



northern
beaches
council

Environment
Strategic Reference Group

MINUTES

EXTRAORDINARY ENVIRONMENT STRATEGIC REFERENCE GROUP MEETING

held in the Guringai Room, Civic Centre, Dee Why on

THURSDAY 28 NOVEMBER 2019

Minutes of the Extraordinary Environment Strategic Reference Group Meeting

held on Thursday 28 November 2019

in the Guringai Room, Civic Centre, Dee Why

Commencing at 6:00pm

ATTENDANCE:

Committee Members

Cr Alex McTaggart

Cr Natalie Warren (Chair)

Sophie Scott

Roberta Conroy

Bayview Church Point Residents Association

Alan Jones

Anthony Petrolo

Marita Macrae

Pittwater Natural Heritage Association

Jacqueline Marlow (*via
conference call*)

Friends of Narrabeen Lagoon Catchment

Billy Bragg

Scott Markich

Council Officers

Todd Dickinson

Director Environment and Sustainability

Yianni Mentis

Executive Manager Environment and Climate Change

Jacqueline Grove

Manager Environment Resilience and Climate Change

Kara Taylor

Senior Sustainability Officer

Ximena Von Oven

Governance Officer

NOTE: Cr Warren thanked the former Chairperson of the Environment SRG, Cr Mc Taggart. She also thanked SRG members for their contribution and enthusiasm in the meetings.

1.0 APOLOGIES

Apologies were received from Cr Sprott, D Tribe and T Hazell.

2.0 DECLARATION OF PECUNIARY AND CONFLICTS OF INTEREST

There were no declarations of pecuniary or non-pecuniary conflicts of interest.

3.0 UPDATE ON ACTIONS FROM LAST MEETING

Nil

5.0 AGENDA ITEMS

5.1 REVIEW OF PUBLIC EXHIBITION FOR THE DRAFT PROTECT CREATE LIVE - ENVIRONMENT AND CLIMATE CHANGE STRATEGY

DISCUSSION

T Dickinson provided a brief introduction on this topic to the group highlighting that the purpose of the presentation is to provide the SRG group with an overview of the outcomes of the public exhibition of the Draft Protect. Create. Live – Environment and Climate Change Strategy 2040. He noted that submissions have been extended for 2 weeks. Councillors will be briefed on this topic. Briefing will include feedback received from the Community and SRG members.

J Grove and K Taylor provided a presentation on this topic . The following points were highlighted:

- Engagement Process
- Statistics
- Submission Summary
- Key Themes in the Submissions
 - Bushland protection and wildlife corridors
 - Action on climate change/climate change emergency
 - Aboriginal Heritage
 - Waste and Single Use Plastics
 - Population Growth
 - Air Quality
 - Greener Neighbourhoods
 - Public Transport and Active Travel Infrastructure

Next Steps

- Report to be presented to 17 December Council Meeting

- Action Plans
- Progress Reporting
- Ongoing Promotion

The group reviewed the Key Trends in Submissions to the Draft Protect. Create. Live – Environment and Climate Change Strategy.

The following questions were raised during the discussion:

- Q: With large upcoming construction projects in mind, like Ingleside and Frenchs Forest precincts how will we not lose bushland?
- A Council aims to strive for no net loss, which relies on actions from other stakeholders, and therefore it has been included as an aspiration in the document
- Q The need for indicators to measure progress was discussed, noting this will come in the action plan stage and could include citizen science data
- A It is important to ensure the data collected is robust. There are some current examples such as Coastsnap and data on Atlas of Living Australia. When setting the indicators we will consult the Environment SRG where appropriate.
- Q Is the water commitment for Council enough?
- A With a growing population the current target says we will service more people whilst still achieving water savings, which is currently deemed ambitious. The action plans will consider opportunities for water saving such as resource sharing

Other items discussed:

- Staff will check the document to ensure that the importance of protecting existing bushland is appropriately discussed, considering planting new bushland areas is not the same as maintaining existing bushland
- Requested to amend the grammar of the proposed Live description changes
- Amend the table heading for “Aboriginal Heritage” to “Protection of Aboriginal Heritage”
- Review using either feral or invasive animals as a reference
- Action plans will be discussed with the Environment SRG as they are being prepared (standing item)

ACTIONS

- A Petrolo to investigate about block chain technology and report back at the next SRG meeting.

DECISION

That the Environment Strategic Reference Group support the proposed amendments being made to the draft Protect. Create. Live. – Environment and Climate Change Strategy 2040 and the revised version being forwarded to Council for adoption.

