentials. This generated a set of transnational imagery that was set to a nationalistic purpose including that created by the MVWUA and MVDL. Highly influential, the campaigns of both of these organizations contributed to negotiation establishing the final Snowy Scheme, an agreement that challenged the constitution, and changed the course of a river and a nation.

IDEAS CONVERGE: DUST BOWLS, DAMS, TVA's, SNOWY MYTH, AND THE ANZAC LEGEND

Australians on all sides of the Snowy campaign drew into their imagery, references to the US Dust Bowl and Dust Bowl refugee—both of these, variations on the idea of American national exceptionalism and frontier myth. Australians drew in paradoxical inferences to their nation riding on the sheep's back (sheep were dying), the Australian constitution, federalism, and state and rural politics, as well as the idea of Australia's “vast empty spaces.”¹⁹ This myth treated the inland as a potentially fertile oasis waiting to be filled with people, industry—and plentiful water, by which the problem of a too sparse population could be overcome.²⁰ “Empty spaces” implied a deserted place, and the need to settle it with huge white populations as opposed to aboriginal people and other races, while during the war-time decade, British settlers particularly were desired.²¹ The irrigation dream had become manifest through the Victorian *Water Supply and Irrigation Bill of 1886* and, after record drought in New South Wales, particularly through the Victorian *Water and Drainage Act of 1902*.²² In the 1940s, this dream was revived at a time when “anxiety about water supplies had continued to mount, especially in N.S.W., as nation-wide drought tightened its grip.”²³ Just as Pick and McKell had done with soil conservation, water conservation stories also drew on the emotional power of the Anzac story, while echoes of bush and Snowy River legends can also be traced in them. Part of bush mythology, ballads such as A.B. Banjo Paterson's *The Man from Snowy River* (1895) have been celebrated as expressing the essence of Australian national identity—supposed to be the bush, the pioneer, the stockman, brumbies, the Anzacs—the Light Horse, the “mighty” Snowy River, the rugged Snowy Mountains, and again, masculinity and egalitarianism or “a fair go”—Paterson's scenes were set within the middle catchment described as “wild and rough and grand in the extreme.”²⁴ Its aboriginal groups have a long history and mythology, and while the region has produced aboriginal horsemen famous for their riding, their stories did not form part of the construction of this national mythology.²⁵

Snowy narratives also portrayed the idea of an organic machine-like nature, an idea connected closely to the irrigation dream and inspired by the dam-building achievements of the US Bureau of Reclamation in the American West and the TVA (established 1933).²⁶ In the USA,

debate over irrigating so-called desert wastes had taken form in the *US National Reclamation Act* (1902) which in turn brought the US Bureau of Reclamation into being. Three years later, in *The Conquest of Arid America*, William E. Smythe described irrigation as a “national movement” that would peacefully conquer the barren desert, turning it into a green garden.²⁷ But many lost their lives working on the “gigantic” dam-building projects that ensued in decades to come.²⁸ Encouraged, however, by Hollywood films of the 1930s such as Warner Bros’ *Boulder Dam*, seen in Australia, dam-building was promoted as a daring act of physical sacrifice for the nation, where heroic, fit, able-bodied men risked their lives for the sake of national progress.²⁹ Burrinjuck Dam on the Murrumbidgee, the fourth largest dam in the world when construction started in 1907, had already been completed in 1928.³⁰ And while New South Wales used Burrinjuck to promote the viability of their plan to further develop the MIA, on all sides of Snowy politics, campaigners told stories that celebrated the dam-building achievements of the US Bureau of Reclamation and the TVA. Across the 1930s and 1940s, both these US agencies utilized engineering and federal government regulated initiatives to meet the related challenges of flood, drought, erosion, and aridity. Like Burrinjuck Dam, these schemes were described as dual purpose when they provided for both water conservation and hydro-power development.

The TVA made an appearance in Australian narratives too. Initiated in 1935, the TVA was a New Deal planning model for multi-purpose resource use aimed at achieving a maximum sustained yield of the water resources in the Tennessee Valley. Its influences could be found not only in “other major valleys in the United States” but also in “proposals for ‘TVA’s’ on the Jordan, in India, China, South America, and Scotland,” on Russia’s Volga and Australia’s Snowy River.³¹ The TVA model signaled a shift in focus away from merely watering deserts, aiming to free the US economy from an over-reliance on erosion-prone farms.

The TVA idea was about the Tennessee Valley Authority, a New Deal planning model for maximum use, multi-purpose resource use across the entire Tennessee River basin. In *Rich Land, Poor Land*, Chase described the TVA’s functions as developing improved navigation, flood control, maximum generation of affordable hydro-electric power consistent with flood control, dealing with deforestation, investigation of the use of marginal lands, and studies on reforestation. By producing affordable hydro-electric power, TVA would improve rural living conditions and develop secondary industry across the entire Tennessee River watershed where water erosion was a major focus.³²

For many, however, the TVA idea was about more than the application of a planning model. It was a concept which has been described by Neil Maher as “total conservation,” while the TVA was described at the time as a testing ground for American democracy and its institutions.³³ The title of TVA Chairman David E. Lilienthal’s *TVA: Democracy on the March* made that clear.³⁴ As American economist Stuart Chase noted in *Rich Land Poor Land* (1936), cross-state river basin planning was a concept as yet unheard of and certainly not reflected in the nation’s constitution.³⁵ There was also a human aspect to the TVA idea. When President Roosevelt suggested “legislation to create a Tennessee Valley Authority” in a 1933 address to Congress, he stated that the TVA model would improve the “social and economic welfare of the Nation.”³⁶ Sarah Phillips has confirmed that the TVA became “the most potent symbol of the new rural conservation,” while Stuart Chase summed it up—“let the valley people stay in their homes and recondition the resource base. That is what makes it so important and so human.”³⁷ From a legal perspective, there were questions raised over the constitutional validity of a TVA-inspired scheme in Australia, and solutions were inspired by the American example, while most influential in the Australian case was the TVA idea as an expression of ideas about nature.³⁸ Not only Richard White and Neil Maher but also Paul Sutter has made clear that during this period, it was unusual for people to feel any sense of contradiction in supporting the idea of an organic yet machine-like nature where projects such as the TVA were simultaneously described as preserving nature, while also conserving it by developing its resources.³⁹ This understanding is clear in expressions of the TVA idea. Chase described it in 1936. With TVA’s multi-purpose dam-building projects planned across a watershed, America would see “a new kind of civilization,” operating “like one unified machine, one organic whole.”⁴⁰ He declared that TVA “intoxicates the imagination” and would refresh the continent.⁴¹ In unmistakable New Deal rhetoric, Lilienthal described “a seamless web: the unity of land and water and men,” and machines. Working “in harmony with the forces of nature,” TVA would neither “despoil” nor waste its resources.⁴² Lastly, the TVA idea and its proliferation through media imagery was a measure of American, and later, Australian hopes for a future, modern utopia.⁴³ For Chase, the TVA heralded the coming of a new world “replete with more freedom and happiness than mankind has ever known.”⁴⁴ However, in the USA, the issue of the government control of electricity was a political one. Opponents described it as a state socialist threat to American freedoms.⁴⁵

Australians embraced the TVA concept and connected it to “dust bowls,” proposing the former as a solution to the latter in a way greatly different from the American circumstances. This strengthened what Finis Dunaway has described as “the symbol of the dam” in narratives envisioning a nation-building project for a modern post-war Australia.⁴⁶ Technology, government regulation, and regional planning, all came together in this set of “dust bowl” imagery at a time when dams were being hailed by many as wonders of modern development.

Snowy imagery was full of contradictions. As the writing of Stuart Chase shows in the US case, humans and nature were portrayed as one machine working in harmony, while in reality, the construction of these projects actually meant human domination and control over the environment. Experts at the time warned that too much enthusiasm for constructing giant dams and hydro-schemes would bring major environmental problems of its own and the state of the Snowy River today shows that many of their fears were justified. To try to avoid damaging impacts, experts called for more attention to be paid to forestry, soil survey, and soil conservation rather than engineering dreams, but ironically, when they did, they often turned to “dust bowl” imagery to make an impact on their audience. This set of imagery simplified the reality of river ecology (water flowing to the sea was “wasted”), climate fluctuation (droughts would be “banished”), aridity, and soils (water alone would create fertile soils and a permanent green oasis). Despite this, its proliferation became a measure of the determination to “resolve” aridity and drought, seen as environmental “defects.” In turn, while this imagery played down the possibility of future environmental impacts, including upon the Snowy River itself, it portrayed the achievements of both US agencies as solutions to “dust bowls.”

However, neither US agency applied such projects as a remedy to the US Dust Bowl—the TVA is not even in the region, while Australian environmental conditions, such as rainfall, and political conditions differed to those in the east and west of the USA, where these American agencies established their projects.⁴⁷ Finally, this imagery generated by Snowy debate masked the political realities of establishing US-style river authorities, even while Australians were embroiled in a decade of heated political debate of their own. But this was at a time when Australian water agencies were dominating discussion over soil conservation and regional planning developments. And despite expert concerns, for many, the dam represented an alternative future-world, one that had already begun not only in Australia with Burrinjuck but also the building of enormous dams in the USA by the

Bureau and the TVA.⁴⁸ As Richard White has explained it in the US case, in Australia, it was also believed that large-scale dam-building projects were capable of "mimicking nature" on a grand scale, to make "dust bowls" and "wasted water" a thing of the past.⁴⁹ When storytellers drew on this group of ideas in Snowy River "dust bowl" narratives, they were giving Australians a simple choice, asking: what kind of future do you want? The suggestion was that technological salvation from a bleak future of US-style "dust bowls" was possible—all Australians had to do was uphold the technological ideal through the TVA model and the dam-building achievements of the US Bureau of Reclamation in the American West.⁵⁰ In 1946, newspapers reported on McKell's diversion plan and his continuing fear of a US-style tragedy at home. McKell stressed that if his plan "was not carried out soon, this land would become a new dust bowl."⁵¹

"THE MAGIC WAND OF WATER": THE NEW SOUTH WALES CAMPAIGN AND ONE IMAGE OF A DAM

Australia's national film-maker took up the narrative of irrigation salvation in New South Wales.⁵² Directed by Ken Hall for Cinesound, newsreel films such as *Australia is Developing a Dust Bowl* (1943) and *Conserve Water* supported the New South Wales campaign.⁵³ *Australia is Developing a Dust Bowl* reflected the mix of ideas which gave meaning to the image of the dam during this campaign.

Hall has been described by film experts as a "brilliant propagandist," his films strongly nationalistic and exhibiting "a palpable love of rural Australia and the environment."⁵⁴ Unlike films made by Movietone, Cinesound are said never to have used an imported story, while all their content was created by Australians.⁵⁵ However, Hall modeled the narrative structure of Cinesound films on the techniques of the Hollywood studio system. And although *Australia is Developing a Dust Bowl* is full of both textual and visual US references, Hall was expressing a nationalist *Australian* perspective. As Australian historian Frank Bongiorno has recently made clear in his discussion of 1940s politics, "there was more than one way of being nationalist."⁵⁶ Using transnationalism as a storytelling strategy, Hall loaded his films with American referents to help him to pose a question for his audience. With imagery contrasting dams against "dust bowls," he promoted the New South Wales scheme, strengthened a nationalistic message about the Australian environment, and tapped into the fears, hopes, and dreams of his war-time audience, asking what kind of post-war

future they really wanted. Did they want to live in a US-inspired modern utopia that the Riverina could readily provide by expanding on the existing achievement of Burrinjuck? Or would they prefer a bleak future of US-style “dust bowls” bringing drought and wind erosion that would eventually lead sheep and even humans becoming extinct? His message was emotive and one reiterated at a 1944 MVWUA meeting, where members argued that diverting Snowy waters “as far westward as is humanly possible” would save sheep from “extinction” and prevent soil erosion.⁵⁷ Contrasted against the dam, such a powerful symbol of modernity, Hall’s portrayal of “dust bowls” only accentuated the meaning of large-scale engineering projects and what, with “the magic wand of water,” one ambitious state could do for the nation.⁵⁸ But how was this contrasting imagery incorporated into Australian films, and what was the quality of that visual expression?

At a 1941 Conference between Commonwealth and State Governments on non-theatrical exhibition of films, attendees expressed concerns over the quality of Australian films. Viewers had complained there were “too many pictures” in the films (they felt the editor was cutting from one image to the next too often and possibly too suddenly, and without explanation).⁵⁹ Reflecting such concerns, the Cinesound films discussed here often jump suddenly to and from one image—that of a dam—without explanation. From a transnational research perspective, however, this technical awkwardness is illuminating. Rather than presenting a seamless integration of ideas, it highlights attempts to connect US-inspired ideas about dams to US-inspired ideas about “dust bowls”—and give that connection Australian meaning. Hall’s dam image appeared in a number of Cinesound newsreel films concerned with soil erosion. Symbolizing the progress of the nation, his dam was actually a “scale [scaled down] reproduction of the Woronora Dam”—originally created so that it could be blown up in the comedy, *Dad Rudd M.P.* (1940), the last film Cinesound were able to make before World War Two.⁶⁰ War, however, did not mean an end to all film-making. Rather, it facilitated the development of a documentary movement first established in the 1930s, and Australian Government film propaganda proliferated and developed.⁶¹ During the process, motion picture footage, such as Hall’s dam sequence, was often cut and pasted into Australian newsreels. This accounts for the rather out-of-place and often “sudden” appearance of Hall’s dam in various newsreels.⁶² It featured in *Conserve Water*, in *Australia is Developing a Dust Bowl* (1943), and earlier in *Soil Erosion: The Enemy Within* (1942), where the dam conveyed a simple message of salvation: “water brings life to the soil.”⁶³

In August 1944, the Commonwealth Government's agenda to achieve extended constitutional powers over water and soil conservation via a referendum had failed and in the same month, the MVDL had formed and were armed with a rival proposal for Snowy waters.⁶⁴ Dust storms continued. Newspapers reported that a blanket of dust sweeping across Canberra in November that year was giving Labour parliamentarians a “lesson” in the realities of wind erosion.⁶⁵ At the same time that this actual dust pall was impacting on the imaginations of parliamentarians and officials, they witnessed very similar imagery on film, at a private screening of Hall's *Drought Grips Riverina* and *Australia is Developing a Dust Bowl*. And when they witnessed it, they saw it contrasted against Hall's image of the dam. Crayton Burns reported for the *Argus* that urgent discussions followed the screening, and they reflected Hall's combination of imagery. While the emergency needs of graziers, provision of relief fodder, and the agistment of surviving stock were discussed, so was the New South Wales Snowy waters proposal.⁶⁶ Newspapers described the “erosion menace” quoting the Federal member for Darling, J.J. Clark, who stated “my electorate is being blown into sea.” Visiting Canadian High Commissioner Thomas C. Davis had just returned to Canberra from a visit to the Riverina. The press reported his “alarm and distress at signs he had seen of the dust bowl in Australia.” Davis encouraged the Murrumbidgee Irrigation plan. He stressed that with water, “many difficulties of drought and soil erosion by wind can be overcome,” particularly in Australia, where topographical conditions were “more friendly” to irrigation. Minister for Commerce and Agriculture William Scully argued that “£25 million would be needed for water conservation and irrigation schemes for the eastern areas of Australia.” Having made an appearance himself in *Drought Grips Riverina*, Scully now called on the government to support the “huge” post-war water conservation scheme being planned by New South Wales. He warned that “any form of post-war rural development was worthless” without this kind of “proper water conservation scheme for inland areas.”⁶⁷

As seen in preceding chapters, in the opening scenes of *Australia Is Developing a Dust Bowl* viewed by parliamentarians in 1944, we hear a warning, so often reiterated in New Deal narratives, that “the land of milk and honey can become a desert.”⁶⁸ We see the carcasses of dead animals, windswept deserted homesteads, and huge tree roots exposed by the wind. We hear the howling wind as it raises sand and dust into the air and omniscient narrator, Peter Bathurst, warns:

