

HEALTHY PARKS  
HEALTHY PEOPLE  
SOUTH AUSTRALIA  
2016-2021



## DISCUSSION PAPER

*Connecting nature and parks to mental health promotion and mental illness prevention strategies in South Australia*

**29 MAY 2017**

This paper is a joint piece of work by the Department for Health and Ageing and the Department of Environment, Water and Natural Resources, who have partnered to develop [Healthy Parks Healthy People SA](#).

The vision of Healthy Parks Healthy People SA is that all South Australians experience the health and wellbeing benefits of being connected to nature.

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## 1. AIM

The aim of this discussion paper is to outline the opportunities for mental health promotion and the prevention of mental illness by engaging in nature. To promote access to nature as part of a range of therapies to be used in the treatment of mental health problems, and to encourage engagement with nature as a daily or weekly habit that helps South Australians to maintain their mental health and wellbeing. As part of the Healthy Parks Healthy People Framework, the Department for Health and Ageing (DHA) and the Department of Environment, Water and Natural Resources (DEWNR) want to promote broader recognition within the health sector that contact with nature is an effective public health intervention and that access to parks and nature is a vital asset for enabling broader population mental health promotion strategies. *Connecting nature and parks to mental health promotion and mental illness prevention strategies in South Australia*, recognises and aims to strengthen, the synergies between the SA Mental Health Commission's *SA Mental Health Strategic Plan*, the *Office of the Chief Psychiatrist's SA Suicide Prevention Plan 2017-2021* and *Healthy Parks Healthy People SA*.

## 2. CONTEXT

### Healthy Parks Healthy People SA

Healthy Parks Healthy People is a global initiative comprised of international research, innovations and programs focused on the health benefits of human contact with nature. Research evidence unequivocally shows that spending time in nature has positive effects not only on physical and mental health, concentration, learning, problem solving and critical thinking capacity, but has also been shown to enhance creativity.

Healthy Parks Healthy People SA acknowledges that South Australian parks (both state government and local government managed) play an important part in improving outcomes for vulnerable members of the community in many different ways, and contribute to mitigating a number of the state's health and social issues. Engaging with nature offers a host of opportunities for play, exercise, relaxation, volunteering and social and community engagement.

Healthy Parks Healthy People SA is supported by a Public Health Partner Authority Agreement<sup>1</sup> between DHA and DEWNR. The strong partnership between the two agencies that underpins the framework is a first of its kind.

[The Healthy Parks Healthy People SA framework](#) was launched in June 2016. The framework envisages many sectors – environment, health, primary industries, Aboriginal affairs, social inclusion, education and urban planning – working together to maximise the often underused resources nature provides, including the benefits of nature-based health promotion. *Mental Health Benefits of Contact with Nature* is one of the seven focus areas of Healthy Parks Healthy People SA which recognises the mental health and wellbeing benefits of spending time in nature.

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<sup>1</sup> Public Health Partner Authorities are established in accordance with Section 51 of the *South Australian Public Health Act 2011* and formalised through an agreement between SA Health and a partnering agency. Their purpose is to build on opportunities for collaborative action to improve health and wellbeing outcomes for South Australians.

The framework forms the basis of a series of actions plans. The first in this series - '[Realising the mental health benefits of contact with nature](#)', was launched as part of Mental Health Week in October 2016. This action plan outlined some short-term outcomes. The development of a Discussion Paper for the new SA Mental Health Commission, on the evidence and opportunities of connecting nature and parks to mental health promotion and mental illness prevention strategies in South Australia, is the first key deliverable.

Key contributors in the development of this discussion paper include the Healthy Parks Healthy People project team (DEWNR and DHA representatives), the Healthy Parks Healthy People Leadership Team and the Mental Health and Nature reference group. Further advice has been sought from both the Office of the Chief Psychiatrist and the Mental Health Commission. This work has been sponsored by Dr Aaron Groves (Chief Psychiatrist, SA Health) and Mr Chris Burns CSC (SA Mental Health Commissioner).

### **The National and State Mental Health Agenda**

Traditionally, physical health and illness have dominated the focus of public health strategies globally, with limited attention directed towards mental illness prevention and mental health promotion. Tools for living a physically healthy life and preventing physical illness are widely accessible. One in five Australians suffer from mental illness at some point in their lives. Few people however, know what to do to protect their mental health and wellbeing, or that of others around them.

More recently, in Australia and globally, there has been growing recognition that the promotion of mental health and wellbeing requires a stronger focus with research suggesting that the costs of mental health problems in some cases exceeding other disorders such as cardiovascular disease (Barry and Jenkins 2007). However, whilst mental health promotion has progressively received more attention, treatment and minimising the stigma around mental health issues remain the key priority areas (The Australian Department of Health 2009).

A great deal of emerging research suggests that prevention and promotion strategies are a cost effective approach to investing in mental health, and minimising the onset and impact of serious mental illness (Barry and Jenkins 2007). Furthermore, evidence suggests that contact with nature can protect and promote mental health and wellbeing and prevent mental illness. There is limited public awareness however, around how to protect and promote mental health and wellbeing and the role of contact as a protective factor in its own right, and in reinforcing other protective factors.

The South Australian mental health system is primarily focused on the treatment of mental illness. There is a recognised gap in the system when it comes to mental health promotion and mental illness primary prevention. The recent appointment of a Mental Health Commissioner, responsible for developing and implementing a State Mental Health Plan, provides a renewed opportunity for focus and for whole of government action across the spectrum, from the prevention and treatment of mental illness to the promotion of mental health and wellbeing.

Other states have also appointed Mental Health Commissioners, each with the key objective to guide a broader approach to mental health. For example, the Queensland Mental Health Commission (2014) released the *Queensland Mental Health, Drug and Alcohol Strategic Plan 2014-*

2019. One of the key pillars of reform in this Strategic plan is: Better promotion, prevention and early intervention initiatives. The Strategic plan triggered the release of the *Queensland Mental Health Promotion, Prevention and Early Intervention Action Plan 2015-2017*. This action plan adopts a life course approach and incorporates actions to support the following priority areas: *Start Well, Develop and Learn Well, Work Well, Live Well* and *Age Well*. As of early 2017 the strategic plan and associated action plans are under review.

In 2014 the New South Wales Mental Health Commission (2014) released *Living Well: A Strategic Plan for Mental Health in NSW 2014-2024*. The Western Australian Mental Health Commission developed a similar strategic plan – *Better Choices. Better Lives: Western Australian Mental Health, Alcohol and Other Drug Services Plan 2015–2025* which has a strong focus on prevention and promotion.

Consultation is currently underway for the *Fifth National Mental Health Plan (2017 – 2022)* which is being developed under the auspices of the Council of Australian Government’s Health Council (CHC). Some recent work by the National Mental Health Commission Australia considered the economic and social benefits of investing in promotion, prevention and early intervention, with reference made to the concept of ‘mental wealth.’ The draft of the fifth plan is predominantly focused on treatment and improving the lives and experiences of those suffering from a mental illness but builds on previous plans which are regarded as ongoing.

The National Mental Health Prevention and Promotion Working Party, a body of state officials from both Mental Health and Public Health was established in 2000. The body developed a *National Action Plan for Promotion, Prevention and Early Intervention for Mental Health 2000* (Commonwealth of Australia 2000) as a joint Commonwealth, State and Territory initiative under the recommendations of the Australian Government’s *Second National Mental Health Plan*. This was the last time that mental health promotion featured as a key priority in the national mental health agenda.

The *Second National Mental Health Plan (1998 - 2003)* recognised a need for broader mental health promotion; this plan identified ‘reducing stigma’ and ‘improving mental health literacy’ as focus areas. The *National Action Plan for Promotion, Prevention and Early Intervention for Mental Health 2000* adopted a population health approach focused on addressing the social determinants of health. It outlined strategies for targeted prevention and promotion in mental health for all age groups, as well as higher risk social and cultural groups such as those living in rural and remote communities and Aboriginal and Torres Strait Islanders. Australia’s changing political agenda saw the body disbanded just as this work was gaining momentum.

In light of the mental illness prevention and mental health promotion work currently underway and the growing body of evidence that suggests the effectiveness of broader mental health promotion, this discussion paper highlights an opportunity for renewed focus in South Australia. This paper aims to provide the following:

- An exploration of the key challenges facing the mental health sector and mental health promotion research, to highlight the complexities that underpin work in this space.

- A summary of international evidence of population level frameworks and strategies that promote mental health and wellbeing.
- A review of existing models that outline the role and effectiveness of nature in mental health promotion.

### 3. OUTLINE

The purpose of this paper is to articulate a clear plan for embedding or linking nature in strategies to promote mental health and prevent mental illness in South Australia. The review of evidence revealed some key challenges that impinge our understanding of how to best approach population level mental health promotion and the prevention of mental illness. Whilst research suggests that nature is good for mental and physical health, evidence of how to best apply nature to mental health promotion strategies is limited. The connection between nature and mental health and wellbeing has largely been explored in the context of settings, or at the individual rather than population level. This paper aims to use the evidence to inform some key recommendations moving forward.

This paper seeks to identify:

- Key challenges that limit our capacity to promote mental health and wellbeing
- Mental health risk and protective factors to better inform targeted prevention and promotion strategies
- Key settings that provide opportunities for targeting risk and strengthening protective factors
- Evidence based outcomes and impacts of strategies for mental health promotion and the prevention of mental disorders
- Evidence based best practice approaches to applying nature solutions in mental health treatment, intervention, prevention and promotion
- Recommendations for how nature can be embedded within the broader policy imperative to promote mental health and prevent mental illness, to inform the new SA State Mental Health Plan and the SA Suicide Prevention Strategy 2017-2021. This paper and some key recommendations will be submitted in response to the consultation for the two plans.

This paper begins with a discussion of the definitions of mental health and how the conflated language is a persistent challenge that limits the positive promotion of mental health and wellbeing. This challenge is underscored by the broader issue of mental health literacy.

The *Social Determinants of Mental Health* section (5) highlights the complex social, economic and environmental conditions that impact on the daily lives and mental health of individuals. This section summarises research from the World Health Organization (WHO) on the social determinants of mental health. The WHO advocates for a life course perspective, and identifies a set of risk factors that also present opportunities for targeted prevention and promotion strategies. The cross-sectoral implications of mental health promotion and the prevention of mental illness become evident when looking from a life course perspective.

A summary of the WHO's (2013) Mental Health Action Plan is also presented, with a focus on the third key objective of the plan to *implement strategies for promotion and prevention in mental health*.

The *Role of Nature in Mental Health Promotion and the Prevention of Mental Disorders* section (7) presents evidence around the benefits of nature for mental wellbeing in prevention, early intervention and treatment.

The *Role of Settings in Mental Health Promotion and the Prevention of Mental Illness* section (8) considers the scope for settings-based prevention and promotion in mental health. Just as certain settings (i.e. schools and workplaces) are places where mental health risk factors can emerge, they also offer opportunities for targeted prevention and promotion strategies. This section explores the literature on mentally healthy workplaces and the Nature Conservancy's recent campaign to promote 'work in nature.' It goes on to explore the importance of mental health and wellbeing promotion and the prevention of mental disorders in early childhood, discussing the mental health risk and protective factors that are specific to this stage of life. Schools as settings offer opportunities for promoting engagement with nature and Nature Play SA is highlighted as a successful initiative aimed at fostering childhood wellbeing by strengthening connections to nature.

The evidence of mental health and wellbeing promotion programmes in nature is limited – programmes connecting mental health and nature have been largely treatment oriented. Sections 9 and 10 summarise some international and Australian approaches to mental health treatment and recovery such as Eco-therapy and Greencare. Examples of some specific programs are discussed. The summary outlines the successes, barriers and limitations of such programs to inform improved design for future initiatives with more of a prevention focus.

The final section of the paper describes international approaches to broader promotion of mental wellbeing. The section outlines the five ways/steps to wellbeing which is a list that emerged from research published by the New Economics Foundation (UK) that has now been adopted and promoted by mental health organisations such as Livingwell.org and at a regional (NZ) and local government level. These tips present a strategy for raising awareness of the benefits of mental health promotion and are simple actions that individuals can incorporate into their daily lives to protect and enhance their mental wellbeing.