5.2 DRAFT PROTECTION OF WATERWAYS AND RIPARIAN LAND POLICY

DISCUSSION

T Dickinson briefed the group on this topic. The following points were highlighted:

- A policy review is currently being undertaken to ensure a concise and consistent approach on all policy matters across the Northern Beaches.
- Council is investigating ways to improve protection of waterways and riparian land through the LEP and DCP process.
- Former Pittwater, Warringah and Manly Councils had their own Protection of Waterways and Riparian Areas Policies. These policies have been harmonised and as a result the Draft Protection of Waterways and Riparian Land Policy has been drafted.

The following question was raised:

Q: *Is there a map of riparian land included in the Policy?*

A The map has been removed from the policy however there is a consistent definition of what is riparian land.

6.0 GENERAL BUSINESS

The following topics will be presented at the next SRG meeting:

- Connectivity – Marita Macrae and Jacqueline Marlow
- Water Quality – Scott Markich

The following points were raised:

- Kimbriki Tour for Environment SRG members will be organised for early 2020
- Alan Jones congratulated staff for their excellent work on the Protect Create Live - Environment And Climate Change Strategy
- Tool library
- Worm procurement
- Cr Warren noted that a NoM regarding Recycling Centres will be presented at the December Council Meeting
- Draft Community Gardens Policy is on Public Exhibition until 28 January 2020. SRG members were invited to present their submission on "Your say Northern Beaches site"
https://yoursay.northernbeaches.nsw.gov.au/2019-policy-review/community-gardens-policy-draft?utm_source=northernbeaches.nsw.gov.au&utm_medium=301&utm_campaign=Website
- Biodiversity Policy will be reported back to Council at the February 2020 Council meeting.

SUMMARY OF ACTIONS

ITEM NO.	ACTION	RESPONSIBLE OFFICER	DUE DATE
5.1	A Petrolo to investigate about block chain technology and report back at the next SRG meeting.	A Petrolo	February 2020
6.0	Kimbriki Tour for Environment SRG members will be organised for early 2020	N Schultz	February 2020

Attachments to the Minutes

- Delivery of Cooling Services Information
- Pavers Cooling
- The Greening of Chicago Article

The meeting concluded at 7:47pm

This is the final page of the Minutes comprising 6 pages
numbered 1 to 6 of the Extraordinary Environment Strategic Reference Group
held on Thursday 28 November 2019 and confirmed on Thursday 20 February 2020

NBC
SRG
ENV

28.11.19 Rob
Conroy
table

Attachment 1



<https://www.forconstructionpros.com/pavement-maintenance/marking-striping/article/11407711/crosswalk-marking#&gid=1&pid=5>

NBC .

- Textured Pavers
- + Surfaces
- Cooling / Social
- Softening
- trap detritus
- Gravel



<https://www.lawslaser.com/wp-content/gallery/stencils/Hervey-Bay-Brick-N-Pave-Stencil-pin-wheels.jpeg>

Surfaces cooler/softer, i.e. tessellated spaces trap water (& detritus for fauna) roads, paths, school/sports grounds, reducing heat island effect, less need for artificial cooling, power, less heat stress

NORTHERN BEACHES COUNCIL STRATEGIC REFERENCE GROUP NATURAL ENVIRONMENT PLAN

member ROBERTA CONROY Goals / Aspirations

Submission to NBC SRG NE Todd Dickinson



<https://everlinecoatings.com/wp-content/uploads/2019/05/U-of-C-Custom-Crosswalk-1024x768.jpg>



<https://www.lawslaser.com/wp-content/gallery/stencils/027.JPG>



<https://www.griffith.edu.au/research/impact/rock-art>



- Aboriginal Motifs
- Native Flora, Fauna
- Endemic NBC.

- NBC SKC Mtg
ENV. 28/11/19 Attachment 2
- Rob Conway
table.



pavers NBC
Cooling.





Permeable paving Sutherland NSW

Alternative
to plain
concrete

- resident PO N -
Nov 19
Avalon critical
new Path Multipurpose
plain concrete
HO+ .