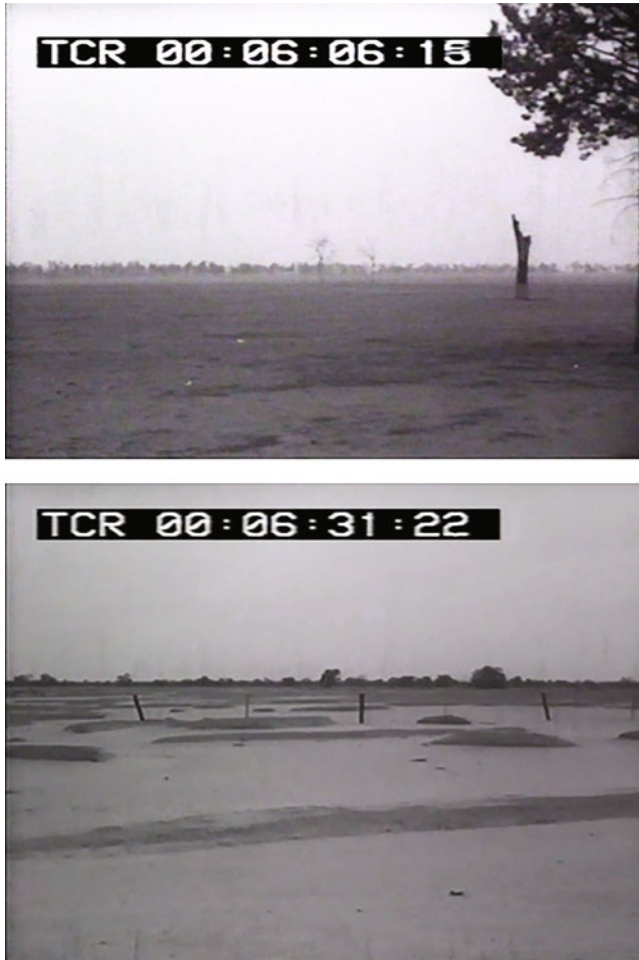


Fig. 7.2 “Now it is part of a potential dust bowl.” Airborne dust captured on film creates a bleak grey haze in imagery suggesting salvation urgently needed for the nation’s Riverina food-bowl. In the far background, trees bend and sway in the rising wind as a layer of sand sweeps across a desert-like landscape. Cinesound Productions, *Australia is Developing a Dust Bowl* (1943). National Film and Sound Archive, Australia

That was a crop in the drought area. But now it is part of a potential dust bowl. Wind whips the surface soil away from the roots of the stunted crop... Farmlands are literally blowing away. (Fig. 7.2)⁶⁹

The work of Noel Beadle in the battle against this “dust bowl” is shown. But how else, Cinesound asks, could this “potential dust bowl” be stopped? The “dust bowl” sequence unfolds with a series of images showing the decline of civilization. Huge sand dunes engulf homesteads. We see images still shocking today of a bullock, greatly valued for its contribution to rural life and significant physical strength. He lies dead, curled up as if asleep. Now fragile. Also valued sheep and horses and rabbits (a sign of European settlement, and often blamed for erosion), lay dead surrounded by scenes of desolation. Stock images repeated across Cinesound erosion films of the time are seen here of “crumbling ruins.” These ruins suggest that the process of the decline of Australian civilization to desert is underway. All of this is classic “dust bowl” imagery, sound, visuals, and text.

The next combination of images comes as a bit of a surprise to the viewer. This is not a story ending in decline. There is technological salvation. This terrible future can be avoided by “water conservation plus land conservation. Undeniably” we are told, “that is the major post-war job for Australians.” We see gallons of fresh water gushing over a dam spillway (Fig. 7.3).

In *Australia Is Developing a Dust Bowl*, along with this brief but dramatic dam scene, there is no text, no narration, no character that mentions methods of water conservation, federal planning authorities, engineering



Fig. 7.3 Ken Hall’s image of a scaled-down model of Woronora Dam as seen in Cinesound Productions, *Australia is Developing a Dust Bowl* (1943). National Film and Sound Archive, Australia

schemes, New South Wales plans for the Snowy, or political campaigns of any kind. The image of the dam is brief. Yet contrasted against “dust bowl” imagery, when screened to parliamentarians, it generated expressions of a real faith in engineering as the answer to erosion and drought. We see the dam (Fig. 7.3). Then, as quickly as it flicks across the screen, the film jumps back to images of “desert” and “ruined civilizations.”

What does this sudden switch from dam to “desert” mean? Was Cinesound predicting that without dam-building projects, the nation would see its food-bowl turn to desert? Yes, narrator Peter Bathurst warns: “in north-west New South Wales, the sands of the desert creep eastward, creep up to good properties, creep over them, forced inexorably on by the wind that comes from the west”(Figs. 6.4 and 7.1). If the New South Wales water conservation proposal does not go ahead, more of civilization will disappear just like this, he adds as we see crumbling ruins take the place of townships. Sand appears to bury homesteads where the fertile soil has “gone in a red pall blowing towards the sea and the men and women who had wrestled with this country have moved on.” This imagery is almost identical to that of Lorentz and Rothstein (Fig. 3.2). The message is that dust bowl migration has begun in the north of the state, and now this dust bowl is spreading into the food-bowl of the Riverina. Dust rises. Treetops bend and sway, as “back in the Riverina,” we are warned, “a dust storm is gathering” (Fig. 7.2). Here, the surface soil is “gone. Not temporarily, but for good.” The symbol of the dam is now pertinent to all that follows. The music whips into a frenzy as a storm sweeps away topsoil. An image of a little lamb replaces images of hundreds of sheep, dead, dying, or caught in the swirling dust as a storm stirs. The little lamb struggles to its feet. It symbolizes Australian prosperity but it also has a double meaning. The newborn lamb symbolizes “America’s effort,” which, if emulated by the Australian nation, would see Australia and its great symbol of economic progress—the sheep—again rise to its feet. Cinesound tells us that although the USA has “not yet conquered the evil,” they have made “great forward strides” in the battle against erosion. By “rising up unitedly,” Bathurst explains, “America” has “fought its Dust Bowl problem.”

Soil conservation is promoted in this film—the image of the dam, however, indicates that the American “great forward strides” against the Dust Bowl involved the building of enormous dams. The US Bureau of Reclamation did build dams in the arid west such as Boulder Dam and Friant Dam in San Joaquin Valley, California. But it was a distortion to suggest—as this and other circulating imagery did—that these dams “beat

America’s Dust Bowl problem” on the Southern Great Plains.⁷⁰ Hall’s film promotes New South Wales’ plans for the Snowy. It argues of the USA that “we Australians must do the same because we have exactly the same problem.” We see that “millions and millions of sheep on the move powder the dry soil into dust.”⁷¹ The rest, we are told, “is easy for a high wind.” The New South Wales problem of overstocking was not “exactly the same” as the primary issue of overploughing for wheat on the Southern Great Plains, and huge dams were unlikely to solve either problem—but the meaning to Australians and Americans of that much-feared concept of “desert” was very much “the same problem.” This is clear in Hall’s overarching message: permanent civilization is doomed to fail in Australia if the New South Wales plan to divert Snowy waters westward to the MIA for irrigation is not adopted. *Australia is Developing a Dust Bowl* closes with a warning:

We and our descendants want to live here permanently and found the good earth for permanence. For the earth in the long run supports our cities and our secondary industries too. It is not too much to say that if we do not face up to and meet this problem determinedly, then the future of our nation is at stake.⁷²

Conserve Water also reminded Australians that “dust bowls” needed to be killed off if the Australian Government was to attract thousands of migrants to the country and build a post-war population. The grand plan for the state was “still a long way from reality.” But the potential could be imagined, because the multi-purpose Burrinjuck Dam, a “remarkable investment,” already “gave life” to the MIA. We see the multi-purpose potential of this “life giving water.” It has even filled swimming pools that couple as reservoirs for farmers, where children play and returned soldiers are seen rehabilitating. An animated map sequence shows all current and planned irrigation areas for the state gradually extending across the entire south-west corner and into the north-west. “Parched” land is described as unproductive, simply for lack of water. Soil types or soil survey for irrigation suitability are not mentioned. We see a “dust bowl.” The camera pans across miles and miles of sand—a windswept, treeless, landscape scattered only with dead wood. However, the alternative future we see is one of a flourishing garden. A woman holds up a giant cabbage she has cultivated to demonstrate that “water is the key to Australia’s golden future.” The film cuts to Hall’s dam image to demonstrate that “water, adequately stored

and carefully distributed can and will make arid lands bloom” (Fig. 7.3). Water splashes over a spillway, a reminder to the nation: “when the war is over water conservation must play a vital part in post-war reconstruction.” This “great continent can support not just twenty but perhaps fifty million people,” most of them, apparently, in the Murrumbidgee Irrigation Area of New South Wales.⁷³ The film cuts back to Hall’s dam image again to affirm “then what a nation it will be” (Fig. 7.3).

Rival claims, however, soon challenged that New South Wales vision and they centered around not simply the symbolism of dams but also the concept of a TVA. The TVA brought political complexity to the debate over a nation-building scheme in Australia in the 1940s. Its influence both reflected and strengthened a shift in priorities away from simply watering deserts.

In New South Wales, politicians and the press took a keen interest in the TVA. Experts such as Dean of the Faculty of Veterinary Science at the University of Sydney, Ian Clunies-Ross, delivered papers such as “T. V. A. Yardstick of the Future.” At such gatherings, films were often screened—on this occasion, the US government’s *Valley of the Tennessee*. The state’s newspapers also reported on the TVA. The *Sydney Morning Herald* illustrated “the miracle of the Tennessee Valley” with images of Fontana Dam, Wheeler Dam, and a diagram of the TVA water control system—all described in detail by New York correspondent Alexander Rosovsky.⁷⁴ Premier McKell had read *Rich Land Poor Land* and toured and reported on the Tennessee Valley scheme.⁷⁵ Despite all of this interest though, aridity and irrigation remained the focus of the New South Wales campaign. In 1945, McKell clarified the TVA’s relevance to Australian conditions in *Tennessee Valley Authority*. Unlike the USA, the Australian states exercised control of navigation, electricity, and flood and “Federal Government assistance in these fields” he added “had been negligible.” The TVA philosophy was, however, transferable. Generous Congressional funding, improved living conditions, and industrial development could be interpreted into an Australian context surely—and perhaps benefit the MIA.

As newspapers reported in 1944, Burrinjuck Dam was already a “shining dual purpose example.” Surely “the great Boulder, Coulee and the two Tennessee Valley dams” would inspire support for a scheme that would further irrigate western New South Wales.⁷⁶ Two hundred delegates from the MVWUA traveled through the MIA before arriving at the “dry” area of Hay in December, 1944, for a “monster meeting.” The press announced: “Duststorm Victims Seek More Water: Snowy Diversion Urged.” Federal

parliamentary members and delegates from the wind erosion-affected Riverina attended.⁷⁷ Conference organizer and state parliamentary Member for Murrumbidgee George Enticknap argued that the New South Wales scheme “would help to save millions of sheep that otherwise die because of drought.”⁷⁸ Delegates from “Balranald, Moulamein, Urana, Leeton, Griffith, Goolgowi and Narrandera,” pledged support for the recommendations of the New South Wales Snowy River Investigation Committee advocating for westward diversion (Figs. 6.4 and 7.1).⁷⁹ Press coverage resounded with the delegates’ alarm that “the entire fruit crop of the Murrumbidgee irrigation area was now menaced by dust.”⁸⁰ It was across those same weeks that *Sydney Morning Herald* reporter Keith Newman had traveled with artist Russell Drysdale to report on drought and erosion conditions in Murrumbidgee areas. Newman’s text and Drysdale’s sketches had dramatically illustrated the severity of conditions. When Newman reported on the ongoing Snowy battle in 1945, he reflected back on that devastation in an effort to promote the New South Wales plan. An image of a “dead lake” at “drought-ridden” Balranald accompanied his story.⁸¹ Newman explained that this was an area of fertile soil simply in need of irrigation. He recalled:

Last year it was my distasteful experience to see the ravages of drought in the Murrumbidgee Valley, to which the waters of the Snowy could be bringing relief if attention had been paid to proposals advanced many years ago.⁸²

Newman constructed clear imagery describing the Snowy conflict. The Snowy River was:

the see-saw of politics with Victoria on one end New South Wales on the other and the Federal Government poised at the centre trying to decide on which side it should throw its weight.⁸³

He described the Victorian and New South Wales campaigns along with the prospects for irrigation and hydro-power generated by both. Both states would divert approximately the same amount of water. However, the “fall of the land” of 1800 ft near Jindabyne in the Snowy region would mean Victoria could generate twice the kilowatts of power that the New South Wales scheme proposed. Engineering costs for diversion to the Murray though would outweigh costs for diversion to the Murrumbidgee.⁸⁴

Newman simplified the issues of erosion and climate fluctuation by explaining things “from the irrigation angle.” He argued that:

In the Murrumbidgee Valley between Narrandera and Balranald, there are an estimated 5,000,000 acres of top-quality soil—drought-parched and unproductive these last few years—only awaiting the magic wand of water to come into rich production.

If only a scheme for diversion to the Murrumbidgee had commenced during the Depression, Newman lamented, “we could now be filling food ships for Britain without the slightest trouble.” This time, he urged, a plan needed to be “hammered out” and “not again relegated to a forgotten plaything of interstate rivalry.” Interstate rivalry however did not disappear in response to Newman’s appeal.⁸⁵ McKell’s vision for the regional planning of New South Wales stopped at the Murray River at the state border, effectively slicing the Murray Valley in half (Figs. 6.4 and 7.1).⁸⁶ The rivalry escalated as Victorians and Snowy River communities developed opposing claims for schemes that would take in the entire Murray Valley. And when they constructed narratives to support their cause, they built them around the idea of the TVA. It was this opposition to the New South Wales plan which really thrust the TVA idea into the Australian media spotlight, gave it greater currency in the Snowy debate, and encouraged Commonwealth Government interest.

A TVA FOR THE MURRAY VALLEY: “AMERICAN ACHIEVEMENT” IN VICTORIA’S RIVAL IMAGERY

The MVDL promoted a plan to rival that of New South Wales. Earlier in the decade, print and film imagery had focused on irrigation to water “dust bowls,” and promote western New South Wales development of the Riverina. But as the 1940s developed, and the nationalist Australian imagination became focused on a brighter post-war future driven by hydro-power, artistic expressions of the Snowy controversy also evolved into a combination of “dust bowl” and TVA ideas. With G. Vernon Lawrence at the helm, the MVDL were responsible for much of it. Lawrence, a soil conservation advocate and Melbourne University law graduate, had founded the Murray Valley Passenger Service before serving with the AIF in Borneo and the Middle East and becoming a major in 1943.⁸⁷ Under his leadership, the MVDL described the TVA as the inspiration for their

own “national idea” to develop “the whole resources of the Murray Valley, from Mount Kosciuszko to the sea.”⁸⁸ The MVDL’s membership included a strong contingent of municipalities and shires from the Murray Valley as well as Snowy River communities in New South Wales and Victoria, fearful of losing their supply of water. At the Snowy, lower reach communities warned that without a TVA-inspired plan, “Gippsland could become, with too much diversion, another dust-bowl as the Riverina” (Fig. 7.1)⁸⁹ But while the lower reaches and their “dust bowl” threats were largely overlooked by the central campaign, campaigners continued to conjure “dust bowls” to strengthen their TVA claims.⁹⁰ There was no point in watering western New South Wales with Snowy waters, MVDL supporters argued, because the Riverina was already a drought-stricken “dust bowl” anyway.⁹¹ Meanwhile, the Commonwealth Government took an interest, keen to secure water supply for the new federal capital of Canberra, part of the Murrumbidgee catchment. As MVDL Secretary, Lawrence co-organized documentary film lecture tours with the Ministry of Post-war Reconstruction, featuring US films such as *TVA*.⁹² Under Lawrence, the League called for Australian films to be made that would promote the Murray Valley to potential immigrants and build its population and industry—they hailed a “TVA for the Murray Valley” as a more democratic alternative to the New South Wales plan and attacked the opposition for creating “misleading” propaganda.⁹³ Their message was that without a Murray TVA, not only would there be more “dust bowls” but also Australia would lose its hydro-power potential, and be left behind in a rapidly modernizing post-war world.

