

**Submission
No 33**

REVIEW OF THE GREATER SYDNEY PARKLANDS TRUST ACT 2022

Organisation: National Turf Alliance

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NATURAL TURF ALLIANCE

Communities for Sustainable Greener Futures in our Public Spaces

NSW PARLIAMENT Joint Select Committee

Review of the Greater Sydney Parklands Trust Act 2022

Submission

On behalf of
Natural Turf Alliance Incorporated

1st February 2025



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1.0 | The Natural Turf Alliance | Formulation

The Natural Turf Alliance (NTA), a Registered Association consisting of an alliance of over forty (40) community and environmental groups committed to preserving and developing natural grass open spaces and parklands, was formed, in 2021, due to the community concerns and evident body of work being compiled by the scientific community relevant to the risks to human health, environmental degradation and impacts to waterways, soils and natural resources generated by the utilisation of inorganic synthetic ground covering materials, such as synthetic turf, and the long term impacts to human health and the environment being identified both locally and abroad.

Within Australia there exists very little understanding of existing and emerging human health, environmental and long term potential risks derived from the utilisation of synthetic ground covering materials within the built environment, urban landscapes, community open spaces and significant heritage parklands.

Given growing community awareness and concern, *re the evident lack of information present within Australia*, the NTA came together to raise awareness and seek Federal and State Government actions to address these issues and enhance the knowledge and understanding of the associated risks applicable.

In so doing members of the NTA were fundamental in ensuring the NSW Government investigated the concerns of the time relevant the synthetic surfacing given the obvious lack of information in existence.

This lack of information and understanding is clearly identified within the reporting of the NSW Chief Scientist, *Independent review into the design, use and impacts of synthetic turf in public open spaces Final report*, 13 October 2022,¹ which the NTA advocated for and ensured was undertaken by the NSW Government given the concerns being identified.

The NSW Chief Scientist reporting is the only one of its kind within Australia and clearly identifies the significant risks and unknowns that surround the risks to human health, the environment and future generations from the utilisation of artificial turf and synthetic ground covering materials. Concerningly, it is evident that since the NSW Chief Scientist report there is still very little knowledge and understanding of the impacts and risks to the environment and human health derived from synthetic surfacing materials within NSW and broader Australia.

The NTA alliance members strongly believe that there is the need to critically review the continued installation of inorganic synthetic ground covering materials. There is an obvious need to further investigate the risks to water, soils and natural resources derived from inorganic ground surfacing materials and to undertake the analysis, further research and investigations outlined and recommended by the NSW Chief Scientist and Engineer.

It is widely recognised that there are substantial emerging and unknown risks to existing generations and the potential for significant risks to future human health, the environment and other natural resources from the continued utilisation of synthetic ground covering materials.

The fact that the Greater Sydney Parklands Trust FAILS, through the continued utilisation and installation of inorganic ground covering materials, to recognise and address these potential risks and evident environmental degradation is extremely alarming.

There is an obvious NEED to ensure the conservation of the natural and cultural heritage of the Greater Sydney Parklands Estate remains unharmed and unutilised by plastic pollutants and inorganic materials shed by recreational sports flooring materials.

¹ https://www.chiefscientist.nsw.gov.au/__data/assets/pdf_file/0004/542263/CSE-Synthetic-Turf-Review-Final-Report.pdf

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2.0 | Terms of Reference | Introduction

Relevant to the *Terms of Reference* detailed within the *Review of the Greater Sydney Parklands Trust Act 2022* of the Joint Select Committee to determine whether;

- a) the policy objectives of the Act remain valid, and
- b) the terms of the Act remain appropriate for securing those objectives.