Fribourg

shallow gutter

- Environmental
- Infrastructure softer
- social

- slows water flow
- green Nature
- vegetative strip
- Cooling
- softens Natural landscape
- biophilic



Love this image so threw it in - 30 the Bond Sydney Green Roof

NORTHERN BEACHES COUNCIL STRATEGIC REFERENCE GROUP

NATURAL ENVIRONMENT PLAN

member ROBERTA CONROY Goals / Aspirations

Submission to NBC SRG NE Todd Dickinson -

1. WATER* Quality as a primary goal in the Northern Beaches Region, coast and inland, oceans, rivers, lakes, creeks. WSUD - Water Sensitive Urban Design everywhere, including ridges eg Ingleside development. Rehabilitation of creek lines - cools & opens green spaces for people, wildlife corridors, biodiversity. On site waste management, eg micro STPs, increase capacity Warriewood STP, & *size of pipes, Deep Ocean Outfall. Mangroves - expand to stabilise sediment loss + clean water + marine habitat. Cooling water features + green rooves/walls to address heat island effect, Climate Change, increased temperatures, and fire protection
2. Best practice & Consistent Management of Waterways & Bushland across N Bchs, *Flood mitigation, building codes, design, compliance, Fire – Hazard Reduction to protect people/property. Crowded waterways-restrict boat numbers-use dry boat stacking 'Rack & Stack' (see Akuna Bay) Regular *Maintenance of waste/sediment/silt traps, preventing erosion, localised flooding, pollution, contamination in heavy rain
3. Environmental (all ages, aural, visual) Education* - enables understanding of environmental issues, threats, risks, preparedness & best ways to manage / encourages participation in processes, eg property landscaping, eg bio-retention basins, interpretative signs in riparian zones, catchment symbols on drains/gutters
4. ARRR Avoidance, Reduce, Reuse, Recycle practices in Community, Business, Government – reduces waste & impacts, eg Kimbriki tip leaching into catchment
5. SMART development/buildings - Incentives for developers, property owners, business to plan, build & act Sustainably eg faster approval Solar powered buildings
6. Electric cars, clean & quiet, battery stations, shared use, cap & trade schemes
7. Surfaces cooler/softer, i.e. tessellated spaces trap water (& detritus for fauna) roads, paths, school/sports grounds, reducing heat island effect, less need for artificial cooling, power, less heat stress
8. RAIL – Pymble > Terrey Hills> Frenchs Forest> Chatswood
Light Rail City > Narrabeen & connect both

9. Local food security & supply – increase community gardens everywhere, including vegetation strips, *green walls, *rooves, more greenhouses eg Ingleside, all schools, retirement villages. Require food suppliers to source local produce.
School grounds to grow community gardens
10. Northern Beaches Region as Centre of Excellence for ECO TECHNOLOGY - Frontier Technology + Science + Traditional Wisdom
11. CONSERVATION *TERRESTRIAL and *MARINE
12. Support TECHNOLOGY / Business / Innovation eg Tesla set-up Battery stations (see Bris>Melb fuel free trip)
13. COLLABORATION EMERGENCY Services – SES, RFS, Fire & Rescue NSW, Police, Marine Rescue, Ambulance Services, RMS, all relevant stakeholders – share resources
14. SUSTAINABLE KELP / MUSSEL / OYSTER FARMING using Water Columns, support Fishing/Marine industries, innovations, in + offshore N Beaches, see attachment
15. SCHOOLS – open-up grounds use – community gardens, recreation-passive/active, Sustainable use *Shared Resources - Libraries, IT, classrooms, equipment, TAFE / adult education satellite sites, Halls – active space, community entertainment venues. Include school paths, eg in Pittwater Trails.
*Benefits: Health physical + mental, environmental awareness, economic, social

"Treat the Earth well. It was not given to you by your parents. It was loaned to you by your children" - Kenyan Proverb

Roberta Conroy-Background: MQ Uni BA, PG Environmental Studies, Director Environmental Consulting & Management, member Pittwater & N Beaches Council committees 2009-17 Natural Environment, Special Rate Advisory Ctee, Heritage working group, McCarrs Creek, Bayview, Mona Vale Flood study working group, Church Point Precinct Advisory & Traffic Ctee's 2016-17, President-Bayview Church Point Residents Assn. Attendance/work: IUCN I'tl Union for Conservation of Nature Congress Hawaii 2016, World Parks Congress Sydney 2014 Team Leader & IT desk, IWFC I'tl Wildland Fire Conference S Korea 2015, Nature Conservation Council 10th Biennial Bushfire Conf 2015, K2W Kanangra to Wyangala Ann Forum 2015, ISCA I'tl Show Caves Assn Speleology Congress Jenolan Caves 2014, Australian Geographic Executive Assistant, Editing 1999-05, Super Sydney Festival 2012, MEC Manly Environment Centre I'tl Conf of Eco Ideas, N Head Sanctuary, Manly 2011

<http://content.time.com/time/nation/article/0,8599,1193833,00.html>

The Greening of Chicago

By ERIC FERKENHOFF/CHICAGO Friday, May 12, 2006

STEVE ALLEN / NEWS.COM

In Chicago, freeways coexist with parks. Since 1989, 500,000 trees have been planted in the city

Follow @TIME

Chicago, a blue-collar city of asphalt and glass and concrete canyons, would seem an odd place for admitted tree-hugger Sadhu Johnston to think he could save the planet. But Johnston, Mayor Richard M. Daley's environmental commissioner, believes that cities are actually the answer to the earth's environmental ills. And with that in mind, he is working to turn Chicago into what he claims will be the most environmentally friendly city in the U.S. — as well as the nation's center for environmental design and the manufacturing of components for the production of alternative energy.