Experts such as Chief of the conservation section of the Pan-American union, William Vogt, warned of the environmental dangers of dreaming up plans for too many TVAs without careful consideration given to environmental risks.⁹⁴ Despite expert fears, however, the Commonwealth Government promoted “some authority on the lines of the T.V.A for the Murray,” as one way of resolving conflict between the two states—and finally nationalizing all that Snowy water.⁹⁵ Murray TVA supporters continued to promote their cause on film, in the newspapers, and radio broadcasts, with G.V. Lawrence, a speaker on the ABC’s *Nation’s Forum of the Air* “The Best Use of the Snowy River,” along with MVWUA speakers. Attorney General Bert Evatt toured the TVA in the USA and attended MVDL conferences in Australia. And in 1945, the Melbourne *Argus* sent Mervyn Weston, previously a war correspondent based at General Douglas Macarthur’s Headquarters, to the USA. From there, he wrote back over fifteen “reports to Australia” on the TVA.⁹⁶

The first of Weston's reports from the USA included a description of conditions in northern Victoria as witnessed in 1944. He described dust storms, sand drift, and an atmosphere of "hopelessness."⁹⁷ But Weston asked, did this picture mean that Australia was "permanently condemned to the disastrous effects of periodic drought?"—or could drought effects be ameliorated? To answer, he turned to the words of Lilienthal and FDR to describe the "American philosophy" behind "integrated basin-wide development of river valleys."⁹⁸ He explained multi-purpose river management and the functions of the TVA including provision of low-cost hydro-power. But Weston agreed with McKell—it was "TVA philosophy" rather than the scheme's physical features and functions that could be absorbed into Australian environmental and political conditions. He covered the main aspects of the TVA idea—he described it as an expression of ideas about nature, democracy, human welfare, and hopes for a modern utopia. He quoted at length from Roosevelt's 1933 address to Congress, seeking TVA legislation for "a corporation clothed with the power of Government, but possessed of the flexibility and initiative of a private enterprise."⁹⁹ Drawing on the words of both Americans, he described TVA: It was a shining example of democracy achieved through wide consultation between the TVA, where control was centralized, the states, the people of the valley, and TVA workers. And Australians must hear of it.¹⁰⁰

The *Argus* illustrated Weston's stories with dramatic images taken from the US of giant dust storms, giant dams, and TVA images of men and giant machines such as "US Workmen Installing a Propeller-Type Turbine Runner." They showed "American Achievement" such as the TVA's Mile-long wheeler Dam" in northern Alabama and still images of "a TVA switchyard at Norris Dam, Tennessee," from the film *A National Program in the Tennessee Valley* (1936).¹⁰¹

In "Tennessee Valley—A Lesson for Australia," the *Argus* preceded Weston's story with a full-page color spread showing a detailed map of the TVA system with maps of both the Tennessee and the Murray Valleys (Fig. 7.5). An area of 40,600 mile² covering the Tennessee Valley was portrayed by the *Argus* as a similar sized area to the 136,000 mile² of the Murray Basin—which covers over three times the area. McKell and Weston had both pointed out that even though the US scheme included "portions of seven American states," the TVA was "only one eighth the size of New South Wales," and covered "less than half the area of Victoria."¹⁰² But the *Argus'* color layout suggested a simple application of the TVA idea to the Murray.¹⁰³ Weston did not omit the long controversy which accompanied



Fig. 7.4 Contrasting images in Mervyn Weston, “The ‘River Authorities’ Issue Comes to a Head in USA,” *Argus*, February 9, 1946.

the battle for the TVA and later proposals based on that model.¹⁰⁴ The process had been a long and painful one, he warned Australians, and could be seen in the current conflict over establishing a Missouri Valley Authority.¹⁰⁵ But when an image of a huge Colorado dust storm accompanied Weston’s report, the warning was clear: “dust bowls” were the tragic alternative to river authority planning (Fig. 7.4).¹⁰⁶

Newspapers noted a promise made by Evatt. The government, he said, would promote a Murray TVA as the basis of post-war reconstruction to fix Australia’s “weather vagaries” and unproductive soils.¹⁰⁷ At the same time, the MVDL pressured the Australian National Film Board (ANFB, 1945) to produce a film promoting regional development of the Murray Valley. The Film Board was established to produce national propaganda and educational films and Arthur Calwell was the Board’s Chairman. He was also the Minister for Information for the Department of Information, the producer of the film. The ANFB was answerable to his department, while Calwell belonged to a government keen on creating water supply for their new capital city, Canberra.

A film was made. It was created by Australian documentary film-maker John Heyer who expressed the idea of a Murray TVA in *The Valley is Ours* (1948) while *The Valley* was “chosen by the U.N.O [United Nations Organisation] as one of the most important films of 1948.”¹⁰⁸ Lawrence stressed that distribution of the film to Australian cities and beyond would promote the Murray Valley as crucial to the nation’s development while



Fig. 7.5 The Tennessee and the Murray Valleys in the Melbourne *Argus*, 1945. In his tenth report, Weston described the TVA as a “heroic” effort in soil conservation using methods such as contour-ploughing to fight water erosion, a lesson to Australian planners. Note that an area of 40,600 mile² covering the Tennessee Valley is portrayed by the *Argus* as a similar sized area to the 136,000 mile² of the Murray Basin—which covers over three times the area. This imagery suggested a simple application of the TVA idea to the Murray.

overall, he reviewed the film most favorably, announcing: “we asked them to make it, we almost despaired of seeing it—but now we acclaim ‘The Valley is Ours’ as a grand film,” which would “thrill those who believe in the Murray Valley.”¹⁰⁹

“DOWN THE MISSOURI”: JOHN HEYER’S IMAGE OF AUSTRALIA IN *THE VALLEY IS OURS*

In *The Valley is Ours*, Heyer captured the post-war mood of the nation along with the deeper cultural meanings associated with the Snowy River—but his aim for a documentary or authentic “image of Australia” was heavily weighted with *transnational* ideas, and this reflected the whole print, film, and broadcast media campaign covering the Snowy diversion debate.¹¹⁰ But as documentary film expert Deane Williams has noted, Heyer’s influences were broader than that. His influences included US films such as *The Valley of the Tennessee* and Robert Flaherty’s *The Land* as well as FSA photography by Walker Evans and Dorothea Lange.¹¹¹ In *The Valley*, Heyer’s imagery clearly brought together influences from two US Resettlement Administration films by Pare Lorentz. One was a TVA propaganda film centered on the Mississippi Flood disaster of 1927, *The River*, which portrayed the planning and dam-building achievements of the TVA as a technological and New Deal planning marvel and the promise of a utopian future for the America.¹¹² The other was *The Plow that Broke the Plains*.¹¹³ What this combination suggested was that the TVA idea and large-scale dam-building projects were a solution, indeed an alternative, to “dust bowls.” Heyer wanted to make clear that in choosing a post-war scheme for Snowy waters, the Australian nation must reject the New South Wales plan focused on irrigating the Murrumbidgee Irrigation Area, in favor of a TVA for the Murray Valley. He portrayed the productive working lives of people of the entire valley, and across state borders. He portrayed regional planning resolving issues such as bush-fires, overgrazing, and water erosion in the high country, then turned to wind erosion and images of sandy “wastes,” before final scenes of recently returned soldiers clearing land and settling in northern Victoria.¹¹⁴

Heyer’s aim in drawing the influence of Lorentz into *The Valley* was to construct the idea of a cross-border regional planning authority for the Snowy River as essential to the Murray Valley, and both as essential to national post-war reconstruction.¹¹⁵ Australian Prime Minister Chifley even appeared in a version of the screen-play to stress that “the Murray Valley is to Australia what the Mississippi is to America and Nile to Egypt,”

and he wanted an appropriate policy.¹¹⁶ But other than this, there are no literal references to the TVA or the US Dust Bowl in Heyer's film.

Rather, the transnational influences in Heyer's film are implicit. They are built both into the structure of Heyer's language and the visuals of every sequence. Heyer took inspiration from *The River* to juxtapose "dust bowl" imagery against a TVA-inspired future for Australia—one lived in regionally planned, industrially progressive, well-populated, and hydro-electric-powered river valleys. When MVDL Secretary G.V. Lawrence reviewed the film, he commented on this contrast between images of "sandy wastelands" in the northern Victorian wheatlands and those scenes the League preferred, portraying a well-watered green garden landscape in a profitable, industrious valley. But when contrasted against an optimistic ending, the MVDL found this kind of "dust bowl" imagery acceptable.¹¹⁷

The Valley is Ours takes its visual and textual rhythm from Lorentz' *The River*.¹¹⁸ Early in the film, just like *The River*, Heyer begins with one drop of water.¹¹⁹ The camera follows that drop of water through images of the Spring thaw, and on to water meandering through the Snowy Mountains and beyond. The composition of these opening sequences is almost identical to those of *The River*.

Lorentz created visual rhythms with cinematography and montage. Heyer mirrored those rhythms with his own cinematography and montage. Lorentz used the poetic repetition of words and phrases to create a rhythm suggesting the movement of the river. Heyer's text mirrored this use of poetic repetition while the lyrical voice of narrator, Nigel Lovell, and his easy Australian accent—not British, not neutral, not American, not regional—but omniscient, all-knowing, yet familiar—matched the mood of Heyer's text, the photography, and the musical score by John Kay—all of which echo the achievements of Lorentz.¹²⁰

As we follow the Murray River along its course, Lovell narrates a long list of towns, places, fruits produced in the Valley, and units of the Armed Forces returning home to soldier settlements. Heyer drew on the meaning of Anzac and the post-war mood for change when he featured images of Yarroweyah Soldier Settlement in north-western Victoria. We see homes being built, irrigation channels being cleared of sand drift, and new land being cleared to make way for farms for "the men of El Alamein, New Guinea, Greece, Borneo," and Heyer adds, "the Rats of Tobruk." The Rats of Tobruk were the 14,000 men of the Australian Divisions who served at the siege of Tobruk in defense of Egypt and the Suez Canal against General Erwin Rommel's army. They were bombarded almost constantly

by shelling, bombing, and ground assaults. The Nazi radio propagandist, nicknamed “Lord Haw Haw” (William Joyce), described these trench-dwelling defenders as caught like “rats in a trap.” The Anzacs embraced the irony and the challenge, named themselves the Rats of Tobruk and the men, their service, and their name, became legendary—part of the nation’s Anzac mythology today.¹²¹ Heyer portrayed these Anzacs as fit and able-bodied men of the Murray Valley, creating the future with shovels, with horses—and with machines.

Similar to *The River*, Lovell’s narration constructs a journey along the course of the river, from the Snowy Mountains to the sea. Unlike *The Valley*, *The River* is focused on water erosion and flood emergency created by American industry, such as cotton and lumber, or iron and coal being moved down the river system. But it is the language which is of interest here, where Lorentz uses poetic repetition to build a sense of the relentless momentum of nation-building and eroded soil together, moving¹²²:

Down the Missouri, three thousand miles from the Rockies. Down the Ohio, a thousand miles from the Alleghenie. Down the Arkansas, fifteen hundred miles from the Great Divide. Down the Red, a thousand miles from Texas. Down the Great Valley, twenty-five hundred miles from Minnesota.¹²³ Carrying every rivulet and brook, creek and rill. Carrying all the rivers that run down two thirds of the continent – the Mississippi runs to the Gulf. New Orleans to Baton Rouge...down the highway to the sea¹²⁴...Down from Pittsburg. Down from St Louis... Down the Ohio...we built a new continent.¹²⁵ We built a hundred cities and a thousand towns but at what cost...left the mountains and the hills slashed and burned and moved on.

The repetition continues as we see floods washing mud and soil “down” every river “down the Arkansas....down.”¹²⁶

In *The Valley*, John Heyer used the same rhythm of repetition—then breaks in that repetition in order to bring to life a sense of the Spring thaw sending melting snow from the peaks of the Snowy Mountains through its creeks and streams, snow and water racing into the mountain valleys:

They run down the Dargels, the Spur and the Razorback. They run down from Feathertop, Townsend and Bogong.¹²⁷ They run through the Ash and the Pine of Tumarumba [*long musical pause*]. Down from the mountains into the valley. Down the Indi. Down the Swampy. Down the slopes to Bringenbrong Bridge¹²⁸—to make a river. The Murray—that flows sixteen hundred miles to the sea... Down through the Murray River Valley it lumbers.

Down past Towong, Jingellic and Grenya. Gathering the waters of the Mitta and the Kiewa¹²⁹— swelling its streams. Then into the Hume Weir to spill over the paddocks of the storage—and flood back into the hills [*30 seconds huge sound effect of water rushing over a dam*]. Then to the lowlands, gathering the Ovens. On to lake Mulwala at Yarrawonga Weir. On to... Echuca. Gathering the Lodden, the Goulburne, Campaspie... Gathering the Lachlan from Condobolin at Booligal.¹³⁰ Gathering the Darling from Bourke and Menindee. Fed by the Warrego, Baroo and Castlereagh [*30 seconds of music*].¹³¹ Down from the midlands into the lowlands, dams, wiers, lochs—the Murray serves the people of the valley.¹³²

As Williams has shown, another element used by Heyer was the inner monologue Lorentz had employed for *The Plow*. Heyer adapted this to the Australian story of the Mallee wheatlands, where World War One soldier settlers had walked off the land and dust storms were raging as he conceived *The Valley*. In *The Valley*, one of Heyer's characters explains:

When I went into the Mallee twenty-five years ago, just after the First World War, it was healthy country. As far as you could see, nothing but tree-covered plains and rolling hills. All we had to do was clear a thousand acres and help ourselves to bumper wheat crops. Money from home! So we smashed up the scrub and rolled it over. Cleared it bare as the back of your hand. Ploughed up every square acre we could lay a hand on. Ploughed and sowed a thousand acres, then waited, watched. And sure enough, we got full, heavy crops, fifteen bags for the acre. We reckon we were made. So, rip it off and plough again...But we did it once too often. The heavy loam soil became fine, red dust. We didn't realise the scrub we cleared held it together. We soon found out.¹³³

Heyer later set this kind of “dust bowl” imagery against that portraying technological salvation. By setting such scenes against images of great dams, he was suggesting a TVA-inspired engineering project as the answer to Mallee “dust bowls.”

Kay's musical score mimics Virgil Thomson's for *The Plow*. Dark, discordant music accompanies Heyer's “army” of tractors “despoiling” the wheatlands—not on the Great Plains this time—but in the wheatlands of northern Victoria's Mallee (Fig. 3.1). Not only do we see and hear echoes of Lorentz' tractor armies. Heyer reiterates classic “dust bowl” images—echoes of Arthur Rothstein's *Steer Skull* and Lorentz' skull imagery are clear, while images of sand drift and blowing dust are all dramatized by the sound effect of howling winds (Figs. 7.6, 3.4, 3.1, and 3.2).



Fig. 7.6 “These are the problems of the Valley.” In John Heyer’s *The Valley is Ours*, long shadows and the skull of an Australian merino ram create a visual reference to Lorentz and to Arthur Rothstein’s *Steer Skull* (Fig. 3.4) and suggest *quite* a problem. National Film and Sound Archive, Australia

The Valley clearly borrowed visual and musical inspiration from both the Lorentz films. Heyer’s camera first takes us to a drover and his wife in western New South Wales. As in so much “dust bowl” imagery, she is the picture of the “attentive wife.” She makes a cup of tea for her husband by the wagon. Shoeless children and the family’s working-dog sit on the ground. They appear to live in poverty, surrounded by “desert,” sheep, and rusted, creaking windmills. Drovers are by the nature of their work, nomadic and isolated. But Heyer aimed to make a visual link for the viewer to the *idea* of a Dust Bowl refugee and western New South Wales, thus providing a “dust bowl” warning to Australians who chose to ignore the Victorian vision. That vision included linking Victoria’s existing Kiewa River hydro-electric scheme with the Commonwealth’s plan for developing the Snowy River (Fig. 7.1). This would increase Murray River flows and provide the hydro-electric power the MVDL and Victorian government wanted. In 1949, Victoria’s Minister for Electrical Undertakings, William Kent Hughes, lobbied the Commonwealth to have the completion of the Kiewa scheme included in Snowy plans.¹³⁴ Heyer conveyed all of this. He created a TVA-inspired visualization of what the Murray River could do for the nation. His film described the conservation values of the time that were

based on national economic development and industrial decentralization. For the soldier settlers and the British and European migrants who were to populate it, *The Valley* showed there would be factories and jobs in a modern, post-war regional Australia.

Heyer set “dust bowl” images against those of the Kiewa hydro-scheme, seen taking water underground through tunnels to a power station. The voices of working men call over the hissing, clanking, and clunking of metal on metal in imagery almost identical to *The River*’s. Industrial noise shows us the transformation that can occur through water conservation. Water comes “down the mountain dams and stations and becomes power for the valley and Australia beyond.”¹³⁵ Where Heyer portrays the role of forestry, contour-ploughing, and bush-fire control as equivalent to dam-building, again he echoes Lorentz’ portrayal of men and machines working as part of nature in *The River*. In *The Valley*, earth-moving equipments, explosives, heavy machinery, drills, and bores tunneling through the mountains are all portrayed as part of the nation’s conservation project as man and machine smash open the earth and bend and manipulate steel (Fig. 7.7).