The paper concludes with a set of opportunities and recommendations to inform future directions for policy and partnerships, promotion and research related to mental health promotion and the prevention of mental disorders in South Australia, including the importance of incorporating nature into such strategies.

#### 4. DEFINING MENTAL HEALTH, MENTAL ILLNESS AND MENTAL HEALTH PROMOTION

One of the key challenges in the mental health conversation is language, where the term mental health is often used to describe mental illness (Barry and Jenkins 2007). The label 'mental health' commonly describes mental disorders or conditions, such as depression, anxiety, and/or schizophrenia (Beyond Blue 2016). This creates confusion around what it means to be mentally well or healthy and contributes to a subsequent lack of recognition about the value of and capacity to promote population wide mental health and wellbeing.

The WHO (2013) defines mental health as:

...a state of well-being in which every individual realises his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to her or his community.

This definition focuses on wellness, rather than illness (Beyond Blue 2016), and offers depth, in terms of what contributes to the state of mental wellbeing. Possessing confidence and self-esteem contributes to good mental health (WA Mental Health Commission 2010). Other contributing factors include: being able to fully enjoy and appreciate other people, day-to-day life and our environment, being able to form positive relationships, and being able to use our abilities to reach our potential and deal with life's challenges.

A mental illness is a health problem that significantly affects how a person thinks, behaves and interacts with others. Major mental illnesses include: anxiety disorders, depression, schizophrenia, personality disorders, substance use disorders and bipolar mood disorders, and these are diagnosed according to standardised criteria (WA Mental Health Commission 2010). 'Mental health conditions' is also used to broadly describe mental disorders, illnesses, and syndromes (Mindhealthconnect 2014). 'Mental health problems' further add to the conflated language, describing 'problems' that affect a person's thinking, what they feel and their behaviour, however not to the extent of a mental illness or condition (WA Mental Health Commission 2010).

Arguably, there is a continuum, with mental health and wellbeing at one end and mental illnesses or mental health conditions at the other. Those living with a mental health condition can live a fulfilling life and experience good mental health and wellbeing. Moreover, living without a mental health condition, does not necessarily mean having good mental wellbeing (World Health Organization and the Calouste Gulbenkian Foundation 2014). As Figure 1 suggests, the relationship between mental health and wellbeing and mental illness involves two intersecting continua. It is important to determine a range of strategies that promote mental health across the population and across these mental wellbeing/illness continua, for those experiencing mental wellbeing, those with lived experience of mental illness, and also those without a diagnosed mental illness that experience poor mental wellbeing.

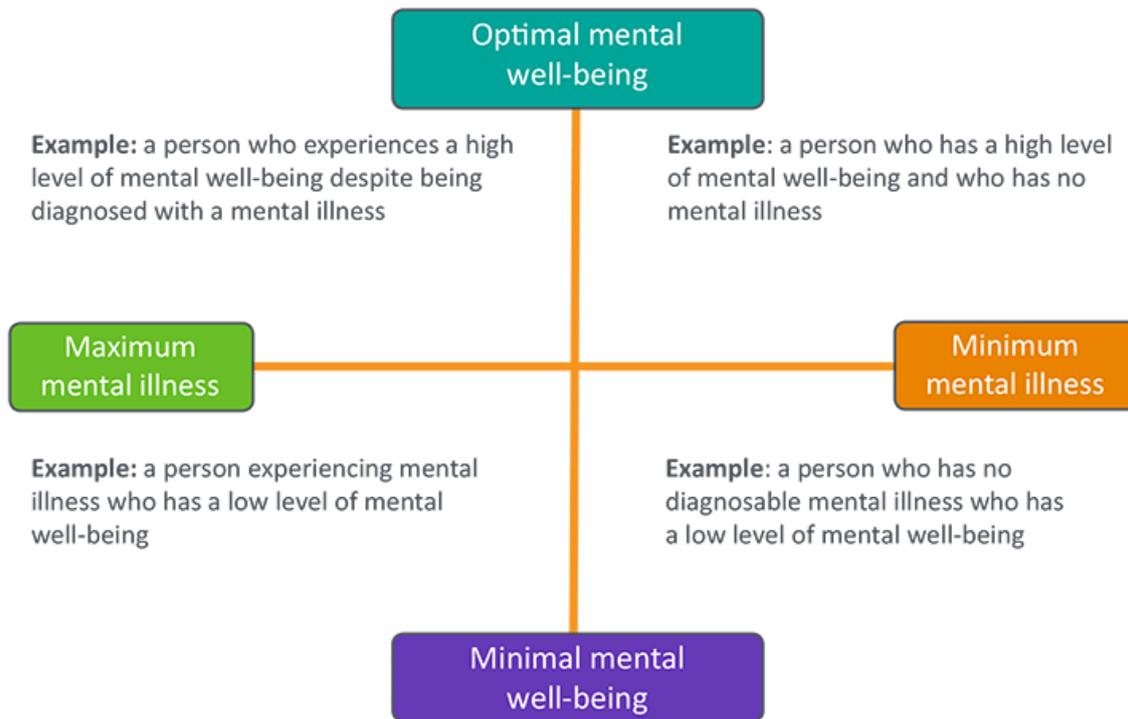


Figure 1: Mental wellbeing and mental illness continuum (Source: Togethertolive.ca)

What is important is that mental health continues to be promoted as a positive concept. Mental health promotion strategies aim to enhance the strengths of individuals and communities to achieve positive mental health and quality of life, incorporating the promotion of identified protective factors (Barry and Jenkins 2007; World Health Organization 2004). They aim to impact on the determinants of mental health and reduce inequality (World Health Organization 2004). Mental illness preventative interventions emphasise reducing the prevalence, incidence and impact of mental ill-health. These prevention strategies are sustainable, and whilst treatment is equally as important, it is less effective in terms of population level impact (Campion, Bhui & Bhugra 2012). Mental health promotion and mental illness prevention strategies should be considered as being more firmly integrated into both clinical and non-clinical prevention and promotion programs and engage a range of service providers to prevent and reduce the economic and social burden of mental illness.

Figure 2 is an excerpt from the NSW Mental Health Commission’s ‘Living well: a strategic plan for mental health in NSW’ (2014). It demonstrates the process by which investment in upstream mental health promotion strategies, can potentially lessen demand for downstream treatment for mental illness. As the diagram shows more upstream investment is less costly but required more frequently/consistently. Strategies to promote mental health and prevent mental disorders need to be embedded in daily living through a range of institutions and structures such as education and employment sectors.

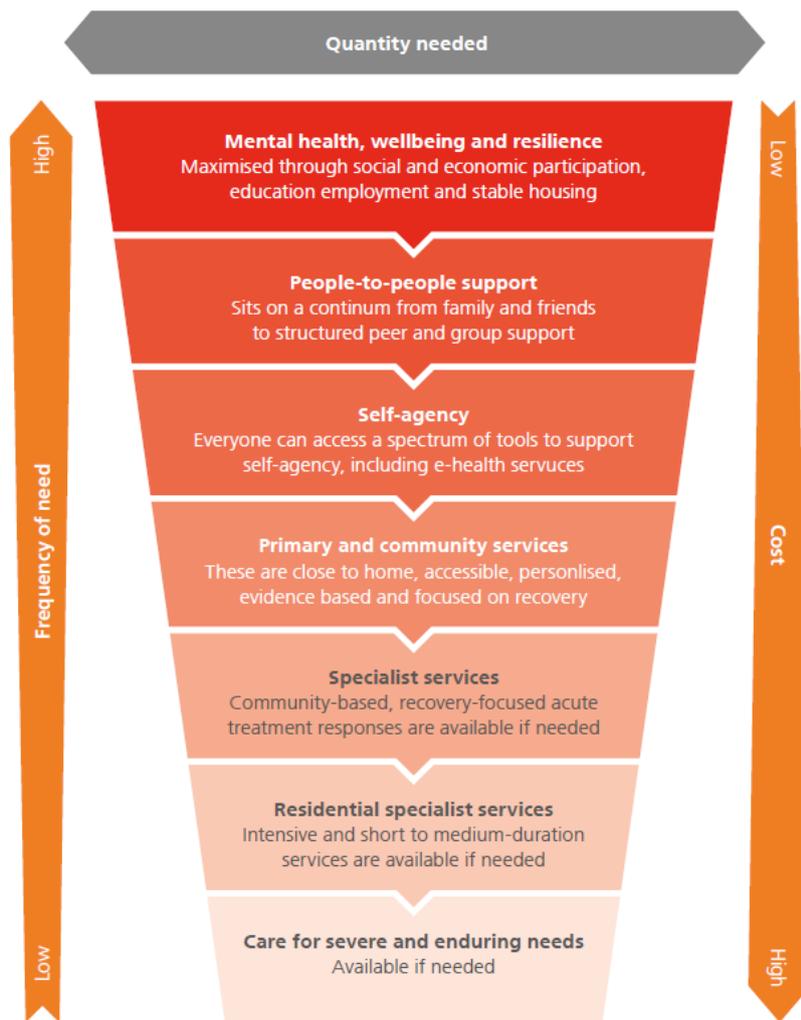


Figure 2: NSW example - mental health and wellbeing continuum

Mental health literacy is the ‘knowledge and beliefs about mental disorders which aid their recognition, management or prevention’ (Reavley and Jorm 2012). There is significant scope for improving the mental health literacy of Australians, to promote tools for the identification of risk factors and prevention and promotion strategies.

Mental health literacy has a role to play in both improving population understanding of mental illness, as well as a better understanding of mental health – how it is defined and how mental health and wellbeing can be promoted. The summary report of the 2011 Australian national survey of mental health literacy and stigma suggested that public understanding about the causes of mental illness is improving but still lacks sophistication (Reavley and Jorm 2012).

## 5. THE SOCIAL DETERMINANTS OF MENTAL HEALTH

The WHO Commission on the Social Determinants of Health (CSDH) released a report in 2008 which focused primarily on the impact of adverse living conditions on physical health, but also considered the implications for mental health, which the WHO recognise as a major factor shaping the global burden of disease. The World Health Organisation and the Calouste Gulbenkian Foundation *Social determinants of mental health report* (2014) advocated for a life course perspective to addressing the risk factors for mental illness and the promotion of mental health. This perspective considers the

social, economic and environmental conditions that affect an individual's daily life from before birth, through all stages of childhood (early, school aged, adolescence), and throughout working age and older age.

Social determinants of mental health include: economic inequality and poverty, adverse early life experiences, food insecurity, poor access to health care (Fisher and Baum 2010), low household income, material disadvantage, low educational attainment, unemployment, gender (Fryers et al, 2005), and social isolation, particularly for older people (Allen et al. 2014). There are differences in how these determinants affect mental health across and within population groups and subgroups. For example:

- Women experience higher levels of common mental disorders whilst men are overrepresented in other mental health disorders and in suicide (Allen et al. 2014).
- Whilst people of any socio-economic status (SES) group can be affected (Allen et al. 2014), the poor are disproportionately affected by mental health problems (Campion et al. 2013).

Culture is also a determinant of mental health wellbeing and in Australia mental health issues can be more pronounced for culturally and linguistically diverse subgroups and/or Aboriginal and Torres Strait Islander Australians. For example:

- In 2013, Aboriginal and Torres Strait Islander Australian adults were 2.7 times more likely than non-Indigenous adults to have high or very high levels of psychological distress (based on age standardised rates, ABS 2013).
- The suicide rate for Indigenous Australians was almost twice the rate of non-Indigenous Australians for the five year period between 2008 and 2012, and almost five times the rate for Indigenous Australians aged 15-19 years during the same period (Australian Institute of Health and Welfare 2015).
- Whilst suicide rates for non- Indigenous Australians declined by 25 per cent between 1998 and 2012, there was no change during that time for Indigenous suicide rates, highlighting a need for targeted action around the prevention of mental illness and the promotion of mental health and wellbeing for Indigenous Australians (Australian Institute of Health and Welfare 2015).