This submission details the **evident failure** of the *Greater Sydney Parklands Trust (GSP)* to ensure that they **adhere to, validate and engage with the policy objectives** provided within the *Greater Sydney Parklands Trust Act 2022* (the Act) due to the installation and utilisation of synthetic ground surfacing materials; such as **Synthetic turf, Chem grass, Rubberised Surfacing and Underlay Materials; (SCRUM)²**

The installation of SCRUM within the State Significant Heritage Parklands under the conservatory of the GSP **FAILS TO ALIGN** with the policy objects of the Act **due to the significant environmental harms, risks and degradation caused by these inorganic products.**

Identified by the NSW Chief Scientist and Engineer; *Independent review into the design, use and impacts of synthetic turf in public open spaces - Final report, 13 October 2022 (NSWCSE)*, there are **clear unknowns, lacking standards, significant knowledge gaps, identified environmental impacts, heavy metals, high toxicity, unknown chemical composition, habitat loss and disruption of ecological functions** through the use of SCRUM.

As outlined within the NSWCSE, *Executive Summary, Key Insights*, pages iv-vi;

Currently, there is insufficient information and a lack of standards about the materials and chemical composition of synthetic turf.

Areas of concern regarding environmental and ecological impacts identified by the Review include water contamination and soil health. Research on drainage and stormwater impacts of synthetic turf fields is limited. However, there is evidence that both rubber infill and turf fibre blades from synthetic turf fields are found in waterways in NSW.

The amount of turf fibres lost from a synthetic turf field is likely to be in the 100s of kilograms per year, with the amount increasing for fields near the end of life or under poor maintenance. International studies have also found a large difference between the amount of microplastics shed from different types of synthetic turf.

Weathering, UV exposure and the association of microbes with plastic material influences leaching of chemicals into the environment. Research under Australian conditions has found mixed contaminants including heavy metals, have higher toxicity and bioavailability than those in isolation.

Changes to habitat resulting from synthetic turf installation replacing grass or vegetation may include habitat loss, disruption of ecological functions, increased heat and increased artificial light at night. Increased light at night is a risk associated with synthetic turf sporting facilities that are installed with lights to increase their playing capacity; and has been recognised to fragment nocturnal habitat and impact biodiversity.

Given this and the numerous concerns identified by experts consulted for the NSWCSE it is evident that the **validity of the objectives of the Act have FAILED due to the actions of the GSP** and the introduction and utilisation of SCRUM within the parklands under their control.

² SCRUM includes Softfall™, Pour in Place™ rubber surfacing, Rubberised Shockpad™, recreational flooring, sports matting and other inorganic ground covering fabrics or materials.

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3.0 | Greater Sydney Parklands Trust Act 2022 | Policy Objectives

Within the ACT, the policy objects are as follows;

3. Objects

The objects of this Act are as follows—

- (a) to maintain and improve the parklands estate across Greater Sydney and ensure the parklands estate is effectively managed and operated to deliver world-class and ecologically sustainable parklands for the public,
- (b) to enable the Greater Sydney Parklands Trust to facilitate a connection to Country for First Nations peoples that
 - (i) recognises and conserves First Nations peoples' cultural heritage and values through the use of the parklands estate, and
 - (ii) establishes long-term and mutually beneficial partnerships that give effect to the ongoing relationships of First Nations peoples with Country,
- (c) to ensure the conservation of the natural and cultural heritage values of the parklands estate and the protection of the environment within the parklands estate,
- (d) to advocate for a long-term vision to achieve the outcome of quality parklands across Greater Sydney, particularly connectivity of green corridors and public access to open space,
- (e) to encourage the use and enjoyment of the parklands estate by the community by promoting and increasing the recreational, historical, scientific, educational, cultural and environmental values of lands within the parklands estate,
- (f) to ensure the parklands estate may be used by the community in a way that is adaptive and recognises and responds to the diverse needs of the community,
- (g) to provide increased opportunity for community engagement to shape regionally significant parklands in response to diverse community needs.

It is the belief of the NTA that the actions of the GSP to continue to utilise Synthetic Turf, ChemGrass, Artificial Grass, Underlay Materials; Softfall™, Pour in Place™ rubber surfacing, recreational flooring, sports matting and other inorganic ground covering fabrics or materials within the Greater Sydney Parklands, fails the policy objectives of the Act.