The final sequences of *The Valley is Ours* cut between the silence of the Snowy Mountains, the origin of all this water, and the industrial sounds of factory machinery employing workers in a growing nation. The final message is that regionally planned conservation of nature focused on hydro-electric power can create industrial development and save the nation from a destiny of sand and dust. As in *The River*, we see images of electricity generation, wires crisscross the landscape to remind us that government-planned hydro-power, man-power, and industry are all part of that “one unified machine, one organic whole.”¹³⁶ Lovell explains in his mellow, soothing tone that “these are the problems of the Valley” and “of all great Valleys. The people of the Murray Valley together, supported by the Commonwealth and states are working them out.” You can tell they are working them out because across the valley echoes “the sound of men and machines.”¹³⁷

In the final sequence of *The Valley is Ours*, Heyer’s dam imagery is again almost identical to that of Lorentz’. The sound track becomes overwhelmed by the deafening sound of water rushing over a dam spillway. Heyer continues to capture the pace of the river, mapping its course across the region—“down from the midlands into the lowlands—dams, weirs, lochs.” All is as it should be in the Valley. Planning, technology, and man-power have drawn the maximum benefit to the nation from every drop of



Fig. 7.7 *Top*: Industrial sounds are part of this imagery suggesting an organic machine-like nature in Heyer’s *The Valley is Ours* 1948, National Film and Sound Archive, Australia. Echoes of Lorentz’ TVA imagery seen at *bottom* in *The River* (Farm Security Administration, 1937), NARA

Snowy water as it flows through the Murray system. Lovell’s voice meanders with the flow of the river to its very end where—“the Murray serves the people of the Valley and then rolls into the sea” (Fig. 7.8).¹³⁸



Fig. 7.8 Closing imagery from John Heyer's *The Valley is Ours*, 1948, National Film and Sound Archive, Australia (*top*) is almost identical to imagery to that seen at *bottom* in Lorentz' *The River*, Farm Security Administration, 1937 (NARA)

CONTRADICTIONS: “HENCE LET US BUILD DAMS TO CONSERVE WATER”

In both TVA and Snowy imagery, we see explosives and heavy earth-moving equipments employed to dam and divert river water.¹³⁹ The dam symbolized humans and technology operating in harmony with nature—and in Snowy imagery, it was coupled with dust and sand symbolizing nature “despoiled” by humans and technology, just waiting for that dammed water to arrive.¹⁴⁰ This contradictory picture simplified the realities of a relationship between soil erosion, climate fluctuation, and river ecology. At the same time, the political challenges associated with establishing US river authorities were often simplified in Snowy imagery—even while those generating it were engaged in this drawn-out political struggle themselves. This group of contradictions was not always acknowledged in popular media narratives, although reporters such as Mervyn Weston did address the political contradictions, while environmental issues were raised by a range of experts at the time. One of those was Chief of the conservation section of the Pan-American union, William Vogt.

Vogt commented on the Australian context in *Road to Survival* (1948), while he warned there was a danger of engineers being “turned loose” to create more “TVAs” before any assessment of environmental conditions was undertaken, he said that “mistakes made in the Tennessee Valley, such as flooding productive land and neglecting the watershed, might be graver elsewhere.” Australian newspapers reviewed this “current American best-seller.” While they reiterated Vogt’s message about resource “plundering” and population imbalance, reviewers also repeated his warning: Australians had outdone the “folly” of Californian water use. Now, Australia’s soil, he stressed, was blowing to the wind, with rabbits and overstocking exacerbating the dust problem. The reviewer noted that Vogt

has some harsh things to say of those enthusiasts who think that the construction of great dams and hydro electric plants are the solution of all problems. They have not been an unqualified success in the United States.¹⁴¹

When Luna B. Leopold reviewed *Road to Survival*, he joined the attack on Bureau of Reclamation policy, which critics described as concerned about nothing more than making money. Leopold was a civil engineer, meteorologist, geologist, a leading hydrologist, and the son of ecologist

Aldo Leopold.¹⁴² The Bureau's dam-building, he argued, aimed to increase production on marginal lands, while claiming false "benefits for wildlife," to justify those dams. In the process, future environmental impacts were being ignored. Leopold stressed that political roadblocks, not scientific ones, were the only thing preventing the Bureau from saying: "we will build a multiple purpose dam only if we are assured that soil conservation practices are adopted in the headwaters of the drainage basin."¹⁴³ New South Wales Commissioner for Forests, Edward H. F. Swain, also called for caution. At the Soil Erosion and Water Conservation Conference held in Sydney in 1945, he called for attention to forestry to save the soil. Swain attacked the influence of the dam in "the popular imagination" and used the idea of great "dust bowl" migrations to do so:

Canaan, once a land of milk and honey, is now a land of blowing sand and crumbling limestone...The mediterranean countries are in a bad way. Erosion by deforestation, in Italy, Italianised the U. S. A. by compelling migration therefrom, thereto. Hence, let us build dams to conserve water—and have them filled up eventually by siltation. The Boulder Dam and the Elephant Butte Dam—the two largest in the world—will be out of commission by siltation within eighty years.¹⁴⁴

DEBATE DRAGGED ON: THE FINAL SNOWY AGREEMENT

Throughout the 1940s, the Commonwealth continued to seek ways of settling the dispute over a Snowy plan for the nation. As echoed in *The Valley*, by late in the decade, hydro-power had become the primary focus of national interest in the Snowy debate, as opposed to the issue of drought and irrigation for the western lands of one state—but New South Wales stood firm on their argument until the final Snowy plans were agreed upon. Gippsland Shires raised the issue of their constitutional rights regarding the Snowy's lower reaches (largely ignored in the debate), while newspapers continued to cover the story as debate dragged on into 1949.¹⁴⁵ When members of the Commonwealth and States Snowy River Committee raised the issue of constitutional challenges posed by the scheme, the TVA had an influence. Snowy Committee Chairman, Louis Loder, had studied the act under which the TVA was established and each of the lawsuits that challenged it.¹⁴⁶ He found that one of the grounds upon which TVA was held to be constitutional was that it was vital to defense. Loder believed that, similarly, the only way to establish the Snowy Scheme was for the Commonwealth to draw on its constitutional defense powers. It did so.

Portraying it as vital to the nation's defense to secure power supply away from coastal areas considered vulnerable to attack, the Commonwealth took control of the Snowy project in 1949.¹⁴⁷ The Snowy Mountains Hydroelectric Authority was established by the Commonwealth as an independent authority with agreement from the states of Victoria and New South Wales.¹⁴⁸ The engineering aspects of the project were as well. J.M. Powell has described the influence of “America-watching” water conservationists upon the final Snowy Scheme. Tom Griffiths, Tim Sherratt, and Ian Tyrrell, equally have described the Snowy Scheme as “greatly influenced” by the idea of US technology transforming desert to oasis—with the final scheme also displaying the “unmistakable echoes” of the TVA.¹⁴⁹

Completed in 1974, the scheme provides for irrigation and hydro-power. It impounds “the south-flowing waters of the Snowy River at high elevations,” diverting them to both the Murray and Murrumbidgee Rivers, through tunnel systems carved through the Snowy Mountains. There are “sixteen large dams, 80 km of aqueducts, over 145 km of tunnels, a pumping station with five surface and two underground power stations.”¹⁵⁰ The Snowy Mountains Scheme was recently acknowledged by the American Society of Civil Engineers as “an international historical engineering landmark” and has become a part of national myth—just like the now-ailing Snowy River itself.¹⁵¹

Despite the considerable engineering achievements of the scheme, Swain's fears were well founded.¹⁵² Claire Miller has recently outlined the history of the Snowy Scheme in terms of its damaging impacts on the Snowy River. These have included “massive sediment” choking the river after 99 % of its headwaters were diverted into the Murray–Murrumbidgee system. In 1998, fifty years after the scheme began, an inquiry was commissioned. The commission led to an agreement for much needed water flows to be returned to the Snowy from the Murray and Murrumbidgee Irrigation systems. Commissioner Robert Webster described three national icons now pitted against each other—the Snowy Mountains Hydroelectric Scheme, the “food bowl” of the Murray and the Murrumbidgee, and the Snowy River itself.¹⁵³ The now-iconic Snowy Scheme is celebrated as an expression of the essential Australia—a great post-war chapter in the story of the nation. And it is.

This set of imagery provides a record of environmental ideas about dust bowls, and about “total conservation” or that “organic machine” achieved through “TVAs.”¹⁵⁴ Australians dramatized these ideas during the World War Two drought period and early post-war years of the Snowy campaign.

Ken Hall was one of those Australians and John Heyer was another and both have been described as nationalistic film-makers who captured the “essential Australia” on film and were recognized internationally for their efforts. At the same time, when they promoted rival visions for Snowy River waters, Hall and Heyer were strongly influenced by American ideas, both in terms of the documentary film movement and conservation. Earlier in the decade, the national imagination was focused on irrigation for watering “dust bowls.” To earn support for the New South Wales Snowy vision, Ken Hall constructed nationalist narratives blending in US ideas to strengthen his message in *Australia is Developing a Dust Bowl*, and the print, film, and broadcast media reflected his US warnings. But by the middle of the decade, the national mood and the Snowy vision had shifted in favor of multi-purpose, whole of watershed schemes, hydro-power, and the TVA idea. The stories of newspaper reporters such as Mervyn Weston reflected this, while the MVDL and their dedicated secretary, G.V. Lawrence, known as “that tall, towering heavy weight from Albury,” had a major influence over the promotion and establishment of the final Snowy Scheme. A part of that influence involved urging for the creation of *The Valley if Ours*.¹⁵⁵

In *The Valley if Ours*, John Heyer was able to give the Snowy River new national meanings. Through sound, text, performance, and all the elements of film-making, Heyer dramatized both the “dust bowl” and the TVA idea. He blended these with Australian scenes. He drew in references to Australian legends of the Snowy and the Anzacs. And like Hall, he did all of this to create contrast, and pose a question to Australians about the kind of future they really wanted.

Heyer inscribed a combination of the dust bowl idea and the TVA idea onto the landscape of the Murray Valley. But most importantly, *The Valley* describes a transnational landscape in the way that these Australians imagined it in the late 1940s. By drawing on TVA and Dust Bowl ideas, the broader MVDL campaign, and *The Valley* helped turn Australia’s Snowy River mythology into a story of nation-building and the regional planning of grand water conservation schemes. Snowy myth was transformed. *The Man from Snowy River* no longer rode a horse. He exploded, smashed, and tunneled his way through the Snowy Mountains to construct a gigantic organic machine.¹⁵⁶ After 1949, when Snowy Hydro Electric Scheme construction actually began, this group of ideas became inscribed onto the landscape itself forever by—as Heyer described it those “men and machines.”¹⁵⁷

NOTES

1. Keith Newman, “The Old ‘Battle of the Rivers’ is to Begin Again,” *SMH*, May 31, 1945.
2. This Snowy, TVA, dams, and “dust bowls” chapter was developed in papers by Janette-Susan Bailey for conferences with UNSW; ASEH; ANZASA; Broken Images, GCCR; and the USSC including, Bailey, “The Dust Bowl and Australia: a transnational study,” (2010), listed in bibliography.
3. J. M. Powell, “Water Management in Australia,” in *Ecology and Empire: Environmental History of Settler Societies*, eds. Tom Griffiths and Libby Robin (Carlton South, VIC: Melbourne University Press, 1997), 117.
4. B. R. Davidson, *Australia, Wet or Dry?: The Physical and Economic Limits to the Expansion of Irrigation* (Melbourne: Melbourne University Press, 1969), 162.
5. Department of Agriculture, Fisheries and Forestry, “Biography of Sir William McKell,” (Australian Government: November, 2008).
6. Claire Miller, *Snowy River Story: The Grassroots Campaign to Save a National Icon* (Sydney: ABC Books, 2005), 4–5; “Snowy Mountains Rivers” map, NSW Office of Water, February 2010. On The Great Dividing Range see Australian Government, “About Australia–Australian Stories: Australian Rocks and Mountains,” (June 2007); NSW Government Office of Water, “Returning Environmental Flows to the Snowy River: An Overview of Water Recovery, Management and Delivery of Increased Flows,” (Sydney: NSW Office of Water, 2010).
7. NAA, “Australia’s Prime Ministers,” 1.
8. Curran, *Curtin’s Empire*, 85.
9. The Bank of NSW, tried to expose this myth in “Australia’s Vast Empty Spaces,” *The Western Australian Bank and the Australian Bank of Commerce Limited Circular* VI, No. 5 (August 1936); See also Sydney Upton, “Dead Heart-Australia’s Empty Spaces,” *SMH*, June 11, 1938.
10. Wigmore, *Struggle for the Snowy: The Background of the Snowy Mountains Scheme* (Melbourne: Oxford University Press, 1968), 103, the Advisory Committee, 103–104.
11. Ion L. Idriess, “Ambitious Plan: Converting Desert into Garden-Irrigation Scheme for Central Australia,” *SMH*, November 21, 1944; F. R. V. Timbury, “Australia’s Future Depends on Battle for the Interior,” *Daily Mirror*, January 17, 1945; Timbury, *Battle for the Inland* (Sydney: Angus and Robertson, 1944); Idriess, *Onward Australia: Developing a Continent* (Sydney: Angus and Robertson, 1944); Idriess, *The Great Boomerang* (London: Angus and Robertson, 1941).
12. C. T. Madigan to Dewar Goode, March 20, 1944, Dewar Wilson Goode Collection, SLV; On the unreliability of Idriess’ accounts see also Bailey,

- "The History of Lasseter's Reef" in "Reminiscences of John (Jack) Bailey," 1, 8, 9 who states it as "regrettable" that Idriess had "misrepresented the facts in his book," "*Lasseter's Last Ride*" (1940) which was "not based on fact...It is regrettable that this man should deceive the public and posterity." Commonwealth Meteorological Bureau, *Bradfield Scheme for Watering the Inland: Meteorological Aspects*, Bulletin no. 34 (Melbourne: Government Printer, 1945; L. W. Parkin, "Madigan, Cecil Thomas (1889–1947)," *ADB*.
13. A plan for Western Australia's Ord River took shape in the 1950s commencing in 1961.
 14. On dam symbolism, see Dunaway, *Natural Visions*, 82.
 15. On the Commonwealth and rival proposals, see Davidson, *Australia, Wet or Dry?*, 162–165.
 16. Newman, "The Old 'Battle.'"
 17. Madeline Denholm and Nancy Blacklow, "The Murray Valley Development League: A Research Communication," *Rural Society Journal* 10, no. 2 (2000), 167.
 18. James McGirr became New South Wales Premier in February 1947.
 19. Bank of NSW, "Australia's Vast Empty Spaces."
 20. On these fears, see "Thousands of British Migrants," *Argus* (Melbourne), November 23, 1944. On Britishness and the evolving sense of Australian identity, see Curran, *Curtin's Empire*, 19, 24, 75–116; Richard White, *Inventing Australia*, 153–154.
 21. On irrigation, race and gender, see Tyrrell, *True Gardens*, 138–139.
 22. On events leading to the 1902 act, see Mohamed T. El-Ashry and Diana C. Gibbons, eds. *Water and Arid Lands of the Western United States* (Cambridge: Cambridge University Press, 1988), 37. On the irrigation dream see Tyrrell, *True Gardens*, 110, also 107–108, 111, 112, 113, 133, 140. John Wilkinson, "Water for Rural Production in NSW: Grand Designs and Changing Realities," Briefing Paper No. 26/97 (NSW: NSW Parliamentary Library). 8. On the Victorian acts see Tyrrell, 126–127. For early US influences upon Victorian Minister for Water Supply Alfred Deakin see 121–129; and Wilkinson, "Water for Rural Production."
 23. Wigmore, *Struggle*, 114.
 24. Miller, *Snowy*, 234. Andrew Barton Paterson, *The Man from Snowy River and other Verses* (Sydney: Sydney University Press, 2009). At 2228 m (7310 ft) Mount Kosciuszko is the highest mountain in Australia. The Snowy River receives a semi-permanent supply of snowdrift from the eastern side of Kosciuszko.
 25. Stockmen are the equivalent of cattlemen in the USA. Brumbies are wild horses. On bush mythology and Australian identity, see Richard

- Waterhouse, "The Vision Splendid: conceptualising the bush, 1813–1913," *The Journal of Popular Culture* 33: 1 (1999), 32. On the origins of bush mythology see Graeme Davison, "Rethinking the Australian Legend," 429–451; Bill Garner, "Bushmen of the Bulletin: Re-examining Lawson's 'Bush Credibility' in Graeme Davison's 'Sydney and the Bush'," 452–465; Graeme Davison "Just Camping Out? A Reply to Bill Garner," 466–471, all in *Australian Historical Studies* 43: 3 (2012). On contemporary interpretations, see Leanne White, "The Man from Snowy River: Australia's Bush Legend and Commercial Nationalism," *Tourism Review International* 13:2 (2009): 139, 146; On rivers and national character, see Christof Mauch and Thomas Zeller, "Rivers in History and Historiography," Introduction to *Rivers in History: perspectives on waterways in Europe and North America*, eds. Christof Mauch and Thomas Zeller (Pittsburgh, PA: University of Pittsburgh Press Digital Editions, 2008), 3–5. On Snowy River aboriginal groups see Miller, *Snowy*, 219–236.
26. On the concept of a machine-like nature, see White, *Organic Machine*, for example, 108; Sutter, "New Deal Conservation," for example, 95; Limerick, *Desert Passages*, 169.
 27. Smythe, *The Conquest of Arid America*, 3; Tyrrell, *True Gardens*, 104; See also White, *Organic Machine*, 57.
 28. For the Snowy Scheme death toll of over 120 workers, see Brad Collis, *Snowy: The Making of Modern Australia* (Canberra: Tabletop Press, 1990), 40–41 and 77 workers on Grand Coulee, White, *Organic Machine*, 63. On the Bureau, "gigantic" dams and "multi-use water development" see William D. Rowley, *Reclamation Managing Water in the West: The Bureau of Reclamation-Origins and Growth to 1945*, Volume 1 (Denver, CO: US Department of Interior, Bureau of Reclamation, 2006), 370 for a list of 1930s Bureau projects, 360.
 29. "Special Bill for Ozone Theatre," *Barrier Miner* (Broken Hill, NSW) September 19, 1936; "Physical Culture," *Examiner* (Launceston, TAS.) September 4, 1936. Boulder Dam was constructed on the Colorado River in the West. On dam symbolism, see Mauch and Zeller, Introduction to *Rivers in History*, 3–5. White describes photographic representation of "men and machines" working on Bureau of Reclamation dams in *Organic Machine*, 60.
 30. With early guidance from Elwood Mead. Tyrrell, *True Gardens*, 159; On establishment of the MIA, see Davidson, *Australia, Wet or Dry*, 68–69, Burrinjuck Dam (1906), 68–69.
 31. Norman Wengert, "TVA — Symbol and Reality," *The Journal of Politics* 13 (August 1951), 370; On Russia, TVA and "high modernism," see Dorothy Zeisler-Vralsted, "The Cultural and Hydrological Development of the Mississippi and Volga Rivers," 73.