The social and cultural determinants of mental health are overlapping and interdependent. Those who are affected by multiple risk factors often experience more pronounced disadvantage. An example of this is that Australian Indigenous women are significantly more likely to experience psychological distress than Australian Indigenous men (Australian Institute of Health and Welfare 2015).

Some broad mental health risk factors identified in the Social Determinants of Mental Health report include: diminished access to quality social arrangements and institutions such as education, social care and work environments (WHO and the Calouste Gulbenkian Foundation 2014). Mental health risk factors operate at many levels: the individual, family, community and population level and as such need to be addressed through multilevel and cross sectoral action. Evidence already demonstrates the effectiveness of broad scale prevention strategies to address the social determinants of both mental and physical health (National Advisory Council on Mental Health 2009; Fisher and Baum 2010).

The Social Determinants of Mental Health Report (WHO and the Calouste Gulbenkian Foundation 2014), with reference to the work of Bell, Donkin and Marmot (2013) list the following focus areas for the promotion of mental wellbeing, which influence the risk of mental illness but at the same time present opportunities for intervention, prevention and promotion strategies:

- **Life-course:** prenatal, pregnancy and perinatal periods, early childhood, adolescence, working and family building years, older ages all related also to gender;
- **Parents, families, and households:** parenting behaviours/attitudes; material conditions (income, access to resources, food/nutrition, water, sanitation, housing, employment), employment conditions and unemployment, parental physical and mental health, pregnancy and maternal care, social support;
- **Community:** neighbourhood trust and safety, community based participation, violence/crime, attributes of the natural and built environment, neighbourhood deprivation;
- **Local services:** early years care and education provision, schools, youth/adolescent services, health care, social services, clean water and sanitation;
- **Country level factors:** poverty reduction, inequality, discrimination, governance, human rights, armed conflict, national policies to promote access to education, employment, health care, and housing and services proportionate to need, social protection policies that are universal and proportionate to need.

The effectiveness of early childhood prevention strategies, in generating the best population wide mental health benefits, was a strong message that emerged from the social determinants of mental health report (The World Health Organisation and the Calouste Gulbenkian Foundation 2014). Furthermore interest has emerged in policy approaches to promote resilience and positive mental health in early childhood and community based settings, including parenting education, or strategies for fostering local community social capital (Fisher and Baum 2010; Baum 2008; Friedli 2009). Such strategies can work to complement existing mental health services and interventions (Fisher and Baum 2010). Identifying and targeting the complex social determinants of mental health is vital in the process of developing tools and strategies for mental health promotion (WHO and the Calouste Gulbenkian Foundation 2014).

## 6. MENTAL HEALTH PROMOTION AND MENTAL ILLNESS PREVENTION STRATEGIES

The WHO (2013) *Mental Health Action Plan* acknowledged that mental health promotion and mental illness prevention strategies should consider mental health and wellbeing for everyone, from those who are already suffering from a mental illness, to those who are experiencing good mental health and wellbeing. The third objective outlined in the Action Plan is *to implement strategies for promotion and prevention in mental health*. The Action Plan considers that mental health promotion and mental illness prevention need to be understood from a life course perspective, and that early life stages are a crucial time. The WHO (2013) highlights the cross-sectoral implications for mental health promotion and the prevention of mental disorders and proposes that all government departments should be charged with responsibility to address mental health problems.

The Action Plan proposes that mental health promotion and the prevention of mental disorders across the life course could focus on aspects such as: reducing discrimination through antidiscrimination laws: promoting campaigns to redress mental illness stigma and promoting the rights, opportunities and care of individuals with mental disorders (WHO 2013). A series of actions are proposed including engaging all relevant stakeholders in advocacy to raise awareness of the

magnitude of the burden of disease associated with mental disorders and the availability of effective intervention strategies for the promotion of mental health, prevention of mental disorders and treatment, care, support and recovery of persons with mental disorders. This approach would incorporate advocating for those with mental illness to ensure their needs are met and that they are fully engaged in community life; including them in decision making and advocacy for the wider disability community; and as partners in development and implementation of programs for mental health promotion and the prevention of mental illness.

The Plan also suggests promoting ways to nurture individual attributes in the formative stages of life by applying tools such as early childhood and education programs to support the development of life skills, and safe, stable, and nurturing relationships between children, their parents and their carers. Early intervention is also important in the formative years, and building capacity for early intervention includes improving identification, prevention and treatment of emotional or behavioural problems. Furthermore, strong protection programs and community protection networks targeted at addressing child abuse are integral, as are broader programs to target family and domestic violence and protection for the poor and socioeconomically disadvantaged (WHO 2013).

## **7. THE ROLE OF NATURE IN MENTAL HEALTH PROMOTION AND THE PREVENTION OF MENTAL DISORDERS**

The role of nature as an upstream promotion and prevention strategy in public health has started to gain interest from a research, policy and clinical perspective. Investigating solutions within an ecological paradigm is likely to create a shift in thinking around how nature can be an affordable, accessible and equitable resource in both health promotion and restorative public health interventions (Maller et al. 2006; Mind 2007).

Many scholars and philosophers throughout history have contributed to broad recognition that nature plays an integral role in human health and wellbeing (Bratman et al. 2012), suggesting an inherent psychological, emotional, and spiritual connection between humans and nature (Wilson 1984; Katcher and Beck 1987; Maller et al. 2009; Williams 2016). For example, Wilson's (1984) 'Biophilia' theory hypothesizes that humans instinctively need to bond with nature; this is strongly supported by Kaplan's (1995) 'Attention Restoration Theory' which highlights the long term psychological benefits of exposure to the natural environment, for those suffering from stress. Kaplan (1995) suggested that being close to nature helps people to forget their worries, clear their mind, enjoy a serene environment and spend time reflecting in solitude.

Contrary to this instinctive human-nature relationship, modern urbanisation has instigated an extraordinary disengagement of humans from the natural environment (Axelrod and Suedfeld 1995; Beck and Katcher 1996; Katcher and Beck 1987). More than half of the world's population now lives in cities (Dye 2008, Lederbogen 2011) and it is predicted that by 2050 close to 70 per cent of the world's population will live in urban areas (Lederbogen 2011). In evolutionary terms 'the urban environment is a spontaneous, changeable and historically unfamiliar habitat' (McMichael 2001, p. 252). In addition to where we live, we are also choosing modern conveniences that are contributing to the internal conflict between our 'innate need to connect with nature and our disconnection from it' (Burls 2007a, p. 20). This internal conflict can perpetuate negative emotions and physical and psychological problems, heightening the risk of developing a mental health problem or illness.

Urban living has been associated with chronic disorders, more stressful living and more pronounced social disparities (Dye 2008). People living in cities have greater difficulty processing stress (Lederbogen 2011), and are at a greater risk of experiencing anxiety and mood disorders (Peen et al. 2010). The risk of developing schizophrenia is more than doubled for an individual born into an urban (rather than rural) environment (Krabbandam and van Os 2005; Vassos et al. 2012). A UK study tracked the effect, over some years, of moving from an urban area with little or no green space to one with more green space and discovered that participants experienced an increased feeling of contentment for at least three years after their move (Alcock et al. 2014). Connection to nature has also been found to be critical for disease prevention, and the promotion of positive psychological states (Beil & Hanes 2013; Abraham et al 2010; O'Brien et al 2014).

Use of parks by adults is known to produce greater psychological benefits than equivalent time spent indoors (Webb 2014). Specifically, green open space benefits are more favourable than indoor rest or meditation, particularly for adults who spend a large proportion of their week indoors (Grinde & Patil 2009). Areas with high plant biodiversity, such as forests, are also high in Phytoncides - chemicals produced by plants that have been shown to reduce blood pressure, increase immune function and relieve depression (Tsunetsugu et al. 2010). One study that found that visits to parks have a positive effect on depression and blood pressure also found that the length of the visit was important:

...up to a further 7% of depression cases and 9% of high blood pressure cases could be prevented if all city residents were to visit green spaces at least once a week for an average duration of 30 minutes or more. (Shanahan et al 2016, p.3).

Another study found that a 90 minute walk in nature, as compared to a 90 minute urban walk, had a much more positive impact on mental wellbeing in that it reduced neural activity associated with the part of the brain that triggers rumination, which is known to heighten the risk of depression (Bratman et al. 2015). Similarly a study by Kim et al. (2010) found that viewing images of urban areas, compared to viewing images of natural areas, triggered neural activity in the part of the brain associated with stress, anxiety and other negative emotions.

The social benefits associated with spending time in parks are widespread, and can further impact on mental wellbeing. The mental health benefits of access to parks are more pronounced for older people, for example, than they are for either adolescents or adult sub groups (Hawkins et al 2013). One study that looked at the social and mental health implications of activity in nature for immigrants also found that activities in natural spaces had a positive impact on not only social and psychological stress, but reduced their focus on housing stress as well. This study also highlighted the importance of support services for migrant groups to learn how to access natural spaces (Hordyk, Hanley and Richard 2015).

Indigenous experiences of health and wellbeing are inherently linked to land and the natural environment. Berry et al. (2010) explore the notion that, particularly in remote settings, Caring-for-Country projects offer an opportunity to enhance the social and emotional wellbeing of indigenous Australians, and at the same time achieve climate change adaptation goals.

The following definition of Aboriginal/Indigenous health, from Swan and Raphael (1995) highlights how mental, physical, cultural and spiritual health, are viewed holistically, and are interconnected with the land:

“The Aboriginal concept of health is holistic, encompassing mental health and physical, cultural and spiritual health. Land is central to wellbeing. This holistic concept does not merely refer to the ‘whole body’ but in fact is steeped in the harmonised inter-relations which culturally constitute wellbeing. These inter-relating factors can be categorised largely as spiritual, environmental, ideological, political, social, economic, mental and physical. Crucially it must be understood that when the harmony of these interrelations is disrupted, Aboriginal ill-health will persist.’(p.13)

The National Aboriginal and Torres Strait Islander Health Plan 2013 – 2023 (The Australian Department of Health 2013) places culture at the centre of priorities for improving Aboriginal health status. Connection to Country is a critical component of culture and is recognised as an important determinant of Aboriginal health and wellbeing.

By ensuring that the quality and health of our natural environment is upheld, and parks and natural spaces are widely accessible, nature could and should be seen to be a key component of broader health infrastructure that has the capacity to address the needs of many societal subgroups, and the broader population as a whole.

By ensuring that the quality and health of our natural environment is upheld, and parks and natural spaces are widely accessible, nature could and should be seen to be a key component of a broader health infrastructure that has the capacity to address the needs of many societal subgroups, and the broader population as a whole.

## **8. THE ROLE OF SETTINGS IN MENTAL HEALTH PROMOTION AND THE PREVENTION OF MENTAL ILLNESS**

Settings are important for mental health promotion and the prevention of mental disorders. Schools, tertiary education institutions, workplaces, the community and homes are settings in which many risk and protective factors emerge. As such, these settings offer opportunities for use of nature in preventative approaches to strengthen wellbeing and in intervention approaches for those with mental illness. Whilst nature is regarded as a setting, access to nature can be facilitated in other settings as a strategy for promoting mental health and preventing mental disorders within these settings. The following discussion highlights the importance of specific settings and how accessing nature can link in and add to mental health promotion efforts and outcomes in these settings.

### **Mentally Healthy Workplaces**

Workplaces play an important role in shaping the mental health and wellbeing of employees. Whilst workplaces can present risk factors for mental health, they also offer opportunities for protecting and promoting mental health and wellbeing and additionally, for strengthening support structures for employees who are experiencing mental health problems or illness.

Working and being employed (in good quality employment) has been shown to be very good for both physical and mental health (The Royal Australasian College of Physicians 2015). The workplace can provide individuals with a sense of purpose and achievement as well as opportunities to develop strong relationships - all of which are known to promote mental wellbeing. Workplaces provide

opportunities to improve rehabilitation interventions for people with mental health conditions by incorporating approaches in partnership with healthcare that focus on returning to work, ensuring that workplaces are accommodating and non-discriminatory, and that there are early intervention mechanisms to support workers to stay in work (Waddell, Burton, and Kendall 2013). Whilst mental wellbeing is not the primary concern/responsibility of workplaces and businesses, interest is growing in the range of opportunities for mental health promotion in these settings as part of population-based approaches.