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2.1 | Policy Objectives | Overview

<p>Greater Sydney Parklands Trust Act 2022</p> <p>Objects A-G</p>	<p>Greater Sydney Parklands Trust</p> <p>Failure to meet the objectives</p>
<p>OBJECT A</p> <p>To maintain and improve the parklands estate across Greater Sydney and ensure the parklands estate is effectively managed and operated to deliver world-class and ecologically sustainable parklands for the public,</p>	<p>The installation of synthetic turf and artificial ground covering materials FAILS to maintain and improve the parklands estate through the <i>removal of natural habitat, flora and fauna</i>.</p> <p>The introduction of vast amounts of inorganic ground covering matter, <i>in the order of hundreds of tonnes</i>, FAILS to align with the objectives relevant to ecological sustainability.</p> <p><i>Effective management and operation of the parklands to deliver world class ecologically sustainable parklands for the public is COMPROMISED</i> by the introduction of plastics based materials that degrade and pollute surrounding areas, leach toxic chemicals and shed millions of plastic particles annually.</p> <p>The identified plastic and rubber particle contamination within NSW Waterways is evidence of the FAILURE of the GSP to ensure that they maintain and improve parklands and the waterways contained within the parklands estate..</p> <p>The utilisation of rubberised sports matting substances FAILS to conserve, restore and enhance the parklands estate within the control of the GSP due to the destruction of natural habitats and impacts to waterways from contaminated leachate and particulates.</p> <p>The utilisation of synthetic recreational sports flooring mediums FAILS to ensure that there is no reduction in the extent of the net existing natural environment of the parklands estate due to the removal and destruction of between 7500m² to 21000m² for a single soccer field or AFL field respectively, of natural habitat and flora.</p> <p>The continued utilisation of inorganic ground covering materials by the GSP FAILS to IMPROVE the ecological sustainability of the parklands due to the requirement to renew such products within a limited life span or cycle of between eight to ten years.</p> <p>Effective management, operation and delivery of a world class ecologically sustainable parkland estate is JEOPARDISED with the introduction of plastics based ground covering materials that impact natural habitats, disrupt ecological functions, fragment nocturnal habitats and impact biodiversity.</p>