32. On New Deal era water erosion imagery in the works of Chase and FSA photographers, see Sutter, "What Gullies Mean," 598, 590–591; Sutter, "On 'Georgia's Little Grand Canyon,'" 831.
33. Maher, *Nature's New Deal*, 209. On democracy see Wengert, "TVA," 370.
34. David E. Lilienthal, *The TVA: An Experiment in the 'grass roots' Administration of Federal Functions*, Address before the Southern Political Science Association, Knoxville TN: November 10, 1939, 1. On TVA's democratic spirit, see 14, technology and science enhancing democracy, xxii.
35. On watershed planning and the US Constitution, see Chase, *Rich Land*, 268, on individualism and private property, 231.
36. A Congressional Act (May 18, 1933) created the TVA. Franklin D. Roosevelt, Message to Congress Suggesting the Tennessee Valley Authority, April 10, 1933, *The American Presidency Project*, eds. John Woolley and Gerhard Peters (University of California, Santa Barbara 1999–2013).
37. Chase, *Rich Land*, 242, also 270; Phillips, *This Land*, 80–81, on human values see 30–31, 80–81, raising rural welfare standards nationally, 82. Phillips discusses Gifford Pinchot's "Giant Power" model for affordable electric power in "FDR, Hoover, and the New Rural Conservation 1920–1932," in *FDR and the Environment*, eds. Henry L. Henderson and David B. Woolner (Basingstoke, England: Palgrave Macmillan 2005), 113. White, *Organic Machine*, 51–56.
38. For extended discussion of the TVA idea and Australia, see Bailey, "'Dust bowls,' TVAs."
39. Sutter, "New Deal Conservation," 95.
40. On watershed planning, see Stuart Chase, "Behind the Drought," *Harper's Monthly Magazine* 173 (September 1936), 377. On new civilization, see 35, unified whole, 110, in Stuart Chase, "A Vision in Kilowatts," *Fortune* 8:5 (April 1933); also White, *Organic Machine*, 58; Sears in *Deserts*, 198. On a modern civilization, see also Chase, *Rich Land*, 288.
41. Chase, *Rich Land*, 287.
42. On the "seamless web," see David E. Lilienthal, *TVA: Democracy on the March*, Twentieth Anniversary edition (New York: Harper and Brothers, 1953), 62. On "harmony," see xxii. For examples of the use of the term "despoiled," see The Eleventh Commandment, in Lowdermilk, *Conquest of the Land*, 30; "A Grim Warning."
43. On utopian hopes, see Dunaway, *Natural Visions*, 77; White, *Organic Machine*, 55.
44. Chase, "A Vision," 35; White, *Organic Machine*, 58 and on the idea of a new world as an expression of Frederick Jackson Turner's frontier thesis, see White, *Organic Machine*, 56.

45. On "giant power" as "state socialism," see White, *Organic Machine*, 51–52. On negative legacies of water conservation ideas in the context of the American West, see Worster, *Rivers of Empire*, 7–11, imperial power, 4. In *True Gardens*, Tyrrell explains "Australian irrigation promoters in the 1930s had envied the New Deal's exploitation of federal power," 172.
46. Dunaway, *Natural Visions*, 82. Also, "TVA and Australia," (Canberra: The Ministry of Postwar Reconstruction, undated). On nation-building in the US case, see White, *Organic Machine*, 56.
47. On water conservation on the Plains, see Cooke, *Future of the Great Plains*, 76–77; In *Land of the Underground Rain*, 134–135, Green discusses water facilities legislation providing only for "the installation of pumping plants," but without specifically mention them; Worster, *Dust Bowl*, 25th Anniversary edition, 221, 252–253, on Bonneville Dam and Dust Bowl refugees, 50; White, *Organic Machine*, 62.
48. In *Flood Country* (Melbourne: CSIRO Publishing, 2012), 47, Emily O'Gorman, notes the effect of Burrinjuck Dam on Murrumbidgee River hydrology.
49. White, *Organic Machine*, 57, also 62.
50. On dams representing of salvation for US Dust Bowl refugees, see White, *Organic Machine*, 62.
51. For McKell quotation, see "Snowy River Scheme," *Riverine Herald* (Echuca, VIC: Moama, NSW), October 23, 1946; See also Wigmore, *Struggle*, 117, 106.
52. Newman, "The Old 'Battle.'"
53. Edmondson, "The Voice,"; Cinesound Productions, *Conserve Water* (undated), NFSA Title: 75364; Cinesound Productions, *Australia is Developing a Dust Bowl*.
54. Ray Edmondson, e-mail to author, August 6, 2012.
55. On nationalistic content, and on war-time film development, see Edmondson, "The Voice," 2.
56. Frank Bongiorno, "Comment: Australia, nationalism and transnationalism," *History Australia* 10, no. 3 (December 2013), 81.
57. Mr. Heason (Hay district), feared sheep "extinction" due to fodder shortages. Mr. Washington (Leeton Shire) argued for diversion westward in, Notes of a Deputation which Waited on the Acting Prime Minister on the 22nd May, 1945, Representing the Murrumbidgee Valley Water Users' Association, Commonwealth of Australia Department of Post-war Reconstruction, Snowy River Hydro Electric Scheme-Representations by or on Behalf of Municipalities and Organisations File No. /44/485, NAA, Series: A9816 Item: 1946/307 Part 9.
58. Newman, "The Old 'Battle.'"
59. Agenda for Conference on non-theatrical exhibition of films, 35.

60. Woronora Dam provides water to the south of Sydney, not western NSW.
61. On war-time film development, see Edmondson, "The Voice," 2; On propaganda-film development, see Ina Bertrand and Diane Collins, *Government and film in Australia* (Sydney: Currency Press, 1981), 96–97. On propaganda and on location film footage edited into news-reels, see Helen Ennis, *Exposures: Photography and Australia* (London: Reaktion Books Ltd, 2007), 91.
62. On the model dam, see Hall, *Directed by Ken G. Hall*, 155–156. For national symbolism of the dam in *Dad Rudd M.P.*, see Michael Cathcart, *The Water Dreamers: The Remarkable History of our Dry Continent* (Melbourne: Text Publishing, 2009), 237, 235.
63. Cinesound Productions, *Soil Erosion: The Enemy Within*, NFSA: 75400, Production Date: 1942, release date: 17 July 1942. Cinesound Productions, *Conserve Water: Australia's Future*, NFSA: 0500.
64. Commonwealth Government of Australia, *You and the referendum*.
65. Burns, "M P's Warned of Dust Bowl Danger." These reports quoted NSW Divisional Meteorologist David Mares. "Labour," common spelling used to describe the Australian Labour Party, during this period, is the spelling used by the writer.
66. Burns, "Conference Urged."
67. "Mr. Clark Says the Darling Electorate Being Blown into Sea: Erosion Menace," *Barrier Miner*, November 15, 1944.
68. *Australia is Developing a Dust Bowl*. "Land of milk and honey" refers to the Riverina.
69. *Australia is Developing a Dust Bowl*. For analysis of more of these opening images, see Bailey, "War-time Political Ambition behind one Image of a Dam." On the British actor see "Peter Bathurst: Biography," (Imbd). On the voice of an omniscient/all-knowing narrator asserting the creator's values and ideas, see Abrams, *A Glossary*, 94–96. On 1930s opposition to "BBC English" or "Received Pronunciation" (RP) in Australian radio, see David Goodman, *Radio's Civic Ambition: American Broadcasting and Democracy in the 1930s* (Oxford; New York: Oxford University Press, 2011), 26. In this 1940s film, Bathurst's accent is less "RP," his vowel sounds more neutral. On "RP," see Lynda Mugglestone, *Talking Proper: The Rise of Accents as Social Symbol* (Oxford: Oxford University Press, 2003), 270–272; See also Joy Damousi, "'The Filthy American Twang,'" Elocution, the Advent of American 'Talkies,' and Australian Cultural Identity," *American Historical Review* 112, no. 2 (April, 2007), 413.
70. Green, *Land of the Underground Rain*, 134–135; Cooke, *Future of the Great Plains*, 76–77.
71. This sheep imagery was created by Hall for an earlier film, *The Squatter's Daughter*. Deb Verhoeven, *Sheep and the Australian Cinema*, (Melbourne: Melbourne University Press, 2006), 65.

72. *Australia is Developing a Dust Bowl.*
73. Australia's population, as at November 15, 2013 was 23,281,554. Australian Bureau of Statistics, "Population Clock."
74. Ian Clunies Ross, "T. V. A. Yardstick of the Future," Association of Scientific Workers, *Soil Erosion and Water Conservation Conference*. Fontana Dam is in the Great Smoky Mountains in western North Carolina. Wheeler Dam is in North Alabama. Alexander Rosovsky, "The Miracle of Tennessee Valley," *SMH*, December 21, 1946.
75. W. J. McKell, *Tennessee Valley Authority (U.S.A.)* (Parliament of New South Wales, December 5, 1945), unpaginated; "Premier Prepares For Big Schemes," *Farmer and Settler* (NSW), August 24, 1945; "The Premier Abroad," *Cessnock Eagle and South Maitland Recorder* (NSW), August 21, 1945; Norman Wrigley, "An interview with Sir William McKell," Transcripts of interviews by Norman Wrigley (31 January, 1978), unpaginated. NLA, Item: MS 9790 10/41; I.
76. Waratah, "Irrigation is our Major Need," *SMH*, September 29, 1944.
77. "Duststorm Victims Seek More Water: Snowy Diversion Urged," *SMH*, December 18, 1944; "Snowy River Diversion Scheme: Monster Meeting in Hay Receives Report," *Riverine Grazier* (Hay, NSW: 1873–1954), December 19, 1944; On "'dry' areas," see "Murrumbidgee Irrigation Area," *Daily Advertiser* (Wagga Wagga, NSW: 1911–1954) April 12, 1945. Enticknap was Labor MLA for Murrumbidgee (1941–1962). On Enticknap's wide-ranging professional associations involving the MIA and fruitgrowers, see, "New South Wales Parliament: Legislative Assembly: The Hon. Ambrose George ENTICKNAP (1894–1976)."
78. New South Wales Parliamentary Debates, 34th Parliament, 2nd Session, 1944–1945, 307–308.
79. The Committee's report was tabled at the Premiers' Conference of 1945; On MVWUA Secretary (1945 to 1949) M. J. Gleeson (of Leeton), see "Letters to the Editor-Snowy River Diversion," *Narandera Argus and Riverina Advertiser* (NSW), September 28, 1945; for a dedication to Gleeson and MVWUA Chairman J. Alan Gibson, see "Diversion of the Snowy – Eucumbene Rivers," Monument Australia (2014).
80. "Duststorm Victims."
81. Newman, "The Old 'Battle.'"
82. Newman reported that on June 8, a large Parliamentary party would visit the Snowy River to "consider on the spot," proposals for its use, *Ibid.*
83. *Ibid.*
84. 1800 ft is equivalent to 548.64 m
85. *Ibid.*
86. Denholm and Blacklow, "The Murray Valley Development League," 273.
87. Lawrence portrait and biography at "Murray Valley," *Murray Pioneer*, December 20, 1945: 1.

88. "The Murray Valley Development League," *Murray Pioneer* (Renmark, SA: 1942–1950) February 21, 1946.
89. "Protest Against Filching Snowy River Waters," *Morwell Advertiser* (Morwell, VIC), February 1, 1945. For letters from Shire Councils calling for inclusion of these regions in a TVA-inspired national scheme, see Department of Post-war Reconstruction, Snowy River Hydro Electric Scheme-Representations by or on Behalf of Municipalities and Organisations (File No. /44/485), NAA, Series: A9816 Item: 1946/307 Part 9.
90. On Orbost Flats, Gippsland, east of the Snowy River, see George Sedden, *Searching for the Snowy: An Environmental History* (St Leonards, NSW: Allen & Unwin, 1994), 275. On a 1949 trade-off between the Snowy Scheme's technical committee and the Victorian government in exchange for irrigation water and a share of hydro-power, see Miller, *Snowy*, 13–16, on not one of the Snowy's three indigenous groups being consulted, 232–233.
91. "Snowy River Diversion Opposed," *Argus* (Melbourne, VIC), 15 February 1945).
92. TVA screened in Perth (1946) and toured the Murray Valley, see "Tennessee Valley," *West Australian*, November 1, 1946.
93. G. V. Lawrence, "The Best Use of the Snowy River Waters," *Murray Pioneer*, September 2, 1948.
94. William Vogt, *Road to Survival* (New York: W. Sloane Associates, 1948), 126–127; On three decades of controversy, see El-Ashry and Gibbons, *Water and Arid Lands*, 38; See also Marc Reisner, *Cadillac Desert: The American West and its Disappearing Water* (New York: Viking, 1986); Radkau, *Nature and Power*, 181.
95. For information circulated by the American Embassy, Washington, DC, see Memorandum (Regional Planning) No. 2 from G. M. Gray, Attache, Australian Embassy, Washington, DC (June 28, 1947) to Canberra; Also see Memorandum No. 570/47 sent from G. M. Gray, Attache, Australian Embassy, Washington, DC, to the Australian Department of External Affairs, Canberra (July 28 1947), NAA, "Regional Planning USA," Series: A9816, Item: 1946/445
96. On Weston's service as war correspondent, see "Australia's Part in New Guinea Campaign," *Benalla Ensign* (VIC), October 27, 1944.
97. Weston, "American Trends in Resource Planning," September 15, 1945.
98. Ibid.
99. Weston, "A Vision Became a Reality," September 19, 1945. See Roosevelt, Message to Congress Suggesting the Tennessee Valley Authority.
100. On the Murray as an ideal fit, see Weston, "Report To Australia—XII. We Could use the TVA Idea Here," October 13, 1945. Weston

- described the limitations of the existing River Murray Commission (1917) involving three states and with distribution but no planning powers; See Murray Darling Basin Authority, *History of the Basin Plan* (2013).
101. Weston, “Why Not Use Our Vast Hydro-Power Resources?” July 27, 1946; TVA, *A National Program in the Tennessee Valley* (1936).
102. McKell, *Tennessee Valley Authority*; Weston, “Report to Australia—IV. Great Achievements In Tennessee,” September 26, 1945.
103. Weston, “Tennessee Valley—A Lesson for Australia,” September 22, 1945.
104. Weston compared Australian state, and US federal resource planning powers in “Report to Australia—XV. Problems of Setting up an MVA,” October 27, 1945
105. For US coverage of the controversy and on irrigating “dust bowls” west of the 100th meridian see “MVA,” *Life* (August 13, 1945), 73, 76–77.
106. All above-listed TVA reports by Mervyn Weston were published in the Melbourne *Argus*.
107. “Murray May Have T.V.A.,” *SMH*, August 16, 1944; G. C. Bolton, “Evatt, Herbert Vere (Bert) (1894–1965),” *ADB*.
108. For press coverage on the U.N.O, see “Film Classics,” *Albany Advertiser* (Albany, WA, 1888–2003), November 14, 1949.
109. The ANFB was established in April 1945. In July 1945, Prime Minister Chifley made Calwell Australia’s first minister for immigration. Film review by G. V. Lawrence, “The Valley is Ours,” *Wodonga and Towong Sentinel* (VIC: 1885–1954), May 13, 1949.
110. On Heyer’s “image of Australia,” see John Heyer, “Geography and the Documentary Film: Australia.” *Geographical Magazine* 30, no. 5 (September 1957), 234.
111. Deane Williams, *Australian Post-war Documentary Film: An Arc of Mirrors* (Bristol, UK: Intellect, 2008), 107.
112. Dunaway, *Natural Visions*, 52, 78, 82, 86; Robert L. Snyder, *Pare Lorentz and the Documentary Film* (Norman, Oklahoma: University of Oklahoma Press, 1968); On national TVA symbolism, see Brian Black, “Authority in the Valley: TVA in Wild River and the Popular Media, 1930–1940,” *Journal of American Culture* 18: 2 (1995), 13.
113. See Williams, “International Documentary Film-maker,” 252, on formal similarities with *The River* in Heyer’s text, 249. On Lorentz and Heyer’s *The Valley*, see Williams, “Heyer, John,” 589. Both US films Pare Lorentz, *The River* (Farm Security Administration, 1937), and Pare Lorentz, *The Plow that Broke the Plains* (Farm Security Administration, 1936), can be viewed in the Prelinger Collection Internet Archive.
114. Lawrence, “The Valley.”