The workplace can, however, present some risks to mental health. Not only are mental health problems prevalent in the workforce, some can also be attributable to certain working conditions. The most prominent and potentially harmful influences are psychosocial work stressors which include risks such as high job demands, low job control and bullying. Work-related mental stress, as described by Safe Work Australia (2013, p. 1), is - *'the adverse reaction experienced by workers when workplace demands and responsibilities are greater than the worker can comfortably manage or are beyond the workers' capabilities.'* The overall impact of work related stress on individual workplaces and the economy as a whole is considerable. Prolonged or excessive work related stress can be a risk factor for developing a mental and/or physical illness, and has the potential to cause a pre-existing mental health condition to escalate. Mental illness is the leading cause of sickness absence and long term work incapacity in most developed countries. It is also the leading cause of 'presenteeism' - where an employee is suffering but continues to work less productively (Mentally Healthy Workplace Alliance 2014).

Improving workplace capacity to promote and protect mental wellbeing involves clearly identifying the causes and risks of work related stress, and subsequent strategies to address these. Safe Work Australia (2013) identifies seven subcategories of work-related mental stresses that highlight both causes and impacts. These include: work pressure; exposure to work place or occupational violence; exposure to traumatic events; suicide or attempted suicide; other mental stress factors (i.e. dietary or deficiency diseases); work related harassment or bullying, and other harassment.

The Mentally Healthy Work Place Alliance in partnership with the Black Dog Institute, UNSW and the National Mental Health Commission (2014) undertook a review of literature on mentally healthy workplaces, with an aim to bridge the gap between recommendations emerging from literature and what workplaces actually do. The report presents relevant findings and practical advice for workplaces to reduce stress and improve employee mental wellbeing. It outlines a set of evidence based risk and protective domains and associated factors that interact in complex ways - working towards mentally healthier workplaces should involve targeting these collectively rather than handpicking one domain/factor. The factors include:

- **The design of the job** - (e.g. how demanding the role is, exposure to trauma, availability of adequate resources to do the job etc.).
- **Team/group factors** - (e.g. quality relationships, support from colleagues and managers, effective good ('transformational') leadership and management etc.).
- **Organisational factors** - (e.g. support from organisation, recognition and rewards, safe environment, positive organisational climate).

- **Work/home conflict** - (e.g. how the demands of personal and home life impact or interfere with work).
- **Individual biopsychosocial factors** - (genetics, personality early life events, history of mental disorder).

The report identified a number of evidence-based strategies to target the above mentioned domains, including:

- **Designing and managing work to minimise harm** - e.g. flexible working hours, reducing other known risk factors, ensuring the physical work environment is safe.
- **Promoting protective factors at an organisational level to maximise resilience** - e.g. build a psychosocial safety climate, implement anti-bullying policies, enhance organisational justice, promote team based interventions, provide manager and leadership training and manage change effectively.
- **Enhancing personal resilience** – e.g. providing resilience training and stress management which utilises evidence-based techniques, coaching and mentoring, and worksite physical activity programs.
- **Promoting and facilitating early help-seeking** – e.g. implementing processes to conduct well-being checks, use of Employee Assistance Programs which utilise experienced staff and evidence-based methods and peer support schemes.
- **Supporting workers recovery from mental illness and reducing stigma** – e.g. provide supervisor support and training, facilitate partial sickness absence (working only hours that they can handle to manage their illness), provide return-to-work programs, encourage individual placement support for those with severe mental illness, provide a supportive environment for those engaged in work focused exposure therapy.

There is growing evidence around the impact that nature can have on reducing stress (Largo-Wight et al. 2011) and enhancing attention and concentration in the workplace (Hochuli and Taylor 2017). According to the Nature Conservancy (2017), nature can improve the creativity and sharpness of employee thinking. There are also resources emerging for not only improving the mental wellbeing of employees, but doing so using nature [see for example the David Suzuki Foundations 30x30 Nature challenge (2017) workplaces resources which are described in more detail in Section 9 of this paper]. Simply viewing nature, for example, looking at or smelling fresh flowers, has been shown to have a positive psychological and relaxing impact on office workers (Ikei et al. 2014).

‘Work with Nature Week’ is a campaign undertaken by the Nature Conservancy (2017) proposing that employees move their work to nature for an hour to improve their wellbeing (see appendix A for more information on ‘Work with nature’ week). Whilst the quality of nature experiences in the urban environment has been challenged in the past, urban ecologists have reframed views around urban nature more recently. Access to a small urban garden or the opportunity to sit next to a street tree during the work day can provide a fulfilling nature experience and exposure to biodiversity (Hochuli and Taylor 2017).

## Childhood Mental Health Promotion and Schools and Education Institutions as Settings

Childhood presents a number of mental health risk and protective factors - the risk factors being those influences that have been found to increase the likelihood that children will experience a mental health problem, and the protective factors are those known influences that are found to decrease the likelihood that children will develop mental health difficulties. Schools are therefore an important setting for mental health promotion and the prevention of mental illness.

*Kids matter* published a document on mental health risk and protective factors (Kidsmatter.edu.au 2016). The factors are divided into categories and demonstrate a number of opportunities for mental health promotion and early intervention:

- Child:
  - **Risk factors** - Complications during birth and early infancy, difficult temperament (overly shy or aggressive), low self-esteem, developmental delay, poor bonding with parent/s
  - **Protective factors** - Easy temperament, good social and emotional skills, positive coping style, optimistic outlook on life, good attachment to parents or carers
- Family:
  - **Risk factors** - Family disharmony, instability or breakup, harsh or inconsistent discipline style, parent/s with mental illness or substance abuse, siblings with a serious illness or disability
  - **Protective factors** - Family harmony and stability, supportive parenting and family environment, consistency (firm boundaries and limits)
- School:
  - **Risk factors** - Peer rejection and/or bullying, academic failure, poor attendance, poor connection between family and school
  - **Protective factors** - Positive school climate, sense of belonging and connectedness between family and school, opportunity for participation in a range of activities, academic achievement
- Life events:
  - **Risk factors** - Difficult school transition, death of a family member, emotional trauma, experience of physical or sexual abuse
  - **Protective factors** - Involvement with a caring adult, support available at critical times
- Society:
  - **Risk factors** - Discrimination, isolation, socioeconomic disadvantage, lack of access to support services
  - **Protective factors** - Participation in community networks, access to support services, economic security, strong cultural identity and pride.

Given the emphasis that the WHO has placed on early childhood as a critical time in the life course for mental health promotion and the prevention of mental disorders, early childhood centre and schools are important settings for targeted mental health promotion and further exploring the role of nature.

Through a qualitative research study interviewing school principals, teachers and environmental education professionals, Maller (2009) found that hands-on contact with nature has a number of benefits for the promotion of school aged children's mental, emotional and social wellbeing at this very crucial time in their development. The benefits identified included: improved self-esteem; improved self-confidence; sense of achievement; catering to different learning styles; sensory engagement; engagement with school; improved care and nurturing skills; greater connectedness to others; freedom and creativity and stress release.

The evidence around the benefits of unstructured nature play for children is also growing rapidly. The benefits are broad and include: improved development of gross motor skills and concentration; improved problem solving and critical thinking; improved enquiry and observational skills; greater curiosity, imagination and creativity; increased joy and confidence; enhanced social skills; enhanced self-efficacy and increased interest in the environment (Wilson 2012). Such benefits can have a positive impact on both immediate and longer term mental health. Nature Play SA (2014) is a recent initiative of the South Australian Government (and has also been implemented in WA, QLD and the ACT). It promotes unstructured outdoor play being embedded as part of everyday childhood. The US based 'Wild Network' operates in a similar way, and is globally renowned (see Appendix A for more information).

### **Mental Wellbeing in Universities and Tertiary Education institutions**

Universities and tertiary education institutions also provide opportunities for the promotion of mental health and wellbeing. For example, the University of South Australia recently released a UniSA Safety and Wellbeing Strategic Plan (2016-2018) and are soon to release a Student Wellbeing Action Plan. The UniSA website provides guidelines for Mental Health and Wellbeing, citing a focus on primary secondary and tertiary prevention and offering some practical steps to support mental health – there is no clear nature focus embedded in this strategy however.

There is some research around the wellbeing benefits of gardens in university settings. Natural spaces, such as healing gardens allow people a change of scene and a space to escape the pressures that can come with a university environment. Gardens also have positive effects on mental wellbeing by fostering social engagement and encourage people to be physically active (Lau and Yang 2009).

Both the SA Mental Health Strategic Plan and the SA Suicide Prevention Plan provide an opportunity to consider workplaces, schools, higher education institutions and other community settings, as settings for supporting mental health outcomes. As such the Plans could offer recommendations to work towards further embedding access to nature in workplaces and work schedules and schools and higher education institutions. Whilst there are programs and initiatives emerging in this space, more can be done to enhance and promote more widespread engagement with these programs and further promote their benefits for mental wellbeing.

## 9. NATURE AND MENTAL HEALTH – INTERNATIONAL RESEARCH, INITIATIVES AND PROGRAMS

Whilst there is growing recognition of the benefit of engagement with parks and nature for mental wellbeing, the majority of mental health programmes and initiatives that promote engagement with parks and nature are those designed to treat mental illness. ‘Ecotherapy’, ‘Greencare,’ ‘Green Rehabilitation’ and nature-based interventions are terms commonly used to describe such programs and initiatives (Natural England 2016). This section reviews examples and emerging evidence around nature-based intervention programs. The review begins with a focus on the UK evidence, where the health system has strong parallels with Australia’s and where mental health treatment in nature strategies and promotion strategies are more well-established. There is also some discussion of a few instances where nature programs with a promotion angle have been trialled. A review of similar work in other countries follows, including in the US, Canada, Australia and New Zealand. This review is not an exhaustive list, but rather presents a broad selection of evidence of nature-based programs that have had a positive impact on mental health and wellbeing.

### **UNITED KINGDOM**

A UK review of nature based interventions for mental health care identified the three most common forms of Green Care, all focused on treatment for people with an existing mental health condition or disorder i.e.: social and therapeutic horticulture; environmental conservation interventions and care farming (Natural England 2016).

Social and therapeutic horticulture uses plants and gardens to enhance physical and mental health through programs and activities tailored to suit individual’s needs and goals. Some key benefits, as outlined in Figure 3, include:

- Better physical health through exercise and learning how to use or strengthen muscles to improve mobility
- Improved mental health through a sense of purpose and achievement
- The opportunity to connect with others – reducing feelings of isolation or exclusion
- Acquiring new skills to improve the chances of finding employment
- Just feeling better for being outside, in touch with nature and in the 'great outdoors' (Thrive.org.uk 2016)



Figure 3: The benefits of social and therapeutic horticulture centred around health and wellbeing (Source: Thrive.uk.org 2016)

Environmental conservation interventions involve engaging people suffering from a mental illness in conservation initiatives. Wellbeing is enhanced not only through the immersion in nature, but the process of volunteering and nature stewardship providing a sense of purpose and achievement, which in turn promotes positive self-esteem.

Care farming involves using farming practices for therapy, offering supervised, structured programmes for farming related activities. These activities are largely targeted at providing health, social and/or education services for individuals from a range of vulnerable groups. Care Farming UK is a registered charity which promotes care farming by increasing the profile and awareness of care farming, and supports care farmers by monitoring the quality of care farming services through initiatives such as establishing a standard code of practice. The charity has also facilitated the development of networks of care farmers across the UK.

In Nature England's (2016) review of nature based interventions, similar benefits were identified for all three forms of Greencare. Benefits include:

- Psychological restoration and increased general mental wellbeing
- Reduction in depression, anxiety and stress-related symptoms
- Improvement in dementia-related symptoms
- Improved self-esteem, confidence and mood
- Increased attentional capacity and cognition
- Improved happiness, satisfaction and quality of life
- Sense of peace, calm or relaxation
- Feelings of safety and security
- Increased social contact, inclusion and sense of belonging; and
- Increase in work skills, meaningful activity and personal achievement (Nature England 2016).