If it works — and Daley is betting a hefty sum it will, with promises to buy millions in solar panels, for example — the green movement here is expected to yield the city perhaps billions in saved energy costs and new business. "This is way beyond tree hugging in Chicago," said Johnston, 31, who before coming to Chicago helped dust some of the rust off of Cleveland's image by serving as executive director of the non-profit Cleveland Green Building Coalition. "This is about quality of life. What we're talking about is creating a city that exists in harmony with the world, a place that can be a model. Cities have long been hurtful to the environment. Raw materials came in and waste went out. We're trying to redefine that relationship, and cities can be models."

In much the same way that cities like Austin and San Francisco latched onto the boom in the Internet or biotech industry to propel their economies, Chicago is working hard to rev up its manufacturing and capitalize on the growth in green construction and wind and solar energies. But can Chicago, such a muscular city, shake its industrial, broad-shouldered image by showing that cities are not the bane of the environment. Does it deserve, in short, the title of America's Green Thumb?

"We're doing it," Daley said in a brief interview earlier this week while also playing host to an environmental summit for U.S. mayors and making a pitch for the 2016 Olympics. "We're aggressive in terms of the environment and we're educating the people and bringing business along."

The city first drew real attention to its greening efforts, when it planted a lush garden on the rooftop of City Hall. Now, be it McDonald's, Wal-Mart or the Apple store, businesses wanting a relaxation of density building rules or financing to help construct new offices are being convinced to plant so-called green roofs. The result: the city has planted or negotiated the construction of over 2 million square feet of rooftop gardens, more than all other U.S. cities combined.

While in office Daley, who shut down the lakefront airport Meigs Field in a bold power play to create a big park, has ordered that the heads of all city departments make their operations environmentally friendly. That includes

paving alleys with special asphalt to better absorb water, buying a greener fleet of vehicles or forbidding city vehicles to idle more than five minutes.**

Chicago is now among the largest users of green energy in the country, with a goal of using renewable energy for roughly a quarter of city operations. To help reach that goal, it has already attracted two solar panel manufacturers to set up shop in the area.

The Windy City, which has won international awards for its environmental agenda, also boasts one of the world's only municipal buildings given a platinum rating for its green design and operations by the organization Leadership in Energy and Environmental Design. That honor is more than a little ironic, since the building, the Center for Green Technology, sits on a former illegal dump that was part of a sweeping federal investigation that sent several aldermen to jail for taking bribes.

Since Daley, a Democrat whose administration is mired in a sweeping federal investigation into hiring practices and patronage schemes, took office in 1989, some 500,000 trees have been planted, the city has been decorated with fancy planters, park space has increased and the lakefront, while still soiled with pollution, is being cleaned and preserved at a level never before seen.

"Look at this," Daley said, motioning to a wide yard in the depressed Dearborn Homes public housing development. To be sure, the neighborhood, among the city's poorest, isn't much to brag about. But it is green. Trees have been planted, the lawns have been tidied and are lush, despite the broken concrete and glass that litters nearby playgrounds. "This wouldn't have happened before."

But not all is so green here. A broad recycling program in the city, which was touted as a model for urban America a decade ago, has not yielded the expected results, as some 87% of the city's total refuse is still not being fully recycled. And the air quality, while improved, remains a sore topic.

Still, the city's efforts are drawing attention. Green Bay Mayor James Schmitt, who launched his Greener Green Bay campaign during his recent State of the City speech, is sold and makes no apologies for trying to copy Chicago. "We're a blue-collar, paper-making, NFL football town," he says. "We're very young in this, and we're going to use Chicago as a model."