115. Williams, "International Documentary Film-Maker," 249.
116. For the part of Chifley, see, *The Valley is Ours*-Commentary (December, 1948) Commonwealth of Australia, Department of Information, Films Division-Burwood NSW (file FB/13/49), NFSA, Box: ALIR0001.
117. Lawrence, "The Valley."
118. In poetic verse such as that of Lorentz and Heyer—the meter, or rhythm is created by a recurrence of regular—and approximately equivalent—units of stress pattern. A stress pattern refers to the "pattern of stronger and weaker syllables" that make up the words in the verse. The pattern of strong and weak accent on certain syllables, gives the speech a particular rhythm (as opposed to tempo, which is also a factor). See Abrams, *A Glossary*, 160.
119. John Heyer, *The Valley is Ours*, ANFB, Department of Information, 1948, *Moving History: 60 Years of Film in Australia*, Australian Broadcasting Commission, 2014; Dunaway describes *The River* beginning with droplets and ending with images of modern technology, in *Natural Visions*, 81.
120. On Lorentz, see Dunaway, *Natural Visions*. On the voice of an omniscient or "all-knowing" narrator asserting the writer's ideas, see Abrams, *A Glossary*, 94–96. On the Australian preference from the 1920s for an Australian accent, as opposed to the "offensive, coarse, and harsh" American accent, see Joy Damousi, "'The Filthy American Twang,' Elocution, the Advent of American 'Talkies', and Australian Cultural Identity," *American Historical Review*, 112:2 (April 2007), 410, also 112 and on the 1930s, Australian identity, the broadcast Australian accent, rejecting the sound of the American accent, 397 see 24–26.
121. On Australians in the Middle East campaigns, see Maughan, "Tobruk and El Alamein." On Australian Divisions and casualties at Tobruk, see Australian War Memorial, *Siege of Tobruk*; Johnston and Stanley, *Alamein*. On the name "rats," see "The Siege of Tobruk," Imperial War Museum, London.
122. As in these films, repetition "may have an incantatory effect as in the opening lines of T. S. Eliot's "Ash-Wednesday":
 "Because I do not hope to turn again
 Because I do not hope
 Because I do not hope to turn...." In addition, a change in mood, scene or tone can be created by shifting from that repetition "in the words following the identical phrases." In both Lorentz and Heyer's case, the words "down the" are repeated before the change, and Heyer also repeats "on to" and "gathering the" before the Murray finally rolls into the sea. See "Modern & Contemporary American Poetry: Repetition," Philadelphia: University of Pennsylvania Department of English, (2007).

123. The rhythm of repetition is broken at this point for effect.
124. See Pare Lorentz, *The River* (at 4:49).
125. The rhythm of repetition is broken at this point for effect.
126. Pare Lorentz, *The River*.
127. The headwaters of the Kiewa River rise between Mt. Bogong and Mt. Feathertop and flow into the upper Murray (see notes below).
128. The rhythm of repetition is broken at this point for effect.
129. The rhythm of repetition is broken at this point for effect.
130. The Mitta Mitta and the Kiewa Rivers are on the upper Murray on the Victorian side of the border and Echuca, on the Central Murray in Victoria. The Hume Weir (now Hume Dam), Jingellic, Mulwala, Yarrawonga, Booligal, as well as the Darling River, Bourke, and Menindee are in New South Wales (Figs. 7.1 and 6.4).
131. The rhythm of repetition is again broken at this point for effect.
132. Heyer, *The Valley*.
133. In "International Documentary Film-Maker," Williams suggests this sequence "takes the spectator with the character/narrator on a personal journey which evolves into a didactic cadenced speech reminiscent of Lorentz's films" (251). On the voice of first person narrator, see Abrams, *A Glossary*, 233–234, the dramatic monologue, 70.
134. See map at "Kiewa Scheme—general plan," Melbourne: State Electricity Commission of Victoria, 1945, SLV. For the press coverage, see "Kiewa Scheme to be Speeded Up," *Argus* (14 March 1949); "Snowy River Diversion Opposed," *Argus* (February 15, 1945). Parliament of Victoria, "Kent Hughes, Sir Wilfrid Selwyn," *About Parliament: Members*.
135. Heyer, *The Valley*.
136. Chase, "A Vision," 110.
137. Heyer, *The Valley*.
138. Ibid.
139. See Swain, *Soil Erosion and Water*.
140. Sutter, "New Deal Conservation," 95. See also White, *Organic Machine*, xi.
141. William Vogt, *Road to Survival* (New York: W. Sloane Associates, 1948), 126–127. Reference to plundering and to "folly" from "Coolie's Fate Will Menace World Unless Food Sources are Conserved Immediately," *Northern Times*, October 14, 1948. On "folly," also see Vogt, *Road to Survival*, 236. On readiness for TVAs, see "Road to Survival," *Camperdown Chronicle* (VIC), June 27, 1949.
142. See The Aldo Leopold Foundation; In *Cadillac Desert*, Reisner describes Luna Leopold as a leading hydrologist, 295.
143. Luna B. Leopold, "Review of 'Road to Survival' by W. Vogt," *Soil and Water Conservation* 3, no.4 (1948): 186–187, University of California,

- Department of Earth and Planetary Science, Berkley. Also see J. E. Nichols, "Malthus Modernized: Road to Survival by William Vogt," *Nature* 164 (July 2, 1949): 4–5. For biographical information, see "The Virtual Luna Leopold Project." On the lack of environmental accountability built into the dam-building culture of the time, see Reisner, 166–168.
144. See Edward. H. Swain, Association of Scientific Workers, *Soil Erosion and Water Conservation Conference*. Swain was Forestry Commissioner of the New South Wales Forestry Commission from 1935 to 1948. On Swain, conservation and preservation, see Gregory A. Barton and Brett M. Bennett, "Edward Harold Fulcher Swain's Vision of Forest Modernity," *Intellectual History Review* 21, no. 2 (June, 2011), 150, on post-war planning, 144. On Swain as a poet see L. T. Carron, "Swain, Edward Harold Fulcher (1883–1970)," *ADB*; See also "Snowy River Hydro-Electric Scheme–Dangers of Siltation," *Camperdown Chronicle* (VIC), September 8, 1950, an article describing an address to the Victorian Grazier's Association by conservationist, J. Manifold of Perrumbete, Weerite.
 145. For press coverage, see "McGirr Reports To Cabinet On Snowy River," *SMH*, March 1, 1949; "Favour Diverting Third of Snowy River into Murray," *Argus*, March 10, 1949; "NSW Opposed to Diverting Snowy River Water," *Argus*, February 16, 1949.
 146. Wigmore, *Struggle*, 138, 141–142. Their first meeting was in December 1947.
 147. Wigmore, *Struggle*, 141–142; Miller, *Snowy*, 6; Cathcart, *Water Dreamers*, 241.
 148. The Snowy Hydro authority more recently became a corporation with the states as shareholders.
 149. Tyrrell, *True Gardens*, 173; On "America watching," see Powell, *The Empire Meets the New Deal*, 344, on "unmistakable echoes," 339; Tom Griffiths and Tim Sherratt, "What if the northern rivers had been turned inland?" in *What if?: Australian History as it Might Have Been*, eds. Stuart Macintyre and Sean Scalmer (Carlton, VIC: Melbourne University Publishing, 2006), 238; Cathcart, *Water Dreamers*, 241.
 150. Australian Bureau of Statistics, *The Snowy Mountains Hydro-Electric Scheme* (1301.0 – 1986).
 151. On the Snowy Mountains Authority as part of national myth, see Sedden, xxiii. For engineering facts and figures, see Grahame Griffin, "Selling the Snowy: The Snowy Mountains Scheme and National Mythmaking," *Journal of Australian Studies*, no. 79 (2003): 1. On the Snowy construction (1951–1975) and the Snowy Scheme's cultural / social history from 1951, see Brad Collis, *Snowy: The Making of Modern Australia* (Canberra: Tabletop Press, 1990), 315; 31–33, 40–41.

152. Swain, *Soil Erosion and Water*.
153. Miller, *Snowy*, 167, 249; Robert Webster, "Snowy River Enquiry: Final report," (Sydney: Snowy Water Enquiry, October 23, 1998) 5. "On 26th Feb 2013 the NSW Government proposed to replace the Snowy Scientific Committee (SSC) with a new group." See Snowy River Alliance, "Important news: NSW Government wants to eliminate the Snowy Scientific Committee," (March 21, 2013); See also Ben Cubby and Tom Arup, "Fears for Snowy River as scientists ditched for industry-funded group," *SMH*, February 27, 2013, 2.
154. Maher, *Nature's New Deal*, 209; White, *Organic Machine*.
155. "This big man," *The News*, September 10, 1954.
156. Claire Miller describes the Snowy Scheme's appropriation of both the Snowy River and its mythology in *Snowy*, 225.
157. Heyer, *The Valley*. On landscapes as evidence of "aspirations located in historical time," see Tyrrell, *True Gardens*, 2.

Conclusion: “Just a ‘Bloody Duststorm’?”

During the late 1930s and 1940s, Australian soil conservationists commented on what they saw as an American talent for storytelling. One of them was Australian pastoralist Jock Pick, author of *Australia’s Dying Heart* (1942). Just weeks after the fall of Singapore in 1942, Pick wrote home to the newspapers from where he was serving with the Australian Forces in the Middle East. He wrote:

The dust storm has many names. In Algeria they call him “Sirocco.” The Egyptians know him as “Bidouri.” The Americans, with their urge to dramatise the commonplace, call him the “Black Blizzard.” He is, in fact, a dust storm, neither better nor worse than I have seen a thousand times at home in Australia.¹

Australians, Pick was arguing, could not sit back and believe that their soil erosion problems were smaller just because American stories were bigger. No stranger to dramatizing himself when the need arose, Pick was observing that Australians needed to tell more dramatic stories about their own dust storms, to motivate an interest in soil conservation across the nation. And in the war-time months and years to come, they did. Many

Jock Pick (AIF), “Dust-Storm and Bedouri,” *Chronicle* (Adelaide, SA: 1895–1954) May 7, 1942

Australians also noticed the way that New Dealers constructed stories rooted in national myth in order to create commentary on contemporary problems. They were influenced by the concept of a “dust bowl” and the way that lessons could be drawn from it in the Australian context, even in the following decade. And they were inspired by the Americans’ use of mass media to circulate this often visual imagery. Among them were Mary Gilmore, Sam Clayton, William McKell, Ken Hall, Arthur Calwell, Donald F. Thomson, Fred Alexander, Gerard Blackburn, Elyne Mitchell, Mervyn Weston, Noel Adams, Bruce Miller, Ion Idriess, Fred Timbury, G. Veron Lawrence, and John Heyer.

The US Dust Bowl story is rooted in a place, a time, and a phenomenon, the actual wind erosion events that occurred on the US Great Plains during the 1930s. Treated as it has been here, as an idea however, a “dust bowl” can be said to be more. It is the place where a set of national, gender and environmental myths, beliefs (including fears and hopes), and theories converged and together, took form as a film, print, broadcast, rhetorical, artistic, and photographic product of the American, and later Australian national imaginations. Roy Stryker, Dorothea Lange, Arthur Rothstein, Pare Lorentz, Hugh Bennett, Henry A. Wallace, Stuart Chase, Jack Glenn, John Steinbeck, Archibald MacLeish, Russell Lord, Walter Clay Lowdermilk, and Morris Llewelyn Cooke were among those who contributed to the creation of Dust Bowl imagery that found currency well beyond its American context, including in World War Two Australia. In sound, music, images, and the written word, Dust Bowl storytelling has endured in the USA. American libraries, museums, galleries, and archives of every kind, as well as family stories often passed on in casual conversation, all re-iterate Dust Bowl imagery and in doing so they confirm its place as part of US national storytelling.² Part of the reason for this is that this storytelling provides evidence of Depression era efforts to achieve social, economic, and environmental change in America.

Most importantly, Dust Bowl imagery endures because it is an expression of ideas about American identity—the national myth of American exceptionalism and its narratives of the frontier, the yeoman dream, American optimism, rugged individualism, the American West, and a Great American Desert. These stories have further endured due to the impacts of American social realism and concepts such as the photo-story, documentary films, broadcast radio forums, and documentary photography that helped to convey Dust Bowl imagery to the nation and around the world, including to Australia.

During World War Two in Australia, soil conservationists promoting a national soil service, employed the concept of the Dust Bowl. They used it to reinterpret and bolster the meaning of their own national myths. The threat of a "dust bowl" was used to draw attention to sheep "trampling across the face of Australia" to "empty spaces," "creeping deserts," or "dying hearts"—and the irrigation dream. "Dust bowls" were used to draw attention to the tradition of celebrating pioneering women, to the Anzac legend and to war-time sentiment—expressed in terms of the patriot, the enemy, and the traitor. However, despite the intensity of state or national patriotism, and the emotional and intellectual energy invested in creating this significant collection of imagery, an Australian national soil conservation service became a reality and the idea of a "dust bowl" found its most potent manifestation elsewhere.

Australian "dust bowl" narratives grew out of a period of severe drought, war-time national grief, unthinkable levels of personal loss, and great cultural change. It was also a period of technological change. Water conservation ideas dominated the national storytelling about conservation at his time. Engineering, steel, and the smooth, towering cement walls of gargantuan dams became foremost in imagery describing Australia and nation-building in the post-war world. Contrasted against dams and TVAs—powerful symbols of modernity, "dust bowls" only accentuated the meaning of large-scale engineering projects, and what with all that Snowy water a post-war scheme for the nation could do. This is where the death and devastation evoked by "dust bowl" imagery found its most lucid expression—as the kind of world Australians did not want. With this contrast, storytellers such as Ken Hall and John Heyer were posing a question. They were asking Australians to decide what kind of post-war future they really wanted. Did they want to live in a modern utopia inspired by US achievements? Or did they prefer a bleak future of US-style "dust bowls" bringing drought and wind erosion that would eventually lead to further death, devastation, and even human extinction?