The review outlined recommendations for improvement in coordination to enhance the impact and capacity of the Greencare sector i.e.:

- Greater collaboration was required within the sector including establishing a green care umbrella organisation, to promote the sector and establish consistency in messages from the sector to gain wider support in a policy environment.
- Adopting a more universal term for the sector, to streamline action.
- Establishing a clear distinction between specific interventions for individuals with a defined need (green care), and public health programmes for the general population. The objective being that nature based service providers would understand better the appropriate pitch to the relevant government bodies for support i.e. green care providers will target health and social care commissioners and more general nature-based programmes will target Commissioners of Public Health.

The United Kingdom Secretary of State Environment, Food and Rural Affairs presented a white paper to parliament in 2011 entitled *The Natural Choice: securing the value of nature*, with a core objective of 'Reconnecting people and nature.' The paper acknowledged the demonstrated positive impact of nature on physical and mental health, and that human engagement with nature enriched the health of the natural environment. The white paper proposed the following actions:

- Public Health England to publish practical evidence about improving health, including through access to a good natural environment
- Remove barriers to learning outdoors and increase schools' abilities to teach outdoors when they wish to do so
- Create a new 'Local Green Areas' designation to allow local people to protect the green areas that are important to them
- Establish a Green Infrastructure Partnership with civil society to support the development of green infrastructure in England; and
- Launch a new phase of the Muck In4Life campaign (connecting local families with local environmental activities), offering volunteering opportunities to improve the quality of life in towns, cities and the countryside (Her Majesty's Government 2011)

At the University of Derby (2017), the Nature Connectedness Research Group worked in partnership with Nature England and national conservation NGOs and a number of PhD students to research nature connectedness. Their research programs included '30 days wild' and '3 good things in nature' and a spin off from that project - the *Finding Nature* mobile app (see appendix A for more info on these programs). The group have convened a nature connections conference, and festival (promoting nature connections to a broader population wide audience) as well as an Open Air Laboratories (OPAL) conference. OPAL is focused on developing and promoting opportunities for education and learning activities in nature.

One study conducted by Richardson and Hallam (2013) in this research group, analysed the words of a year-long journal monitoring over 200 trips to a semirural landscape. Two main themes emerged from thematic analysis of the journal; the transition from observer to nature connectedness and; the ways in which the natural environment was experienced once a connection was made. The findings

suggest that regular engagement with semi-rural countryside can produce mental health benefits and that making a connection does not necessarily require being in the wilderness.

The Forestry Commission Scotland (2016) runs a program called Branching Out that aims to improve the Health-Related Quality of Life of adults experiencing severe and enduring mental health problems. The service includes three hours of activities per week, in a woodland setting, for a twelve week period. The activities are adjusted dependent on the specific client group, where they end up going and the season and include a combination of physical exercise, conservation, bushcraft and environmental art. There is an achievement aspect to the program too, where participants are awarded with certificates of completion, tool handling and achievement. Upon completion of the course participants are also linked up with other leisure, volunteer and training opportunities based on their interest. Survey results undertaken as part of program evaluation have shown that small but significant improvements in participants' mental health, social participation and general vitality; these have been particularly notable for those experiencing more severe mental health problems.

### **UNITED STATES OF AMERICA**

Whilst the USA health system is structured very differently to that of the UK or Australia, there has been clear recognition in the USA of the important role of nature in promoting health and wellbeing. The American Public Health Association (2013) highlighted the importance of doing more in nature, such as: walking and physical activity, encouraging social connections and reducing stress and illness. In their policy statement abstract they state -

'In order to promote people-nature contact across American communities, public health practitioners and policymakers should form alliances with parks departments, planning and design departments, housing agencies, greening and garden organizations, cooperative extension services, school districts, and nature centers to prioritize access to natural areas, productive landscapes, and other green spaces for people of all ages, income levels, and abilities. Moreover, public health officials, physicians, nurse practitioners, and other health professionals should advise patients and the public at large about the benefits of green exercise, personal and community gardening, and nature-based play and recreation.' (The American Public Health Association 2013, p.1).

The publication concluded with a series of eleven recommended action steps for public health practitioners, policymakers, community-based and environmental justice groups and researchers. The action steps would advance policy and planning activities that further prioritise the relationship between health and wellbeing and green space in relevant legislation, land-use planning guidance or public health priority-setting regulations (The American Public Health Association 2013).

According to Bishop (2013), 'Nature is power-*full*, yet often overlooked as a mental health treatment option in the United States.' Bishop's study suggests that mental health services should engage nature-related programming to provide opportunities that enhance multiple aspects of health and well-being, including social inclusion to promoted the de-stigmatization of mental illnesses - 'The use of nature must therefore be implemented within all levels of the mental healthcare delivery system in the United States in order to enrich the lives of people, progressively develop society, and further advance humanity' (Bishop 2013).

Forest therapy is a form of nature immersion that has gained momentum not only in the USA but also across Asia, and in Canada and Europe. Forest Therapy involves walking in nature but doing so slowly and mindfully so that all senses are engaged (Krieger 2015). Originating in Japan, where the practice is known as *shirin-yoku* (which translates to ‘forest bathing.’), research shows the practice provides a host of physical and mental health benefits (Lee et al. 2012). The goals of forest therapy advocates and champions in the US are to get the medical system across the country to start handing out forest prescriptions (more information on forest therapy is provided in appendix A). A recent Swedish study assessed qualitative reports of forest based rehabilitation for a subset of patients experiencing exhaustion disorder. Whilst forest therapy should not be the only treatment option for exhaustion disorder, the study showed that the treatment provided rest, restoration, time for reflection and potential contributions to coping processing among the patients (Sonntag-Öström et al. 2015).

At the University of Washington’s College of Environment a research project entitled *Green Cities: Good Health* has been running since 2010. This project recognises how important regular nature encounters are for mental health and wellbeing, and their ability to ‘encourage social interaction and de-stressing through exercise or conversation, and provide calming settings’ (Wolf and Flora 2010). The study focus also considers the importance of workplace, college and childhood settings. The *Green Cities: Good Health* project acknowledges a number of ways that spending time in nature can have positive impacts on mental health, including the impact nature can have in the treatment of mental disorders such as Attention Deficit Disorder, Alzheimer’s and Dementia, and stress and depression. The project recognises the physical activity and social connection benefits of contact with nature as well as the importance of landscape and green infrastructure design.

The *Healthy Parks Healthy People* initiative originated in Victoria, but has been picked up by many regions across the globe. The San Francisco Bay area in California has been a strong contributor with *The HPHP: Bay Area* regional coalition officially formed in April 2012. Recently, the HPHP project team published *Healthy Parks Healthy People: Bay Area – A road map and case study for regional collaboration* (Institute at the Golden Gate 2017). This document highlights how important it is that *Healthy Parks Healthy People* initiatives across the globe partner with the right organisations to bring together the right resources and address the specific needs and opportunities of their region.

One key lesson cited in the document was that knowledge sharing between and within collaborative organisations enabled stronger identification of the needs of the population, and of the various existing tools and solutions that may be able to be leveraged. The roadmap highlighted the need to provide a platform for knowledge sharing, such as a website, newsletter and the convening of regular events for the purpose of knowledge sharing. Another key message in the roadmap is that a broader push to get non-typical park users to fully embrace nature as health solutions involves strengthening the link between parks as resources and the health care setting, i.e. direct promotion of and prescription of programs in nature for patients with certain health problems. The key message of the roadmap document is that HPHP should maximise partnerships and collaborative efforts to leverage joint knowledge and affect change at a population level.

## CANADA

Minding our Bodies (2008-2013) was a treatment focused Canadian project that promoted physical activity and healthy eating for people with serious mental illness. In the latter stages of the project a literature review - *The Nurture of Nature: Natural Settings and their Mental Health Benefits* (2013) was commissioned. This research outlined the considerable benefits of natural settings for improving physical and mental health and reducing the load on health care. The literature review recognised the benefits of being in nature and in viewing nature which included positive impact on attention, the healing benefits and the benefits of green exercise. The review noted that the evidence around the health benefits of nature is too compelling to ignore, and made reference to the *Natural England* program in the UK as a model for population level promotion of the benefits of nature that could be applied in the Canadian context.

A number of programs connecting nature and health have since emerged in various provinces of Canada. Mood Walks (2013) in the province of Ontario promotes physical and mental health and wellbeing by encouraging physical activity in nature. The Canadian Mental Health Association spearheaded this initiative in partnership with mental health and conservation hiking organisations (more information on this program can be found in appendix A). The program pilot season which commenced in 2014 was targeted at older adults (50+). The evaluation report showed that in that year alone:

- 22 new walking groups were established across the province
- 29 new partnerships between local mental health agencies and hiking groups and conservation authorities had been established
- 92 per cent of all partnerships were described as successful
- 73 per cent were anticipated to continue; and
- the average length of the walks was 70 minutes.

When mental health agencies were asked to rank the impact of participating in Mood Walks, the highest ranked impact (ranked 4/5) was 'strengthened a health-promoting culture within our agency.' Similarly, when other partners were asked the same question, the highest ranking benefit (4.3/5) was 'Increased my awareness of nature's influence on mental health.'

The David Suzuki foundation is a Canadian based, but global network promoting nature solutions for many global environmental and social problems. The 30x30 Nature Challenge (2017) was established by the foundation in 2012 and now has tens of thousands of global followers. The challenge encourages people to spend 30 minutes in nature every day for 30 days. Challengers register on a website and track their progress over the 30 days. There are also a range of tips about the things individuals can do to engage with nature more in everyday settings. The Nature Challenge offers registration for individuals, groups, schools or workplace and provides resources and activities i.e. the workplace resource explain Biophilic design, providing recommendation on how to create a greener workspace. The 30x30 Nature Challenge is an example of a population wide initiative to encourage daily nature habits to not only improve mental health and wellbeing but strengthen broader understandings of the importance of the human-nature bond.

## 10. NATURE AND MENTAL HEALTH – AUSTRALIAN RESEARCH, INITIATIVES AND PROGRAMS

Australia now has a number of treatment oriented care farm programs, such as the triple care farm in NSW which focused on Youth Rehabilitation. Another form of nature based treatment is horticulture therapy. Horticultural therapy has grown in popularity in Australia. Gardening activities are used to improve the body, mind and spirit for people of all ages, backgrounds and abilities. It is used in hospital, rehabilitation centres, disability services, aged care facilities and a range of community settings, including people's homes and community gardens. Peak horticultural therapy bodies in Australia include Cultivate NSW, Horticultural Therapy Program of Vic and Horticultural Therapy SA. These organisations foster and support existing horticultural programs and activities which enhance social, emotional and physical wellbeing.

In Victoria, a Green Rehabilitation Program was piloted in 2010 in the Barwon Region of Victoria and has been running since (Active in Parks.org 2016). The pilot involved scoping capacity to partner with local mental health service providers and parks agencies, with an aim to establish sustainable connections. Parks and outdoor spaces were chosen based on proximity to the service and its client group, and for the suitability to planned programs and activities. Mental health service providers were also encouraged to source outdoor activity providers to run park based activities for their clients. For example, the YMCA was engaged to run activities in Parks Victoria spaces, which included bike riding, beach combing, guided garden tours, tree planting and exercise sessions. The following successes, learning points and outcomes were cited on the Active in Parks Website.

### Keys to Success and Learning Points

- Strong relationships between mental health service providers and parks agencies ensured the program was able to have a long term positive effect on the mental health of participants
- A mix of activity options, in different locations, ensured interest was sustained and participants were more likely to integrate physical activity into their daily routines
- Reinforcing the benefits of outdoor activity supported both services and participants to understand the positive effect this would have on treatment and recovery; and
- Capacity building exercises were easily added to the activities such as using public transport to access park spaces and preparing healthy meals to enjoy during activities.