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<p>OBJECT B</p> <p>To enable the Greater Sydney Parklands Trust to facilitate a connection to Country for First Nations peoples that</p> <p>(i) recognises and conserves First Nations peoples' cultural heritage and values through the use of the parklands estate, and</p>	<p>The introduction of hundreds of tonnes of <i>plastics based materials</i>, such as synthetic turf and artificial grass, FAILS to FACILITATE connections to Country for First Nations people.</p> <p>The REMOVAL and DESTRUCTION of natural resources, flora and fauna and pollution to waterways brought about by the introduction of plastics based sports matting materials clearly FAILS to recognise and conserve First Nations peoples cultural heritage.</p> <p>Indigenous people believe that the <i>land, sky, water and its people are inseparable; they are all connected</i>. The introduction of synthetic sports matting that REMOVES and DESTROYS this connection FAILS to facilitate, recognise and conserve the connections to Country for First Nations people</p> <p>The ONGOING DISRESPECT for the LANDS AND SEAS for which First Nations care for and have connection to occurs through the introduction, by the GSP, of inorganic sports flooring materials that degrade and pollute the natural, cultural and historical uses of the parklands estate and will have IMMENSE degenerative impacts to First Nations people.</p> <p>Water is core to life for Aboriginal and Torres Strait Islander peoples. Protecting and managing water is a custodial and intergenerational responsibility that is COMPROMISED by the introduction by the GSP of synthetic recreational flooring covering materials that degrade and pollute waterways.</p> <p>The FAILURE by the GSP to provide and ensure water that is NOT POLLUTED or CONTAMINATED by <i>chemical leachates and plastic particulates</i> generated by synthetic sporting facilities FAILS to identify with, recognise or conserve the significant cultural and spiritual values placed on water by First Nations people.</p> <p>The installation of inorganic sports floorings FAILS to recognise and conserve the cultural and spiritual values relating to <i>language, song lines, stories, sacred places, customary use, the plants and the animals associated with First Nations people</i> given the pollutants derived from these synthetic materials.</p> <p>The apparent NEGLIGENCE by the GSP to recognise and conserve the cultural and spiritual values of water, by providing water that is sufficient in both quantity and quality and sustaining these qualities, given the pollutants and chemical leachates known to be lost and dispersed from inorganic sports flooring, FAILS to facilitate connections to Country for First Nations peoples.</p>
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	<p>The GSP by its REFUSAL TO OPPOSE the installation of plastic grass at any of its sites IGNORES ITS OBLIGATION TO RECOGNISE AND CONSERVE THE CULTURAL AND SPIRITUAL values of water and landscape.</p> <p>By its actions, at <i>Centennial Park</i>, and UNWILLINGNESS TO OPPOSE Council and sporting groups' ambitions to install plastic grass at Callan Park or INVESTIGATE and UTILISE NATURAL TURF SOLUTIONS the GSP has FAILED to RECOGNISE and CONSERVE the CULTURAL HERITAGE and VALUES FOR FIRST NATIONS PEOPLES..</p>
<p>OBJECT B</p> <p>(b) to enable the Greater Sydney Parklands Trust to facilitate a connection to Country for First Nations peoples that</p> <p>(ii) establishes long-term and mutually beneficial partnerships that give effect to the ongoing relationships of First Nations peoples with Country.</p>	<p>The introduction of hundreds of tonnes of synthetic sports flooring and inorganic ground covering materials, such as synthetic turf and artificial grass, FAILS to facilitate or establish long term partnerships and connections to Country for First Nations people.</p> <p>Ongoing relationships of First Nations peoples with Country and the Land and mutually beneficial partnerships are NOT ESTABLISHED by the use of recreational matting materials that destroys, removes and pollutes Country.</p> <p>Establishment of long term effective management, operation and delivery of a world class ecologically sustainable parkland estate is JEOPARDISED with the introduction of plastics based ground covering materials that impact natural habitats, disrupt ecological functions, fragment nocturnal habitats and impact biodiversity.</p> <p>By the INTRODUCTION OF PLASTIC MATERIALS and INORGANIC SPORTS FLOORING SURFACES in its parklands – and not eclipsing the debate about plastic grass at Callan Park - the GSP has NOT only FAILED ITS OBLIGATIONS to FACILITATE a CONNECTION to COUNTRY for FIRST NATIONS PEOPLES – the GSP has also contributed to the DIMINUTION of the POTENTIAL for FULL CONNECTION to country by first nations peoples.</p> <p>Ongoing relationships of First Nations peoples with Country and the Land and mutually beneficial partnerships are NOT ESTABLISHED by the use of recreational matting materials that destroys, removes and pollutes Country</p>
<p>OBJECT C</p>	<p>The FAILURE of the GSP to protect the environment by replacing grass and vegetation to install synthetic sports flooring materials LEADS TO HABITAT LOSS AND DISRUPTION TO ECOLOGICAL FUNCTIONS as identified within the reporting of the NSW Chief</p>