As Mervyn Weston wrote back to Australia about the TVA from his tour of the USA in September and October of Spring 1945, the newspapers and the homes of Australians were filled with stories such as these: "Heavy P.O.W. Losses on Prison Ship: Torpedoed Near Luzon," "Severe Gas Rationing—Supply May Cease," "Australians used as Slaves in Osaka Ironworks," and "Grim Story of Death March: Six Australians of 1,800 Survive Borneo Horror—RAAF Rescues Last Four of Sandakan Tragedy."³ For Australians of the south-east living through this period, visions of a

brighter future would have been most welcome indeed. Some water conservation schemes were considered crazy by experts at the time. Some were considered economically or environmentally viable or profitable. Either way, visions of huge dams and “TVAs” were generated by the emotional experience of belonging to a new nation recovering from two world wars, the Depression—and often a real sense of connection not only to the land itself but also to national stories. Those stories were about the nation riding on the sheep’s back, empty spaces, irrigated green garden landscapes, and stories about Rivers—the Murrumbidgee, the Murray, and the Snowy. Over and again, the Snowy and Anzac myth have been said to describe the character of the nation. When the Snowy was chosen as the location for the nation-building scheme, New South Wales and Victoria vigorously promoted their rival visions. As these visions played out, a new interpretation of Snowy myth was under construction, soon destined to become the story of the Snowy Mountains Hydro-electric Scheme. Neither a “dust bowl” nor a TVA story have ever been said to describe the character of the Australian nation. Neither has been remembered as part of any Australian national narrative rooted in the memory of an Australian place, time, or soil erosion event. They are defining US national narratives, iconic, and born of the American experience.⁴

Powerful Australian national narratives can of course be found in the nation’s archives, museums, and libraries including that of a nation-building Snowy Mountains Scheme. In Snowy mythology, Paterson’s legendary horseback hero, *The Man from Snowy River*, had conquered the rugged beauty of Mount Kosciuszko where “the pine-clad ridges raise their torn and rugged battlements on high.”⁵ It was to be conquered again, this time engineered, excavated, tunneled, and jackhammered into shape in transnational imagery promoting a post-war vision. But in its earliest evolution from 1942 to 1949, this new Snowy narrative was being constructed at least in part through a transnational exchange of ideas about the New Deal, about soil and water, about the TVA, about US dam-building in the American West, and about the US Dust Bowl. Here, the idea of a “dust bowl” found its moment of greatest articulation in the nation’s storytelling. But in 1949, an agreement over the Snowy Scheme was reached. Dust bowl threats were no longer needed to sell rival state visions. John Heyer captured this moment on film. In *The Valley is Ours*, he portrayed the “men and machines” that could overcome “dust bowl” threats by creating a “TVA for the Murray,” a vision destined to become the Snowy Mountains Scheme. *The Valley* offers the chance to step back

into a sensory experience of the past, and see and hear what the "dust bowl" idea looked like and sounded like to Australians at what was its moment of greatest potency (and also its final hour). The potency of "dust bowl" imagery met its demise as the Australian national story became focused on the post-war era and that vision of a transformed Snowy River, the Snowy Mountains Scheme, took hold.

NOTES

1. Pick, "Dust-Storm and Bedouri."
2. In *Dorothea Lange*, Gordon describes it: "a defining national legend, of mythic status," 244.
3. A mere six Australians survived the Sandakan death march, out of 2500. See Sean Brawley, Chris Dixon, and Beatrice Trefalt, *Competing Voices from the Pacific War* (Santa Barbara: Greenwood Press, 2009), 199–201. All stories from *The Argus* (Melbourne): "Heavy POW Loss On Prison Ship," October 6, 1945; "Severe Gas Rationing," October 6, 1945; "Australians Used As Slaves In Osaka Ironworks," September 22, 1945: 1; "Grim Story Of Death March," September 22, 1945; Athole Stewart, "Repairs Under Way At Singapore," September 22, 1945. See also Paul Ham, *Sandakan: The Untold Story of the Sandakan Death Marches* (North Sydney, N.S.W.: William Heinemann, 2013). For press coverage of Allied casualties finally being confirmed see, "Big Casualties Revealed Among P.O.W.s.," *Sydney Morning Herald*, September 6, 1945: 1.
4. Black, "Authority in the Valley," 13; Gordon, *Dorothea Lange*, 244.
5. Paterson, *The Man from Snowy River*.

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INDEX

A

Act of God or disaster, 211

Adams, Noel, 14–15, 166–7, 183,
189, 223–4, 237, 286

Adermann, Charles, 139

Advertiser, Adelaide, 162, 166–7, 175,
177, 183, 189, 223–4

Alexander, Fred, 10, 15, 163–4, 286

Alldis, Victor, 158

American Progress, 38, 62

*America Wakes to the Need for Soil
Conservation*, 166

*An American Exodus: A Record of
Human Erosion*, 47, 81–2, 163–4

ANFB. *See* Australian National Film
Board (ANFB)

Anzac mythology

character of nation, 116, 121, 288
fighting for nation's future, 124,
135

Rats of Tobruk, 261

sheep mythology, 12, 16

and war-time sentiment, 287

water conservation stories, 241

Argus, Melbourne, 138, 162, 166,
186, 209, 219, 223–4, 255, 258

Atlantic Monthly, 29, 85

Australia is Developing a Dust Bowl, 8,
127, 137, 247–9

death and decay, images of, 133

“The farmer,” 134–5

image of dam, 8, 245–6

landmark vegetation map, 134

overstocking farmer, 173

SCS, research project, 133

Australian Broadcasting Commission
(ABC), 115, 121, 141, 216, 255

Australian Bureau of Meteorology,
109

Australian constitution

desert myth, 158–9

Dunstan, 185–6

“dust bowl” alarm, effects of,
186–9

gloomy narratives, 181–5

human erosion on film, 173–7

man-made deserts, 157

media's objectives, 161–2

Australian constitution (*cont.*)
 national soil conservation service,
 189–90
 politicians and national downfall
 narrative, 177–81
 process of decline, 155
 soil/human interrelationship, 155–6
 soil menace, 158
 stories, 163–73
 wagons and refugees, 156–7
 wind erosion, 159–61

Australian National Film Board
 (ANFB), 257

Australian nationalism, 10

Australian Women's Weekly, 106–7,
 127–8, 156, 204–5, 227, 237

Australia's Dying Heart, 135–6, 158,
 285

B

Bacon, Francis, 38
 Bailey, Janette-Susan, 215
 Bankhead-Jones Farm Tenant Act, 32
 Bathurst, Peter, 129, 134, 247, 250
 battlefields, South-West Pacific
 aridity or drought conditions, 111
 dust storm locations, 110
 “the farmer’s mind” and causes of
 wind erosion, 111–15
 political and conservation interests,
 109–10
 sabotage, 135–7
 Sam Clayton, 115–20
 severe drought, 109
 Singapore, impacts of, 107, 123–33
 submarine and air raid campaigns,
 108
 wind erosion in western New South
 Wales, 111
 Battle of the Coral Sea, 108–9
 “Battle of the Rivers”
 “battle for Australia,” 239

Bradfield/Idriess Scheme, 239
 dams, conserve water, 267–8
 final snowy agreement, 268–70
 Murray valley, TVA, 254–9
 MVWUA and MVDL, 240
 nation-building scheme, 238
The Valley is Ours, 259–66
 Beadle, Noel, 15, 112, 118, 133–4, 249
 Beck, Homer C., 29, 84
Behold our Land, 30, 59, 64, 69, 121
 Bennett, Hugh Hammond, 2, 27–8,
 31
 Blackburn, Gerard, 181, 185, 286
 “Black Sunday,” 2, 84
 Bohn, Odalee Lowery, 29, 84
 Bongiorno, Frank, 245
Boulder Dam, 242
 Bowman, Robert, 114, 166
 Bradfield/Idriess Scheme, 239
 broadcast radio forums, 3, 286
 Burns, Crayton, 15, 138, 237, 247
 Burrinjuck Dam, 242, 251–2

C

Caldwell, Erskine, 47
 Californian and Australian goldfields,
 study of, 8
 Caldwell, Arthur, 15, 139, 159, 175,
 178, 180, 189, 257, 286
 Campbell, Tom, 71
Canberra Times, 139, 180
 Chase, Stuart, 4, 28, 42, 63–5, 69, 71,
 119–20, 177, 242–4, 243, 286
 cinesound erosion films, 249
 civilization
 agricultural settlement process,
 86
 “conception of an advancing
 civilization,” 213
 declining process, 62, 116, 155,
 157, 167, 172–3, 182, 208,
 249

- implications of erosion, 162
- irrigation, 36
- man-made desert, 86
- migrant camps, 81
- natural disaster, women, 16, 60, 209
- Clayton, Sam
 - “the balance of nature,” 115–16
 - fallen civilization, 116
 - forms of soil menace, 119
 - 1938 act of parliament, 118
 - 1938 New South Wales Soil Conservation Bill, 119
 - as “patriotic savior,” 116
 - Rich Land Poor Land*, 118–19
 - rural labor struggles, 117
 - soil conservation program, 118
 - spectacular methods of American publicity, 119–20
 - “tractor farming,” 117
 - US Dust Bowl, 118
 - US Homestead Act, 116–17
 - war-time soil conservation propaganda, 120
- Clements, Frederic, 28, 41
- Climate and Man*, 45
- “climax communities,” Clements’ idea, 66
- Commonwealth Government, 5, 160, 173, 175, 180, 238, 247, 254–5
- The Conquest of Arid America*, 36, 242
- conservation attitudes and action, 120
- Conserve Water*, 245–6, 251–2
- contour ploughing, 169, 258, 264
- Cooke, Morris Llewelyn, 286
- Country Women’s Association (CWA), 208
- “creeping deserts,” 159
- Cronon, William, 32
- Crucified Land*, 170
- Crucifixion*, 170
- cultural or natural disaster, 227–8
- cultural perspective, 4–5
- Curtin, John, 106, 179
- CWA. *See* Country Women’s Association (CWA)
- D**
 - Dad Rudd M.P.*, 246
 - Daily News*, Amarillo, 29, 72
 - Dalhart Wind Erosion Control Project, 71
 - dams
 - building achievements, 241–2, 245
 - to conserve water, 267–8
 - Hall’s dam sequence, 246
 - and hydro-schemes, 244
 - TVA, 243, 259
 - Davies, John B., 128
 - Davis, Thomas C., 247
 - Descartes, René, 38
 - desert myth
 - Australia’s Dying Heart*, 158
 - climax theory, 41
 - creeping deserts, 159
 - desert advance, 158
 - ecology and agricultural mechanization, 41
 - Great American “Sahara,” 35–6
 - Judeo-Christian concept, 44
 - man-made desert climates, 159
 - permanent deserts, 158
 - power machinery, 41
 - “Saving OUR Soil,” 159
 - soil erosion, human responsibility, 158–9
 - Deserts on the March*, 28, 41–2, 64, 70
 - desert wastes, 241
 - documentary films, 3, 28, 87, 115, 123, 139, 156, 286
 - documentary photography, 3, 286
 - Douglas, Kirsty, 8
 - downfall narratives, 159–60, 161

- drought
 climate adaptation, role of, 44
 and erosion conditions, 7
 geological record, 44–5
 government soil conservation
 programs, 45
Drought Grips Riverina, 127, 129,
 130, 137–8, 247
 drought women
 CWA, 208
 Drover's Camp, 206
 The Drover's Wife, 206
 The Grapes of Wrath, 204, 205
 public health programs, 207
 Sydney Morning Herald, 205, 207
 Woman in a Landscape, 206
Drouth Stricken Area, 79–80, 124
Drouth Survivors, 79, 124, 126, 175
 Drysdale, Russell, 170, 182
 Dunaway, Finis, 9, 67, 244
 Dunstan, Albert, 15–16, 160
 Argus “Visibility Restricted!” 185
 Country Party (CP) Premier,
 Victoria, 160, 166, 187
 drought, definition, 211
 Dunstan and Soil Erosion, 185–6
 human/soil interrelationship, 185
 national action on erosion,
 opposition, 180–181
 *Victoria in Peril from Drought, Fires
 and Premier Dunstan*, 186, 187
 Victorian bill, 179
 “dust bowl” alarm
 Argus, 186–9
 downfall narrative, 186
 regions’ longer term social
 capacities, 186
 “dust bowl migrants,” plight of, 29
 dust clouds, 2, 27, 82, 89–91
 dust storms
 civilized people–uncivilized
 conditions, 218–21
 cultural or natural disaster, 227–8
 drought women, 204–8
 housewives’ needs, 221–7
 natural disaster, 210–212
 news of housewives with weather,
 214–18
 state of environment and
 civilization, housewives,
 212–14
 women, eroding soil and humans,
 208–10
 dying trees, 171
- E**
 ecological balance and immoral
 farming, concept of, 60–61
 ecological limits of soil, concept of,
 61
 economic Depression, USA, 9, 92
 “effect of soil drifting and blowing,”
 203–4
 Eliot, T.S., 169
 Emerson, Ralph Waldo, 40
 environmental ideas
 cultural approach, 12
 mythology and folklore, 9
 photo-essay and documentary,
 15–16
 photography, music, film, or
 literature, aesthetic qualities,
 12–13
 soil conservation propaganda film or
 painting, 14
 sound or framing in films, use of, 13
 water conservation imagery, 14
*Environment and Life on the Great
 Plains*, 44, 123
 Esau, Erika, 8
 Evans, Walker, 259
 exceptionalism, American, 34, 156–7,
 241

F

fact films, 47, 138

Fallou, F.A., 38

farmer attitudes

ancient grasslands and cattle
grazing, 67

death of grasslands, 69–70

democracy and private property, 65

Deserts on the March, 70–71

exhausted soil, 69

interpretation of frontier myth, 65

“Man Conquers nature,” 66–7

myth of Mother Earth, 69

The Plow that Broke the Plains, 67,
68

psychoreality, 70

and responsibilities, 121

“slash ‘n burn” attitude, 65

story of soil neglect, 70

Farmers in a Changing World, 157

farmer’s mind and wind erosion

Australian national media, 114

“beyond economic reclamation,”
112

conservation of natural resources, 112

developed soil science, 111

film, print, and broadcast media
stories, 113

idea of conservation, 114

lack of conservation mindedness,
113

nation’s soil losses, 114

New South Wales Government, 112

soil menace, 113

Farm Security Administration (FSA),

28–9, 32, 46–7, 62, 75–8

fiction film, 47, 139

film images or photographs, 162

films, human erosion

Advertiser, 175, 177

Australia is Developing a Dust Bowl,
173

Drought Grips Riverina, 173, 174

Drouth Survivors, 175

green conservation-farming oasis,
175

The Plow that Broke the Plains, 173

Spectre of Drought, 173

Steer Skull, 175

Sydney Morning Herald, 175

*Victorian Drought: Mallee Country
Facing Ruin*, 175, 176

final snowy agreement

irrigation and hydro-power, 268,
269

Murray and Murrumbidgee

Irrigation systems, 269

Snowy Scheme, 268–9

total conservation or organic
machine, 269–70

TVA idea, 270

The Valley if Ours, 270

Flaherty, Robert, 259

forest hydrology, 27

Fortune, 28, 47

Franklin D. Roosevelt (FDR)

New Deal, 35

scientific advisory committee of
enquiry, 114

social reform, 1

Friant Dam, 250

frontier myth, 34, 62, 65, 68, 84, 157,
248

The Future of the Great Plains, 65–6,
78, 114

G

gardens, 3, 35–6, 41, 80, 85, 220

Gast, John, 38–9, 44

gendered narratives

“contagious and deadly natural
blight” of wind erosion, 89–90

desert contradictions, 87

gendered narratives (*cont.*)

- drought and erosion conditions, 87
- Dust Bowl refugees, 89
- dust pneumonia, 88
- The March of Time*, 86–7
- The Plow that Broke the Plains*, 88
- process of agricultural settlement, 86
- US Dust Bowl*, 88–9
- “the voice of doom,” 90
- “voice of Hearst” pumps, 88
- wind erosion, cumulative effects, 86
- geological time, idea of, 61
- Gilmore, Dame Mary, 106, 107
- Glenn, Jack, 71, 88
- gloomy narratives
 - Argus*, 185
 - conquering erosion, 182
 - The Cross of Erosion*, 183
 - decaying civilization, 182–3
 - loss of land values, 182
 - Mitchell’s downfall narrative, 181–2
 - preconceived impression, 184
 - “RAAF aeronautical observations,” 182
 - Soil and Civilization for Meanjin Papers*, 181
 - soil menace, idea of, 183–4
 - Sydney Morning Herald*, 183
- Gold Seeking*, 8
- Goodman, David, 8
- Gordon, Linda, 2
- Grant McIntyre, Beralli Station, 128
- The Grapes of Wrath*, 16, 29, 83, 155, 163, 204–5
- The Grasslands, 64–5
- graveyards of empires, 63–5
- graziers
 - conservation initiatives, 140
 - conservation-minded, 127, 183
 - and farmers, 14, 115, 136, 138–9
 - national press coverage, 141

- overstocking, 120, 124, 141
- Sydney Morning Herald*, 140, 142
- Great American Desert, 3, 34–5, 39, 44, 60–63, 76, 157, 286
- Grierson, John, 124