### Outcomes

- Participants experienced improved mood, social and community connectedness
- Participants were supported to try new activities and overcome previously held fears and misapprehensions about outdoors spaces and physical activity
- Mental health service providers developed sustainable connections with local outdoor activity providers; and
- Services developed extended suites of programs and services for their client groups (Active in Parks.org)

In South Australia, Tree's For Life has piloted a green rehabilitation program called 'Regenerate', funded by DCSI (Department for Communities & Social Inclusion) through the Fund My Community

program (more details about this program are provided in appendix A). 'Regenerate' aims to allow people living with mental illness, disability or chronic health issues as well as new arrivals to Australia to connect with nature through bush regeneration activities. The program has been co-designed by Trees For Life and partner organisations from the health and disability sectors and while it is still in pilot stages, it has been well received. In early 2017, the project team collated feedback around barriers and challenges to inform improved program design and delivery and explore future funding options to sustain the program's continuation.

For the past two years Conservation SA has run another Fund My Community funded program - *Nature for you* - which aims to provide activities and convenient access to nature for disadvantaged groups and communities. The main focus of the program is to promote wellbeing, and educate participants on how to get to conservation parks, what to do when they get there, and how to be safe and feel supported in a potentially unknown environment. This program's aim is to promote greater inclusion by educating people who may have limited experience on how to access and enjoy local conservation parks.

The South East Natural Resources Management Board, Uniting Communities (headspace Mount Gambier), and Friends of Parks Inc. have also established the *Walking the South East Seasons with Nature in Mind* program. In 2017, ten young people will have the opportunity to experience the diverse benefits of connecting with nature through a unique year-long pilot program based on the *Weaving the South East Seasons* Aboriginal calendar comprising 12 full day nature walks. The program aims to increase the mental health and wellbeing of the participants, promote environmental sustainability and leadership, and share local Aboriginal knowledge of nature.

Nature therapy in coastal environments is also gaining momentum. The *Soldier on Surf Therapy Program* (Surfing Australia 2017) championed through a partnership between Surfing Australia and Soldier On has recently been established in NSW. The program provides a unique rehabilitation experience for service veterans, by providing intermediate surf camps and 'learn to surf' lessons. Developed off the back of a very successful Soldier on Surf Day held earlier in 2017 and based on a widely successful program in the US, the program promotes the healing power of the ocean, particularly for veterans suffering from post-traumatic stress disorder.

## 11. TOOLS FOR BEING MENTALLY WELL

After exploring the international evidence on the connection between nature and mental health, this section focuses on international strategies for mental health promotion and the prevention of mental illness. A number of mental health organisations in Australia have contributed to awareness-raising around the prevention of mental illness and protective factors associated with mental wellbeing. These approaches are becoming more popular as the prevalence of mental health problems become better understood, and more widely reported and recognised.

The *Five Ways/Steps to Wellbeing* is a list that emerged from UK research published by the New Economics Foundation (2008). It has now been adopted and promoted by various International and Australian based mental health bodies, such as [Livingwell.org](http://Livingwell.org). The *Five Ways to Wellbeing* report included a review of evidence to inform five key actions that people could incorporate in their daily lives to enhance their overall wellbeing, these include:

- **Connect** - with the people around you (family, friends, colleagues, neighbours – in settings such as work, school or the community)
- **Be active** - walk run, go outside, ride, play games – exercise is proven to have both physical and mental health benefits
- **Take notice** – this encompasses the notion of mindfulness – being curious about things, look for the beautiful and remarkable things around you and learning to ‘enjoy the moment’
- **Keep learning** – learning new things enhances self-esteem and is also fun and enjoyable; and
- **Give** – doing something nice for someone you know or anyone around you can be rewarding.

The *Five Ways to Wellbeing* was introduced in the UK as part of a broader ‘Mental Capital and Wellbeing’ (Foresight 2008) project, a wide-ranging study undertaken by Foresight to create impact across government. The New Economics Foundation and the UK National Health Service Confederation later undertook a review in 2011 to assess how the *Five Ways to Wellbeing* had been applied since 2008 and to improve understandings about the scope for implementation as a tool for population mental health and wellbeing though it would also be valuable being used at the individual level. The concept of community wellbeing is not well developed in the literature; however a number of initiatives in the review described themselves as promoting ‘community flourishing.’ The review suggests that further research into the contribution of the *Five Ways to Wellbeing* to promoting flourishing communities is needed (New Economics Foundation and National Health Service Confederation 2011). A survey of the *Five Ways to Wellbeing* activity was undertaken as part of this review, as was a framework for development and analysis to explore the activity and identify both existing and potential uses of the *Five Ways to Wellbeing*. The review identified a number of case studies that demonstrated successful application at the individual, group/community, organisational and policy/strategy level.

The Sunshine Coast Council (2016) adapted the *Five Ways to Wellbeing* postcards, demonstrating how the campaign can be translated to a localised context. On the front of each postcard is a cartoon image depicting an activity that fits the description, a short description of the ‘way to wellbeing,’ and some other suggested activities that fit the description. On the back of each postcard is a photo of an ‘Active, Healthy Sunshine Coast Ambassador’ with a testimonial for an activity/organisation that they can connect with to enhance their wellbeing.

Mental Health Australia (2016) also published ‘Ten Tips for 10/10’ (World Mental Health Day) to help maintain mental wellbeing, these include:

- Sleeping well
- Enjoying healthy food
- Planning and prioritising
- Tuning in (listening to music while working)
- Cutting down (drug and alcohol intake)
- Switching off (from electronic devices)
- Engaging with others (making time to connect with people who make you feel good)
- Joining in (participating in a club or gym)
- Exercising your mind (physical exercise has mental health benefits); and

- Seeking advice and support (talk to someone if you feel you aren't coping).

The *Five (Winning) Ways to Wellbeing* campaign (based on the New Economics Foundations Five Ways to Wellbeing) was implemented by the Mental Health Foundation of New Zealand in 2009 and at the time, a best practice implementation guide was also developed. The *Five (Winning) Ways to Wellbeing* approach was implemented in the Canterbury region after the Christchurch Earthquakes of 2010/11 across the population to promote and monitor wellbeing and the impact of the devastating events in the region. The Mental Health Foundation of New Zealand also developed a Wellbeing (2016) game which is a website that allows groups and individuals to record (and compare around) the time they spend on activities that use the five ways to wellbeing each day.

The *Five Ways to Wellbeing: A Best Practice Guide* (Mental Health Foundation of New Zealand 2017) focuses on shifting away from illness and towards a wellness model both in health policy and practice and is inclusive of holistic Maori and Pacific models of health. The guide states that 'Illness and wellness are now considered to be more than simply two ends of a continuum, but separately operating dimensions' (Mental Health Foundation of New Zealand 2012).

The guide gives a detailed description of what the five ways entail and some specific examples of actions to practice each of the five ways. The best practice guide also emphasizes the importance of variety, and that the five ways can be achieved through a range of activities to continuously refresh the outlook. The guide also notes that not everyone needs to engage in all five ways regularly, but rather the five ways are about incorporating more wellbeing activities into daily lives regardless of which or how many activities.

The guide provides some key focal areas around communicating the message based on some key principles for mental health related social marketing. These include: start where people are; focus on building emotional connections; be positive, upbeat and aspirational rather than focusing on what not to do; exchange - it must be clear to people how they will benefit.

Importantly, the term mental health was not used, based on research suggesting that people respond better to the words 'flourishing' and 'wellbeing.' Furthermore the application of the five ways needs to be targeted to the community. The New Zealand Mental Health Foundation achieved this by developing a wide range of promotional resources, including bookmarks and postcards (Appendix C), posters of each of the five ways (Appendix D shows one in Maori), and a poster targeted at 'Blokies' where the language was pitched differently (Appendix E). Most of these resources were published in a variety of languages – including Maori. The host website for the New Zealand Five Ways provides a whole series of testimonials on how a wide range of community members incorporate each of the five ways into their lives.

The Mental Health Foundation of New Zealand also published 'Make time to feel naturally happy' - linked to the five ways philosophy. This provides a list of activities that can be done in nature, with varied increments of time from two minutes to 60 minutes.

## 12. OPPORTUNITIES

The aim of this paper is to present contact with nature as an effective public health tool for the intervention and prevention of mental illness and the promotion of mental health and wellbeing in South Australia. This is reinforced by the broader ambition, to raise the profile of mental health promotion in the South Australian Mental Health agenda, and encourage broader acknowledgement that the promotion of mental health and wellbeing is effective and economically viable.

This review has reiterated an enormous amount of evidence that suggests - that nature is good for mental health and wellbeing. Whilst a number of mental health and nature programs already exist, their focus remains on the treatment of mental illness rather than on the promotion of mental health and wellbeing. This review has highlighted a need to apply a nature lens across potential mental health promotion strategies in South Australia.

Based on the review of evidence the following set of opportunities have the potential to be progressed in South Australia, however these are dependent on future policy directions and resourcing. Healthy Parks Healthy People SA anticipates that these opportunities will continue to grow as engagement with critical partners' progresses and as new evidence emerges.

### ***POLICY AND PARTNERSHIPS***

**Broad objective: whole of government collaborative action to prioritise the promotion of mental health and wellbeing, and the prevention of mental disorders, that acknowledges the vital role that nature can play.**

- Coordinate the development of a collective of Eco-therapy/Greencare organisations to collaborate and share information, resources and ideas and a mechanism to report back to the Healthy Parks Healthy People SA project team.
- Coordinate the development of local community 'Nature and Wellbeing' action committees – bringing together local champions and advocates to consider barriers to access to nature, and benefits of nature and activities and opportunities at the local level. These could link in to the South Australian Suicide Prevention networks.
- Partner with the education sector and industry sectors to explore opportunities for strengthening mental health promotion in nature strategies in education and workplace settings.
- Partner with the planning development and local government sectors to support and enhance the provision of quality public green public open space.

### ***PROMOTION***

**Broad objective: improving population wide awareness of the mental health and wellbeing benefits of regular time spent in nature, and the programs, activities and tools available for 'getting into nature.'**

- Targeted promotion of existing programs that promote the mental health benefits of nature i.e. Conservation Council SA Forest Therapy/Nature and Wellness walks. This could include strengthening social media, or establishing a website for the networks proposed in *Policy and Partnerships*

- Enhance capacity to take learning and education outdoors within in school curriculums.
- Nature passports for all South Australians/ development of a tool to record daily activities in nature (or recording five ways to wellbeing activities in nature).
- Develop a site based on the UK's 'Muck in 4 Life' – a network connecting families with environmental conservation programs/care farming programs and organisations in their local community.
- Promoting early childhood eco-therapy programs and early intervention within schools - this involves building capacity within schools to identify children at risk of developing mental health problems and the capacity of schools to intervene i.e. programs that engage with parents and caregivers.

## **RESEARCH**

### **Broad objective: Contributing to research into the mental health benefits of regular time spent in nature**

- Evaluate long term mental health benefits of people spending regular time in nature.
- Assess park usage and motivations/limitations for spending time in parks and nature.
- Contribute to or establish research around connection to place and the impact this has on wellbeing including the connection to greenspace in the urban setting.

### 13. KEY RECOMMENDATIONS

Whilst there is great potential to explore a host of opportunities to enhance the linkages between the mental health and environment sectors, there are limitations around what Healthy Parks Healthy People SA can achieve alone. The following key recommendations are considered achievable steps to be progressed in 2017. These will draw on existing resources and have minimal cost implications for DEWNR and DHA. The recommendations are as follows:

- That the Mental Health Commission incorporates a strategic direction with a focus on mental health promotion within the State Mental Health Strategic Plan 2017.
- That the Office of the Chief Psychiatrist incorporates mental health promotion priorities within the South Australian Suicide Prevention Strategy 2017.
- That both the Mental Health Commission and the Office of the Chief Psychiatrist acknowledge the importance of nature as a setting for both the treatment of mental health problems and the promotion of mental wellbeing, and explore opportunities to increase the role of nature in promoting mental health and wellbeing.
- That Healthy Parks Healthy People SA explore further opportunities to partner with the Mental Health Commission and Office of the Chief Psychiatrist to promote the role of nature as a strategy to improve the mental health and wellbeing of the South Australian community.
- That Healthy Parks Healthy People SA develops a strategy to implement a *Five Ways to Wellbeing in Nature* state-wide promotional campaign, that aims to improve the knowledge and understanding within the South Australian community of five key actions to protect their mental health and wellbeing. This campaign will be launched in Mental Health Week 2017 and its delivery is achievable within the existing financial resources for the Healthy Parks Healthy People SA partnership. As part of the development of the strategy, adapting the material for targeted population subgroups may be explored, such as Aboriginal and Torres Strait Islander Australians, Culturally and Linguistically Diverse groups, and youth.