Read more: <http://content.time.com/time/nation/article/0,8599,1193833,00.html#ixzz2j636UjYp>

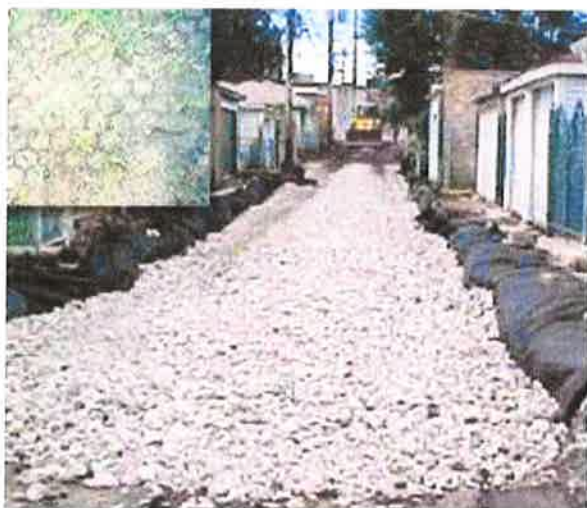
Chicago city official site

http://www.cityofchicago.org/city/en/depts/water/supp_info/conservation/permeable_alleys.html

Permeable Alleys

Permeable Alley

The City is creating a green infrastructure by utilizing unique open spaces to hold water that would normally drain directly into the sewer system. For instance, the City built a new kind of alley in a North Side community as part of a pilot project. The alley, constructed of a rigid grid system and gravel, allows rainwater to soak into the ground-reducing water flow into the sewer system and backyard flooding.



The alley, constructed of a rigid grid system and gravel, allows rainwater to soak into the ground. Close up of finished system upper left corner.

Permeable Paving

Permeable paving refers to paving materials - typically concrete, stone or plastic - that promote absorption of rain and snowmelt. The discussion that follows focuses primarily on one form of permeable pavement - paving blocks and grids, as they are the most common and available type of permeable paving. These modular systems contain openings that are filled with sand and/or soil. Some can support grass or other suitable vegetation, providing a green appearance. A portion of rainfall is trapped in the block's depressions and infiltrates into the underlying soil.

Permeable paving is effective in reducing the quantity of surface runoff, particularly for small to moderate-sized storms.

It also reduces the runoff pollutants associated with these events. Permeable paving in Chicago will be most effective in areas closer to Lake Michigan that are underlain with sandy, permeable soils. Effectiveness can be improved by designs that:

- maximize the openings in the paving material and
- provide an effective permeable sub-layer (e.g., at least 12 inches).

Permeable paving may have aesthetic and marketing advantages over conventional paving, depending on the materials selected. Vegetated pavers, in particular, could substantially improve the aesthetic appeal of paved areas. Vegetated pavers also can be effective in reducing the "urban heat island" effect.

An alternative form of permeable paving is porous pavement that relies on larger particles in the aggregate to rapidly infiltrate precipitation into an underlying stone "reservoir." While not discussed at length in this guide, porous pavement may be a suitable option for certain low-impact applications.

Porous pavement may be prone to clogging, be adversely affected by the freeze/thaw cycle and can have higher maintenance requirements than permeable paving. However, some recent reports - mostly from warmer climates - conclude that porous pavement may be a reliable, cost-effective alternative. One key consideration when using porous pavement is to ensure that the aggregate is sufficiently durable

Applicability

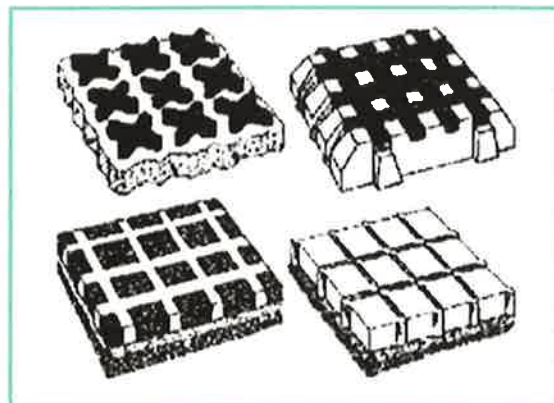
Permeable paving is particularly appropriate for the following applications: **overflow and special event parking, driveways, utility and access roads, emergency access lanes, fire lanes and alleys.**

Maintenance Considerations

Vegetated paving blocks may require occasional mowing. Snow plowing may require special care due to the slightly uneven surface of the pavement.

Cost Considerations

Installation costs for permeable paving can be as much as two to three times greater than conventional concrete or asphalt. However, there are indications that permeable paving requires **less frequent replacement**. Also, because it substantially reduces runoff quantities, permeable paving can substantially **reduce related stormwater engineering and infrastructure (e.g., curbs, gutters and storm sewer) costs**. These savings can at least partially offset the higher installation costs.



Paving Blocks and Grids (above). Permeable paving in Chicago will be most effective in areas closer to Lake Michigan that are underlain with sandy, permeable soils.