H

- Hall, Ken G., 124, 237, 245
- Heaven’s Tableland*, 72
- Henderson, Caroline A., 85
- Heritage*, 123
- Heyer, John, 237, 257
- History Australia*, 11
- HMAS Sydney*, 106
- Hogan, 184
- Hogan, Hazel, 209
- Hogue, Alexandre, 28, 42
- Homestead Act, 34, 36, 62, 75, 117
- housewives
 - awareness of erosion, 86
 - city audiences, interviews, 216–17
 - “conception of an advancing civilization,” 213–14
 - cultural disaster, 86
 - day of “recovery from disaster” or “readjustment,” 212
 - dust storm, 84
 - Farming the Dust Bowl*, 85
 - full-blown dust storm, 218
 - and natural or cultural disaster, 9–10
 - news content, 214, 216
 - New South Wales/Victoria dust events, 214, 215
 - severity and duration of drought, 212–13
 - “soil erosion in southern NSW,” 217
 - state of environment and civilization, 212–13
 - Sydney Morning Herald*, 216
 - torment of wind erosion conditions, 221–7

uncivilized conditions, 216
Howard, Sir Albert, 38
human erosion narratives
documentary studies of people and places, 75
dust pneumonia, 73
ecological decline, 46
federal and co-operative programs, 75
on film (*see* films, human erosion)
Fleeing a Dust Storm, 77
FSA photographs, 62–3, 75–77, 79
homestead and Dust Bowl refugee, 73, 74
human/soil interrelationship, 45–6
images of resettlement, 76–7
Lange and Rothstein, 75–6, 78
man-made deserts, 73
March of Time, 79
myth of Great American desert, 76
natural disaster, 63
newer social science,” 61
process of decline of civilization, 62, 73
Soil Conservation Reconnaissance Survey, 72
Steer Skull, 76–7
symbol of sand, 63
technological optimism, 62
wind erosion conditions, 63
human/soil interrelationship, 45, 83, 170, 185
Huntington, Ellsworth, 42, 44
Huon Peninsula campaign, 167
Hurt, Douglas, 9

I

Idriess, Ion, 286
images and texts, 16
Images of the Pacific Rim: Australia and California, 1850–1935, 8

irrigation, 287
definition, 36
MIA, 251
Murrumbidgee Irrigation plan, 247, 252–3, 259, 269
as national movement, 242, 270
rural production and settlement, 240
Victorian *Water Supply and Irrigation Bill of 1886*, 241

J

Joel, Arthur H., 28, 72

K

Kennedy, David, 9
Kiewa hydro-scheme, 263–4
Kiewa River hydro-electric scheme, 263
Kincer, J.B., 42

L

The Land, 259
Land of the Free, 28, 47, 62–3
“Landscape of death,” 169
land use, concept of, 121
Land Utilisation in Australia, 113
Lange, Dorothea
American Exodus: A Record of Human Erosion, 81, 163–4
images of depression-era poverty, 81
Migrant Mother, 79, 80, 83
mothers breastfeeding or caring, 28–9, 47, 82–3
photography, 28–9, 47, 82, 259
Lawrence, G. Veron, 286
Leeper, Geoffrey, 181
Leuchtenburg, William E., 9

Life and Fortune, 47
 Lilienthal, David E., 243
 Limerick, Patricia, 9
 Long, Major Stephen, 35
 Lord, Russell, 30, 59
 Lorentz, Pare, 28, 286
 Lowdermilk, Walter Clay, 4, 27–8, 36,
 43, 63–6, 120–121, 186
 Lowitt, Richard, 9
 Luce, Henry, 28

M

The Machine in the Garden, 39–40
 MacLeish, Archibald, 28
 Maher, Neil, 243
The Man from Snowy River, 241, 287
 man-induced accelerated erosion, 60
 man-made desert climates, 159
 man-made deserts, 39
 accelerated erosion, 43
 catastrophic soil erosion
 problems, 44
 climax theory, 43
 weather and climate, 42
 Manifest Destiny, 43–4
March of Time, 28, 71, 79, 88–9
 Marsh, George Perkins, 40
 Marx, Leo, 40
 McKell, William, 140
 McMaster, Frederick, 137
 media references, 11–12
 Meinig, Donald, 8
 Merchant, Carolyn, 37
*Methods of Long-range Weather
 Forecasting*, 45
 migrant farm families or “dust bowl
 refugees,” 29
 Miller, Bruce
 accelerated erosion, 142
 Australian land-users, conservation
 principles, 141

Australian War Correspondent, 141
 erosion menace, 142
 first Australian-born newsreader,
 ABC, 141
 imagery of sand drift, 142
 Mitchell, Elyne, 167
 modern art, Australian, 10, 172
 Munich Agreement, 105
 Murray Valley Development League
 (MVDL), 240, 247, 254–5, 257,
 260, 263, 270
 Murray Valley, TVA
 ANFB, 257
 Melbourne *Argus*, 256, 258
 MVDL, 254–5
 The ‘River Authorities’ Issue, 257
 TVA philosophy, 255–6
 Murrumbidgee Valley Water Users’
 Association (MVWUA), 240,
 246, 252, 255

N

national destiny, definition, 34
 national soil authority, 156–7, 227
 national soil conservation program, 5
 nation-building scheme, 238, 252,
 288
Nation’s Forum of the Air, ABC’s, 121,
 255
 natural disaster, 16, 17, 60
 Act of God or disaster, 211
 Association of Australian
 Housewives, 210
 drought relief program, 211
 dust bowl downfall, 210
 dust storms and sand drift, 211
 gendered narratives, 212
 war-time housewife narratives, 211
 nature’s balance, concern of time,
 43
A New Deal, 28

New Deal social reform agenda, 15
 Newman, Keith, 125, 127, 129–30,
 133, 140–141, 170–172, 207–8,
 210, 216, 218, 237, 253
 New South Wales Campaign
 Burrinjuck Dam, 252–3
 Hall's combination of imagery, 247
 Hall's dam sequence, 246
 Hollywood studio system,
 cinesound films, 245
 irrigation and hydro-power, 253
 issues of erosion and climate
 fluctuation, 254
 labour parliamentarians, 247
 "the magic wand of water," 246
 Murrumbidgee Irrigation plan, 247
 narrative of irrigation salvation, 245
 New Deal narratives, 247
 non-theatrical exhibition of films,
 246
 "potential dust bowl," 248–9
 Snowy conflict, 253
 soil conservation, 250–251
 TVA water control system, 252
 water conservation proposal, 250
 Woronora Dam, scaled-down
 model, 249–50
 New South Wales SCS Project, 114
No Foe Shall Gather Our Harvest, 106
 non-fiction films, 47–8
 Norwood, Vera, 39

O

"Old Individualism," 66
 Old-World erosion, 28
On the Margins of the Good Earth, 8
 "Operation Dustbowl," 165
 optimism, 34–5, 39, 62–3, 72, 86,
 171, 188, 227, 286
 organic machine, 40, 241, 265,
 269–70

P

Parer, Damian, 109
 Patzel, N., 10
 Pearl Harbor, 106–7
 permanent deserts, 41, 46, 61–2, 81,
 89, 91, 155, 158
 personal accounts, 29, 84
 Phillips, Sarah, 243
 photo-story, 3, 46–8, 286
 photo-textual books, 46–7, 81
 Pick, Jock, 135–7, 158, 169, 285
 Pike, Zebulon M., 35
The Plow that Broke the Plains
 desert contradictions, 87–8
 sand drift, 67–8
 tractors, 67, 68
 policy-making, 2, 33
 politicians and national downfall
 narrative
 anti-soil conservation propaganda,
 181
Argus, 180
 "Collins Street financiers,"
 180–181
 Commonwealth Powers Act of
 1942, 180
 domestic war-time problems,
 179
 Labor Commonwealth Government,
 178
 machine politicians, 180
 McKell, William, 177
 1942 Constitutional Convention,
 178–80
 opposition to national action on
 erosion, 180
 regionalist vision, 178
Rich Land, Poor Land, 177
 Victorian bill, 179
 post-war national works program, 239
 Powell, Stephen, 8
 print media, 10, 33, 118

prisoners of war (POW) of the
 Japanese, 107, 130
 pseudoscientific theory, 35
 publicity campaign, 33

R

radio broadcasting, 33
Rain on the Plains, 123
The Rape of the Earth, 203
 Ratcliffe, Francis, 158
 Relief and Rehabilitation Plan, 211
 resettlement programs, 32, 75
*Rich Land Poor Land: A Study of Waste
 in the Natural Resources of
 America*, 28, 64, 177, 242–3,
 252
Road to Survival, 267
 Rothstein, Arthur
Fleeing a Dust Storm, 77–8, 127
 iconic images, 29, 76
 images of sand-buried homesteads,
 175
Steer Skull, 76–7, 262–3
 Stryker's workers, FSA
 photographers, 75

S

sabotage
Agricultural Magazine of the Air,
 135
Australia's Dying Heart, 135, 136
 evil influence, 135
 farmers and graziers, 136–7
 man-made desert, 135–6
 Nazi Fifth Column myth, 137
 research into sheep health, 137
Soil Erosion: The Enemy Within, 136
 "Saving OUR Soil," 159
 SCS. *See* Soil Conservation Service
 (SCS)

Scully, William, 247
 Sears, Paul, 4, 28, 41–3, 46, 63–4, 70
 second wind in Australia, 91–2
Simple Guide, 123
 Singapore, impacts of
 actual scenes or media portrayals,
 130
 drought and erosion conditions,
 125
Drought Grips Riverina, 127, 129,
 130
 fall of Singapore, 107, 123–4
 "the Grierson Plan," 124
 idea of human culpability and
 immorality, 124
 idea of immoral grazier, 129–30
 imagery of desolation, 127
 native shrub, saltbush, 125
 photographs of dead sheep, 131–3
 soil erosion and overstocking
 graziers, 124–5
Sydney Morning Herald and *Life*,
 129
 "When the Soil Dies," 124–6
 "smug" erosion, 30
 Smythe, William E., 36, 242
 Snowy campaign, 241
 dams and hydro-schemes, 244
 soil conservation and regional
 planning developments, 244
 Snowy Mountains Hydro-electric
 Scheme, 17, 270, 287–8
 social realism, American, 3, 15
 documentary film movement, 47–8
 FSA photographs, 47
 "moving pictures," 47
 social sciences and photographic
 documentation, 46
 social tragedy, 123
 soil and civilization
 human-induced soil erosion, 37
 soil infertility or soil erosion, 36

soil loss, 37
Soil and Civilization, 167, 169
 soil and human erosion
 benefits of the tractor, 220
 change of seasons, 221
 dust storms and sand drift, 220–221
 formation of sand dunes, 218
 Melbourne *Argus*, 219
 rural housewife, 219
 winter seasons or end of drought
 periods, 219–20
 soil conservation, 4
 Soil Conservation Act, 31
*Soil Conservation Reconnaissance
 Survey*, 59, 72
 Soil Conservation Service (SCS), 1
 soil erosion
 dust storms, 1
 “a national menace,” 2
 1939 international survey, 4
 “*Soil Erosion*” 138
 Soil Erosion and Water Conservation
 conference, 122–3
Soil Erosion Control, 122
 Soil Erosion Service (SES), 30–31
Soil Erosion: The Enemy Within, 246
 soil-healing, 30
 soil/human interrelationship, 61
 soil menace narratives, 2, 3, 138, 161,
 165
 soil mining farmer, 67
 soil ruin, 167–8
Soils and Men, 46, 69, 122, 169
 Standard Soil Conservation District
 Law, 31
 State Emergency Relief Administration
 (SERA), 29
 Stebbing, E.P., 42
Steer Skull, 76, 77, 155, 175, 262–3
 Steinbeck, John, 28, 29
 Steiner, Rudolph, 38
 stock losses, 139

strip-cropping, 32
 Stryker, Roy, 28–9
 Sutter, Paul, 39, 243
 Swain, Edward H. F., 268
Sydney Morning Herald, 125, 128–9,
 133–4, 140–141, 165–7, 170,
 175, 183, 205, 207, 216, 252–3

T
 Taylor, P., 28–9
 Tennessee Valley Authority (TVA), 9
 multi-purpose dam-building
 projects, 243
 for Murray Valley (*see* Murray
 Valley, TVA)
 New Deal planning model, 241–2
 preserving nature, 243
 Rich Land, Poor Land, 242, 252
 “the symbol of the dam,” 244
 symbols of modernity, 287
 total conservation, 243
 TVA: Democracy on the March, 243
 Thompson, Florence, 83
 Thomson, Donald F., 286
 Thomson, Virgil, 67
 Timbury, Fred, 286
 tractors
 commercial agriculture practices, 72
 grass-murdering ploughs, 72
 Great Plains, destroying grasslands,
 71
 modern machinery, 72
 SCS technical approach, 71
The Tragedy of Waste, 28
 transnationalism, 245
 transnational perspective, 5
True Gardens of the Gods, 8
Truth, 166
 Tugwell, Rexford, 32
 Turner, Frederick Jackson, 34
 Tyrrell, Ian, 7, 8, 9, 10, 34, 37, 269

U

- USA and Australia, political and cultural links, 10–11
- US/Australian transnational connections, 7
- US Bureau of Reclamation, 9, 17, 241–2, 245, 250
- US Department of Agriculture (USDA), 2, 31, 45–6, 59, 69, 122, 157, 169
- US National Reclamation Act*, 242
- US Resettlement Administration (RA), 28
- US SCS' conservation agronomy, 32
- US Soil Conservation Act, 167, 189
- US Soil Conservation Districts, 170

V

- The Valley is Ours*
 - dam-building projects, TVA, 259
 - Kiewa hydro-scheme, 263–4
 - Murray Valley, 257, 259–261
 - organic machine-like nature, 264–5
- The Plow*, 262
- rhythm of repetition, 261
- The River*, 260, 261, 264
- sand drift and blowing dust, 262–3
- snowy diversion debate, 259
- snowy water, 265–6
- visual and musical inspiration, 263
- The Valley of the Tennessee*, 252, 259
- vast anti-erosion measures, 167
- Victorian Drought*, 169, 173, 175–6
- Vogt, William, 255
- von Mossner, Alexa Weik, 30

W

- Wadham, Samuel, 166
- wagon abandoning a (water eroded) homestead, 164

- Wallace, Henry A., 28
- Walls of China*, 172
- war-time narratives, Australia's, 18
- war-time national grief, 287
- The Wasteland*, 169
- Water and Drainage Act*, 241
- water conservation, USA, 9
- Water Supply and Irrigation Bill of 1886*, 241
- Webster, Hardy, 36
- Weston, Mervyn, 237, 287
- White, Margaret Bourke, 47
- White, Richard, 35, 243
- Williams, Deane, 259
- wind erosion, 2–3
- wind erosion conditions, housewives' needs
 - Adelaide Advertiser*, 223–4
 - CWA, 226
 - domestic environment, 227
 - dust storms and war-time labor shortages, 222
 - erosion and drought conditions, 221
 - farming, sociological aspects, 221–2
 - Melbourne *Argus*, 223–6
 - modern electricity and water supply, 222–3
 - summer, women's tempers, 223
 - Women's Land Army, 224
- wind erosion control projects, 30–31
- wind erosion events, 10
 - downfall narratives, 159–60
 - "the ravages of erosion," 160–161
 - US Great Plain, 286
 - in Victorian districts, lighter soil types, 160
- women
 - complex systems, 40
 - domestication and morality, 38
 - dust storms, housewives and mothers, 209

eroding soil and humans, 208–10
housewives coping, 208
idea of vitalism, 38
“*living principle*” or “*wheel of life*”
 ideas, 38
myth of exceptionalism, 40
nation-building role, 209
nature’s nemesis, ‘civilisation,’ 37,
 38
need for support, effect of masking,
 210
process of decline, 209
wind erosion’s impacts, 203
women and human erosion
 American Exodus: A Record of
 Human Erosion, 81–2
depression-era poverty, 81
drought immigrants, 82
dust bowl refugees, 82
dying civilization, 84
female strength or stoicism, 83
mechanized farming and wind
 erosion, 83–4
Migrant Mother, 83
soil/human interrelationship, 81

Their Blood is Strong, 83
World Survey of Soil Erosion, 64
World War One
 Anzac myth, 116
 wheat plow-up, 67
World War Two
 Australian involvement, 105
 chronic Victorian erosion problems,
 189
 dust bowl imagery, 5–8
 media narratives, 10
 national soil service, 287
 political influences, 17
 soil conservation and erosion issues,
 16
Woronora Dam, 249
Worster, Donald, 40, 45, 63

Y

yeoman individualism, 34

Z

Zanuck, Darryl F., 155