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World Health Organisation and the Calouste Gulbenkian Foundation (2014) *Social Determinants of Mental Health*,

[http://www.who.int/mental\\_health/publications/gulbenkian\\_paper\\_social\\_determinants\\_of\\_mental\\_health/en/](http://www.who.int/mental_health/publications/gulbenkian_paper_social_determinants_of_mental_health/en/)

30x30 Nature Challenge (2017) <http://30x30.davidsuzuki.org/>

## Appendix A – Local and international mental health programs

### LOCAL MENTAL HEALTH TREATMENT IN NATURE PROGRAMS

Program Name	Program Type	Location	Targeted Population Group	Program Details	Key Aim/Message	Link
<b>Active in Parks Barwon case Study</b>	Green rehabilitation	VIC	Current mental health service recipients	The green rehabilitation program supports mental health service providers to embed parks and other outdoor spaces as resources for program delivery. Health service providers are encouraged to incorporate the use of parks in their service planning and delivery through building relationships with local outdoor activity providers and park agencies. Green Rehabilitation was piloted in the Barwon Region of Victoria where it has been running with great success since 2010. Local mental health service providers were initially supported by Barwon Medicare Local to adopt the program. These providers now run the program independently, incorporating the philosophies of Active in Parks in their day-to-day service delivery.	Connecting people with nature can assist in mental health treatment and recovery.	<a href="http://activeinparks.org/members/case-studies/green-rehabilitation/">http://activeinparks.org/members/case-studies/green-rehabilitation/</a>
<b>Regenerate</b>	Green Rehabilitation	SA	People living with mental illness, disability or chronic health issue as well individuals who have only recently arrived in Australia	'Regenerate' focuses on teaching individuals about local biodiversity and conservation, but also has a strong focus on social connection and the wellbeing benefits associated with volunteering. The program is underpinned by a partnership between Community Living Australia, MIFSA (Mental Illness Fellowship SA), The Australian Refugee Community Living Australia, Neami National and SA Health. The partner organisations promote the program broadly and once they have some interest they select a day suited to the recruited participants. Trees for life provide a bus that takes attendees to bushland sites in greater Adelaide, for a short day of activities including both bush walking and bush regeneration (i.e. weeding).	Connecting people living with mental illness, disability or chronic health issue and new arrivals to Australia with bush regeneration and conservation for social and mental benefits.	

<b>Soldier on Surf Therapy Program</b>	Blue Rehabilitation	NSW (and US)	Veterans	<p>Unique rehabilitation experience for service veterans providing intermediate surf camps and 'learn to surf' lessons. Program run through a partnership between Surfing Australia and Soldier On. Developed off the back of a very successful Soldier on Surf Day held earlier in 2017 and based on a widely successful program in the US, the program promotes the healing power of the ocean, particularly for veterans suffering from post-traumatic stress disorder.</p>	<p>Promoting the healing power of the ocean for the rehabilitation of War Veterans.</p>	<p><a href="https://www.surfin-australia.com/p/soldier-on-surf-therapy-program">https://www.surfin-australia.com/p/soldier-on-surf-therapy-program</a></p>
<b>Triple Care Farm</b>	Care Farm	NSW	Youth (16-24 year olds) suffering with substance abuse, mental illness, homelessness and family breakdown.	<p>Triple Care Farm is an award-winning youth rehabilitation facility located in NSW's Southern Highlands, which helps to rehabilitate 100 young people each year suffering with substance abuse, mental illness, homelessness and family breakdown. The program involves a twelve week stay at the farm. The farm offers a 12 week psychosocial rehabilitation program and offers students opportunity for healing and rehabilitation, and educational programs to develop social, living, and workforce skills.</p>	<p>Helping youth in need to overcome addictions and address their complex underlying issues that contribute to their situation.</p>	<p><a href="https://www.sdmf.org.au/youth-programs/triple-care-farm">https://www.sdmf.org.au/youth-programs/triple-care-farm</a></p>

**INTERNATIONAL MENTAL HEALTH TREATMENT IN NATURE PROGRAMS**

Program	Program Type	Location	Targeted Population Group	Project Details	Key Aim/Message	Link
<b>Branching Out</b>	Early Intervention/Treatment	Various regions across Scotland	People who are already seeking social or mental health support services.	Program for adults who are mental health service users in a number of areas across Scotland. The service involves approximately three hours of activities per week, in a woodland setting, for a twelve week period. The activities are adjusted dependent on the specific client group, where they end up going, and the season. The activities include a combination of physical exercise, conservation, bushcraft and environmental art. There is also an achievement element to the program, where participants are awarded with certificates of completion, tool handling and achievement. Upon completion of the course participants are linked up with other leisure, volunteer and training opportunities based on their interest.	Program for adults who are mental health service users that combines physical activity, conservation, building and creating in woodlands settings, for mental health benefits.	<a href="http://scotland.forestry.gov.uk/supporting/strategy-policy-guidance/health-strategy/branching-out">http://scotland.forestry.gov.uk/supporting/strategy-policy-guidance/health-strategy/branching-out</a>
<b>Mood Walks</b>	Early Intervention	Ontario, Canada	People who are already seeking social or mental health support services.	Province-wide initiative that promotes physical activity in nature, or “green exercise,” as a way to improve both physical and mental health. Led by the Canadian Mental Health Association, Ontario, in partnership with Hike Ontario and Conservation Ontario, Mood Walks provides training and support for community mental health agencies, social service organizations and other community partners to launch educational hiking programs, connect with local resources, find volunteers, and explore nearby trails and green spaces.	Promotes physical and mental health and wellbeing by encouraging physical activity in nature	<a href="http://www.moodwalks.ca/">http://www.moodwalks.ca/</a>

LOCAL PREVENTION/PROMOTION PROGRAMS						
Program	Program Type	Location	Targeted Population Group	Project Details	Key Aim/Message	Link
<b>Nature Play SA</b>	Prevention/Promotion	SA	Children aged 3 - 12 years	Nature play is a recent initiative supported by the South Australian Government (it has also been implemented in WA, QLD and the ACT). The Nature Play SA vision is to make unstructured outdoor play in nature an everyday part of childhood. Nature Play SA does this by providing nature events for families/communities. Running workshops, conferences and training opportunities for educators, designers, Councils staff and others. Develops resources that are free and easy to access. Empowers others and build partnerships with like-minded organisations and individuals.	Making unstructured outdoor play in nature a part of everyday childhood.	<a href="https://natureplaysa.org.au/">https://natureplaysa.org.au/</a>
<b>Nature for You</b>	Early intervention/prevention	SA	People at risk of homelessness, new arrivals to Australia and low income families	Participants are recruited through social service organisations - the programs particularly target people at risk of homelessness, new arrivals to Australia and low income families. The main focus of the program is to promote wellbeing, and educate participants around how to get to conservation parks, what to do when they get there, and how to be safe and feel supported in a potentially unknown environment. The Conservations SA Staff guide participants in an accessible way and offer information and education where appropriate and necessary.	Connecting disadvantaged South Australians to healthy and inspiring nature experiences.	<a href="http://www.conservationsa.org.au/nature_for_you">http://www.conservationsa.org.au/nature_for_you</a>

<b>Sunshine Coast Council - Five ways to wellbeing</b>	Prevention/Promotion	QLD	Everyone	Postcards distributed throughout local organisations depicting the five ways to wellbeing, including daily tips, testimonials and links to local organisation to help people connect to activities and groups, to promote their wellbeing.	The postcards highlight the Five Ways messages and introduce five local residents who are improving their wellbeing every day in their way.	<a href="https://www.sunshinecoast.qld.gov.au/en/Living-and-Community/Community-Support/Health-and-Wellbeing-Programs/Five-Ways-to-Wellbeing">https://www.sunshinecoast.qld.gov.au/en/Living-and-Community/Community-Support/Health-and-Wellbeing-Programs/Five-Ways-to-Wellbeing</a>
<b>Trees For Life – Bush For Life and Tree Scheme</b>	Prevention	SA	Everyone	<p>The Bush For Life program engages, trains and supports volunteers to care for bushland across 320 sites. Around 100 sites are in metro Adelaide. Feedback from participants demonstrates an enormous range of mental health benefits.</p> <p>The Tree Scheme involves volunteers growing seedlings in their own backyard. A sense of purpose is a strong motivator and again, the 5 ways are being experienced through this program</p> <p>Both programs involve all age groups from ~15-81 and retirees are a key demographic. The social inclusion and wellbeing aspects are significant, but not well promoted.</p>	'Taking Action For the Land You Love'	<a href="http://www.treesforlife.org.au">www.treesforlife.org.au</a>

<p><b>Walking the South East with Nature in Mind</b></p>	<p>Early intervention/prevention</p>	<p>SA</p>	<p>Youth – Aboriginal Focus</p>	<p>‘Walking the South East Seasons with Nature in Mind’ is a unique year-long pilot program based on the Weaving the South East Seasons Aboriginal calendar. The South East Natural Resources Management Board, Uniting Communities (headspace Mount Gambier), and Friends of Parks Inc. provide ten young people the opportunity to experience the diverse benefits of connecting with nature. The program comprises 12 full day nature walks, activities and camps around the South East of South Australia. The program is endorsed by the South East Aboriginal Focus Group and supported by The Mount Gambier City Council through partial funding.</p>	<p>Increasing the mental health and wellbeing of the participants, whilst promoting environmental sustainability and leadership, and sharing local Aboriginal knowledge of nature.</p>	
<p><b>Work with Nature Week</b></p>	<p>Prevention/Promotion</p>	<p>Au</p>	<p>Working aged, employed</p>	<p>Nature can improve the creativity and sharpness of employee thinking. ‘Work with Nature Week’ is a campaign by the Nature Conservancy (20-26 March 2017) that proposes that employees move their work to nature for an hour to improve their wellbeing. The campaign cites the following benefits of working with nature; Improved Health, Improved Short-term memory, Restored Mental Energy, Reduced Stress Levels, Improved Concentration, Sharper thinking and creativity.</p>	<p>Employees encouraged to spend one hour ‘Green desking’ in their working week - taking their work to a park.</p>	<p><a href="https://workwithnaturenc.gofundraise.com.au/">https://workwithnaturenc.gofundraise.com.au/</a></p>

INTERNATIONAL PREVENTION/PROMOTION PROGRAMS						
Program	Program Type	Location	Targeted Population Group	Project Details	Key Aim/Message	Link
<b>David Suzuki's 30x30 Nature Challenge</b>	Prevention/Promotion	Canada	Everyone, targeted resources for schools and workplaces as settings	The project aim is to reconnect human beings with nature for the sake of their health and wellbeing. The site provides evidence and tips around why it is so important to fit green time into daily routines. There are also toolkits for schools and workplaces on offer. Challengers register on a website and track their progress over the 30 days. The website offers tips for how to access nature easily in daily schedules, suggesting beaches, local parks and backyards. The site offers 30 daily tips, things you can do to engage with nature more in everyday settings, such as; having a barbecue, stargazing or jumping into a mud puddle. The Challenge also acknowledges settings and offers registration as a school or workplace. The school and workplaces registrations provide resources and activities to enhance the challenge i.e. the workplace resource explain Biophilic design, providing recommendation on how to create a greener workspace.	Challenge to spend 30 minutes in nature every day for 30 days - to kick start a daily nature habit all year round.	<a href="http://30x30.davidsuzuki.org/">http://30x30.davidsuzuki.org/</a>
<b>Finding Nature - Mobile App</b>	Prevention/Promotion	UK	Everyone	The app uses a simple evidence based test to measure how connected the user feels to the natural world and prompts them to note three good things in nature each day, as simple sentences or a photo. After five days the app measures the user's progress to see what improvement has been made	Encouraging people to record three good nature experiences every day.	<a href="https://www.youtube.com/watch?v=xSXCsBpXzuk">https://www.youtube.com/watch?v=xSXCsBpXzuk</a>