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<p>(c) to ensure the conservation of the natural and cultural heritage values of the parklands estate and the protection of the environment within the parklands estate,</p> <p>OBJECT C (Continued)</p>	<p>Scientist and Engineer</p> <p>The GSP makes a MOCKERY OF THIS OBJECT through the utilisation and installation of inorganic sports flooring materials, recreational matting and plastic turf, by the GSP.</p> <p>The continued use and installation of synthetic sports flooring materials UNDERMINES the GSPs' OWN OBJECTIVE and DOES NOT PROTECT or ENSURE the PROTECTION of the ENVIRONMENT</p> <p>The HUGELY DESTRUCTIVE IMPACTS of plastic turf and inorganic materials in any State Significant cultural landscape is an anathema. Respecting and conserving the natural and cultural heritage values of the Parklands Estate starts from the ground up – and the GSP is totally betraying the objects of this legislation.</p> <p>Inorganic ground covering materials such as artificial grass FAIL to ensure the conservation of the natural values of the parklands estate due to the removal of natural flora and fauna and habitats to support them.</p> <p>Evidence that plastic particulate, as both rubber infill and turf fibre blades, from synthetic recreational sports flooring materials is found in waterways is CLEAR INDICATION of the NEGLIGENCE by the GSP to ensure the conservation of natural and cultural heritage values and the protection of the environment within the Parklands estate.</p> <p>Synthetic turf sporting facilities that are installed with lights; as is the case within the Parklands Estate of the GSP; are recognised to fragment nocturnal habitat and impact biodiversity that have SIGNIFICANT RAMIFICATIONS and IMPACTS relevant to the conservation and protection of the environment.</p> <p>Cultural heritage values of the Parklands Estate ARE NOT conserved by the installation of artificial grass and its' associated materials that are unsympathetic and fail to align with heritage elements within the parklands estate</p> <p>The Protection of the environment, within the Parklands Estate, is NOT conserved by the GSP through the utilisation of synthetic turf, given the following indications within the NSW CSE report;</p>
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<p>(c) to ensure the conservation of the natural and cultural heritage values of the parklands estate and the protection of the environment within the parklands estate,</p>	<ul style="list-style-type: none"> - <i>the introduction and installation of inorganic ground covering materials destroys and removes the natural habitats.</i> - <i>Rubber infill and turf fibre blades from synthetic turf fields are found in waterways in NSW.</i> - <i>Water contamination and soil health are identified as areas of concern regarding environmental and ecological impacts derived from artificial turf.</i> - <i>the introduction and utilisation of synthetic recreational flooring materials pollute and degrade natural habitats over their life cycle</i> - <i>the amount of turf fibres lost from a synthetic turf field is likely to be in the 100s of kilograms per year, with the amount increasing for fields near the end of life</i> - <i>inorganic sports matting materials pollute and degrade, over their life cycle, waterways and aquatic elements</i> - <i>The generation, release and dispersion of nano and microplastic particles and other plastic pollution to the environment occurs with recreational flooring.</i> - <i>Synthetic turf weathering, UV exposure and the association of microbes with plastic material influences leaching of chemicals into the environment.</i> - <i>Contaminated leachates and heavy metals from sports matting has higher toxicity and bioavailability.</i> - <i>Disruption of ecological functions and habitat loss occurs from the introduction of synthetic turf.</i> - <i>Removal of grass or vegetation leads to changes in habitat and habitat loss</i> - <i>Increased heat and greater urban heating influences occur with the introduction of synthetic surfacing,</i> - <i>Increased artificial light fragments nocturnal habitat and impacts biodiversity</i>
<p>OBJECT D</p>	<p>The introduction of hundreds of tonnes of inorganic ground covering materials, such as synthetic turf and artificial grass, CONTRADICTS advocacy for connectivity to green open space and corridors</p>