<b>Five Ways to Wellbeing NZ</b>	Population Promotion	NZ	Everyone – but separate promotion materials for specific population target groups.	See above – similar to the UK approach but adopted in NZ using resources that appealed to multiple population groups, including a broad selection of multicultural groups.	Evidence based actions which promote people’s wellbeing.	<a href="https://www.mentalhealth.org.nz/home/ways-to-wellbeing/">https://www.mentalhealth.org.nz/home/ways-to-wellbeing/</a>
<b>Five Ways to Wellbeing UK</b>	Population Promotion	UK	Everyone	<p>The Five Ways to Wellbeing are a set of evidence-based actions which promote people’s wellbeing. Whilst not claiming to be the biggest determinants of wellbeing, it’s a set of simple things individuals can do in their everyday lives. They were developed by the new Economics Foundation and based on the findings of the 2008 Government Office for Science Foresight report on Mental Capital and Wellbeing that aimed to develop a long term vision for maximising wellbeing in the UK.</p> <p>The five ways include; Connect, Be Active, Take Notice, Keep Learning and Give.</p>	Evidence based actions which promote people’s wellbeing.	<a href="http://neweconomics.org/search/?lost=true&amp;sf_s=+projects+fi+ve+ways+well+being">http://neweconomics.org/search/?lost=true&amp;sf_s=+projects+fi+ve+ways+well+being</a>
<b>Five Ways to Wellbeing NZ</b>	Population Promotion	NZ	Everyone – but separate promotion materials for specific population target groups.	See above – similar to the UK approach but adopted in NZ using resources that appealed to multiple population groups, including a broad selection of multicultural groups.	Evidence based actions which promote people’s wellbeing.	<a href="https://www.mentalhealth.org.nz/home/ways-to-wellbeing/">https://www.mentalhealth.org.nz/home/ways-to-wellbeing/</a>

<b>Forest Therapy</b>	Prevention/Promotion	US, Asia, North America and Europe	Working aged, employed	A form of Nature immersion that aims to reverse the impact of stress-related illness and connect people better with the natural environment. It involves spending time in nature in a way that heals both the person and the natural environment. Forest therapists are trained in how to help participants have a sensory experience and in the states there are now 60 trained forest therapy guides. The concept originated in Japan where there are 60 national forest therapy walks across the country.	Guided nature walks that are slowed down to mindfully engage all of the senses.	<a href="http://www.natureandforesttherapy.org/about.html">http://www.natureandforesttherapy.org/about.html</a>
<b>Muck in for life</b>	Prevention/Promotion	UK	Children and Families	Local network connecting local families with local environmental and care farming initiatives.	Local network connecting local families with local environmental and care farming initiatives.	No longer an active program
<b>The Wild Network</b>	Prevention/Promotion	US based, global network	Children and their parents/guardians.	The mission of the Wild network is to support children, parents and guardians to roam free, play wild and connect with nature. The network advocates that all children should have the right to access the outdoors for play, learning, expression and - ultimately - the development of a healthy mind and body.	The Wild Network exists to champion and support connections with nature and wildness in children and young people.	<a href="http://www.thewildnetwork.com/">http://www.thewildnetwork.com/</a>
<b>30 Days Wild</b>	Prevention/Promotion	UK	Everyone	UK based challenge to bring nature into your life every day in June. Those who sign up to the challenge are sent a pack full of ideas, encouragement and random acts of wildness. The site provides 101 random acts of wildness ideas, links people to local parks and has a network of bloggers.	Getting people to spend time in nature every day for a month so it becomes a long term habit.	<a href="http://www.mywildlife.org.uk/30dayswild/">http://www.mywildlife.org.uk/30dayswild/</a>
<b>3 good things in Nature</b>	Prevention/Promotion	UK	Everyone	Part of a broader research around how looking at the benefits of noting three good things in nature each day	Longer term increases in nature connection by noting regular interactions	<a href="https://findingnature.org.uk/2016/11/01/3-good-things-in-nature/">https://findingnature.org.uk/2016/11/01/3-good-things-in-nature/</a>

## Five ways to wellbeing

# Connect...

Connect with the people around you. With family, friends, colleagues and neighbours. At home, work, school or in your local community. Think of these as the cornerstones of your life and invest time in developing them. Building these connections will support and enrich you every day.

- Connect...
- Be active...
- Take notice...
- Keep learning...
- Give...



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Five ways  
to wellbeing  
[www.neweconomics.org](http://www.neweconomics.org)  
[www.foresight.gov.uk](http://www.foresight.gov.uk)

# Five ways to wellbeing

## Be active...

Go for a walk or run. Step outside. Cycle. Play a game. Garden. Dance. Exercising makes you feel good. Most importantly, discover a physical activity you enjoy and one that suits your level of mobility and fitness.

- Connect...
- Be active...
- Take notice...
- Keep learning...
- Give...



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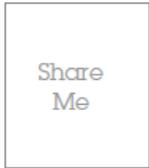
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to wellbeing  
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[www.foresight.gov.uk](http://www.foresight.gov.uk)

Five ways  
to wellbeing

# Take notice...

Be curious. Catch sight of the beautiful. Remark on the unusual. Notice the changing seasons. Savour the moment, whether you are walking to work, eating lunch or talking to friends. Be aware of the world around you and what you are feeling. Reflecting on your experiences will help you appreciate what matters to you.

- Connect...
- Be active...
- Take notice...**
- Keep learning...
- Give...



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Five ways  
to wellbeing  
[www.neweconomics.org](http://www.neweconomics.org)  
[www.foresight.gov.uk](http://www.foresight.gov.uk)

Five ways  
to wellbeing

# Keep learning...

Try something new. Rediscover an old interest. Sign up for that course. Take on a different responsibility at work. Fix a bike. Learn to play an instrument or how to cook your favourite food. Set a challenge you will enjoy achieving. Learning new things will make you more confident as well as being fun.

- Connect...
- Be active...
- Take notice...
- Keep learning...
- Give...



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Five ways  
to wellbeing  
[www.neweconomics.org](http://www.neweconomics.org)  
[www.foresight.gov.uk](http://www.foresight.gov.uk)

# Five ways to wellbeing

## Give...

Do something nice for a friend, or a stranger. Thank someone. Smile. Volunteer your time. Join a community group. Look out, as well as in. Seeing yourself, and your happiness, linked to the wider community can be incredibly rewarding and creates connections with the people around you.

- Connect...
- Be active...
- Take notice...
- Keep learning...
- Give...



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Five ways  
to wellbeing  
[www.neweconomics.org](http://www.neweconomics.org)  
[www.foresight.gov.uk](http://www.foresight.gov.uk)

# Five ways to wellbeing

Foresight's Mental Capital and Wellbeing Project has drawn on state-of-the-art research from across the world to consider how to improve everyone's mental capital and mental wellbeing through life.

Evidence suggests that a small improvement in wellbeing can help to decrease some mental health problems and also help people to flourish.

The Project commissioned the centre for well-being at **nef** (the new economics foundation) to develop 'five ways to wellbeing': a set of evidence-based actions to improve personal wellbeing.

Connect...  
Be active...  
Take notice...  
Keep learning...  
Give...



Foresight helps the UK Government to think systematically about the future.

Find out more and read the full report at  
<http://www.foresight.gov.uk>

**nef** (the new economics foundation) is an independent think-and-do tank. We believe in economics as if people and the planet mattered.

Find out more about our work  
<http://www.neweconomics.org>



# WINNING WAYS TO WELLBEING



INTRODUCE THESE FIVE SIMPLE STRATEGIES INTO YOUR LIFE AND YOU WILL FEEL THE BENEFITS.

 Mental Health Foundation  
of New Zealand  
[www.mentalhealth.org.nz](http://www.mentalhealth.org.nz)



# ĒTAHI ARA E RIMA KI TE NGĀKAU ORA

WHAKATŌKIA NGĀ RAUTAKI MĀMĀ NEI KI TŌ AO KIA RONGO AI KOE I NGĀ PAINGA

AWHITIA TE WHEAKO HOU, KIMIHIHIA NGĀ ARA HOU, ME OHORERE KOE I A KOE ANŌ

**ME AKO TONU**

ME KŌRERO, ME WHAKARONGO, ME WHAKAWĀTEA I A KOE

**ME WHAKAWHANAUNGA**

ME KONGO I TE WHANAUNGTANGA

WHĀIA TE MEA KA TAERA E KOE, KIA PĀREKAREKA TĀU I WHĀIAI

**ME KORI TONU**

KIA PAI AKE Ō PIROPIRO

ME ARO TONU KI NGĀ MEA MĀMĀ NOA

**ME ARO TONU**

I NGĀKAU HARIKOA AI KOE

TE WĀ KI A KOE, Ō KUPU, KO KOE TONU

**TUKUA**

TE PŌKI O MENTAL HEALTH FOUNDATION OF NZ 2015



Introduce some of these simple things into your daily life and you will begin to see the benefits to your mental health and wellbeing.

 Mental Health Foundation  
of New Zealand  
[www.mentalhealth.org.nz](http://www.mentalhealth.org.nz)

**CONNECT**  
NO MAN IS AN ISLAND.  
WE'RE STRONGER TOGETHER

**BE ACTIVE**  
GET INTO GEAR.  
MOVE YOUR MOOD.

**KEEP LEARNING**  
EXPLORE NEW IDEAS  
SHARPEN YOUR SKILLS

**TAKE NOTICE**  
APPRECIATE THE LITTLE THINGS  
SAVOUR THE MOMENT

**GIVE**  
IT'S NOT ABOUT MONEY  
IT JUST FEELS GOOD



## Appendix F – Make time to feel naturally happy

# Make time to feel naturally happy!

If you've got...

### 2 minutes...

- Look at a photo of a favourite place. Take a moment to notice the details, imagine how it smells, sounds and feels to be there. Pause, breathe and smile – then carry on with your day
- Watch a video of nature (e.g. a mountain river, a surf beach or a peaceful forest) on YouTube
- Choose a nature themed desktop background that brings a smile to your face

### 5 minutes...

- Go barefoot and feel the grass or sand beneath your feet
- Pick some flowers and put them where you can look at them often
- Press flowers
- Water the plants on your desk or in your home
- Roll down a really big hill
- Jump in a puddle

### 10 minutes...

- Climb a tree and get a new perspective
- Eat a delicious piece of fresh fruit
- Make a daisy chain
- Take your shoes off and stand on the grass, close your eyes and take 20 deep breaths
- Go on a sound walk – listen to the peaceful sounds of nature

### 20 minutes...

- Find a tree to sit under, lean back against it and take five deep breaths. Look up at the clouds – what shapes can you see?
- Lie back and watch the stars, how many constellations do you recognise?
- Go for a slow walk in a green space. Walk as slowly as you can and take in the sights, sounds and smells around you
- Play leap frog

### 30 minutes...

- Go bird spotting how many native birds can you identify?
- Plant some fresh herbs and veggies in little pots
- Take a photo walk. Walk around your neighbourhood with your phone or camera and take pictures of an unexpected splash of colour/a bird/a flower/a native tree
- Fly a kite
- Go for a run

### 45 minutes...

- Move your mood! Do what you can to get your heart rate up – climb a mountain, go for a brisk walk, do some yoga or tai chi in the garden and then cool down with some slow stretches
- Make a nice meal for your loved ones – the fresher the ingredients the better
- Go for a swim and spend some time just floating
- Go bug-hunting

### 60 minutes...

- Pack a picnic lunch or dinner and take your colleagues, friends or family outside.
- Take your dog for a long walk
- Get your hands dirty with some gardening or weeding
- Play frisbee, catch or spotlight