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<p>(d) to advocate for a long-term vision to achieve the outcome of quality parklands across Greater Sydney, particularly connectivity of green corridors and public access to open space,</p>	<p><i>The removal and destruction of natural resources, flora and fauna and pollution to waterways</i> brought about by the utilisation of synthetic recreational sports flooring clearly FAILS to provide for quality green open space and parklands across Greater Sydney.</p> <p>The INABILITY to advocate for long term visions that recognise and strive for quality natural resources and instead install and utilise inorganic sports matting materials within the parklands estate CONTRADICTS connectivity to green open spaces</p>
<p>OBJECT E</p> <p>(e) to encourage the use and enjoyment of the parklands estate by the community by promoting and increasing the recreational, historical, scientific, educational, cultural and environmental values of lands within the parklands estate,</p>	<p>The FAILURE to promote and encourage the use and enjoyment of the environmental values of the lands within the Parklands Estate is clearly evident with the introduction of inorganic recreational sports flooring materials that DESTROY natural habitat and devalues the environment of the parklands estate</p> <p>The DESTRUCTION of natural habitat, flora and subsequently fauna REMOVES the enjoyment of the educational, cultural and environmental values of the lands within the Parkland Estate due to the introduction of synthetic sports matting materials,</p> <p>The historical and scientific values of the lands within the Parkland Estate and their use is DISCOURAGED by the introduction of synthetic sporting facilities that pollute, remove and destroy existing green spaces and parkland.</p>
<p>OBJECT F</p> <p>(f) to ensure the parklands estate may be used by the community in a way that is adaptive and recognises and responds to the diverse needs of the community,</p>	<p>The incorporation of inorganic ground covering materials that delineate and dictate the utilisation and recreational activities within the parklands estate, FAILS to ensure that community uses are adaptive.</p> <p>Restrictive, pre determined recreational sporting activities whereby synthetic ground covering materials are utilised, FAIL to provide for a diverse range of needs within the community and creates mono sporting and or recreational activities.</p> <p>The OSTRACISATION OF COMMUNITY PARKLAND and open space for formalised sporting activities FAILS to provide for passive recreational activities and the diverse needs of ALL the community.</p> <p>Inorganic ground covering materials, such as synthetic turf, recreational flooring and sports matting and their use within</p>

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	<p><i>sporting fields, FAILS to be adaptive.</i></p> <p>The utilisation of synthetic surfacing materials for sporting fields and their continued need for replacement and renewal, is a MALADAPTATION that locks communities into plastics and fossil fuels which poses numerous human health and environmental issues.</p> <p><i>The RESTRICTION, LIMITATION and REMOVAL of access to areas within the estate, in which inorganic ground covering materials have been installed, for informal users, passive recreators and community members FAILS to recognise and respond to the diverse needs of the community.</i></p>
<p>OBJECT G</p> <p>(g) to provide increased opportunity for community engagement to shape regionally significant parklands in response to diverse community needs.</p>	<p>Inorganic ground covering materials DECREASE the opportunity for community engagement and the ability for community to shape and respond to their diverse needs.</p>

3.0 | Conclusion |

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The utilisation of synthetic ground surfacing materials; such as *Synthetic Turf, ChemGrass, Artificial grass, Softfall™, Pour in Place™, recreational flooring, sports matting, rubber surfacing, organic infill, manufactured rubber, plastic infill and other inorganic ground covering materials, FAILS to align with the policy objectives* of the *Greater Sydney Parklands Trust Act 2022*.

This can be clearly seen through the environmental harms evident at Centennial Parklands, *Moore Park Sports Fields*. (Refer to supplementary paper). These harms are but one example of the **FAILURE of the GSP to CONSERVE, PROTECT and ENHANCE** the natural and cultural heritage of its estate and ensure that the objectives of the *Greater Sydney Parklands Trust Act 2022* are satisfied.

The continued utilisation of inorganic ground covering materials within the Greater Sydney Parklands Estate INVALIDATES the policy objectives of the Act.

It is evident through the concerns detailed within this submission and raised by numerous experts utilised to compile the NSW CSE report that the validity of the policy objectives of the *Greater Sydney Parklands Trust Act 2022* have failed to be satisfied. The introduction of inorganic ground covering materials and the potential significant harms it causes goes completely against the GSP Objects.

The policy objectives of the Act must ensure that they are adaptive, current and incorporate and satisfy the *precautionary principle* given the evident risks and potential for long term harms caused by inorganic surfacing materials being introduced into the Parklands Estate.

In light of this, the objectives of the Act need to be amended so that the utilisation of inorganic ground covering materials can not continue within the Parklands Estate – and cannot in future be installed anew in any parkland in the portfolio of the GSP - and in so doing these materials are prohibited and an embargo on their use established.

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