



(PROJECT)

GOAT LAND AT
WHITEBAY POWER
STATION

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01.



01. Aerial image of the White Bay Powerstation site, Sydney.
02. The 'Belmont Goats', Portland, Oregon.
03. Garden planting typologies.
04. Hydroseeding, a mass planting technique.
05. Phytoremediation system diagram.
06. Site image of the proposed Goat Land site at the White Bay Powerstation.



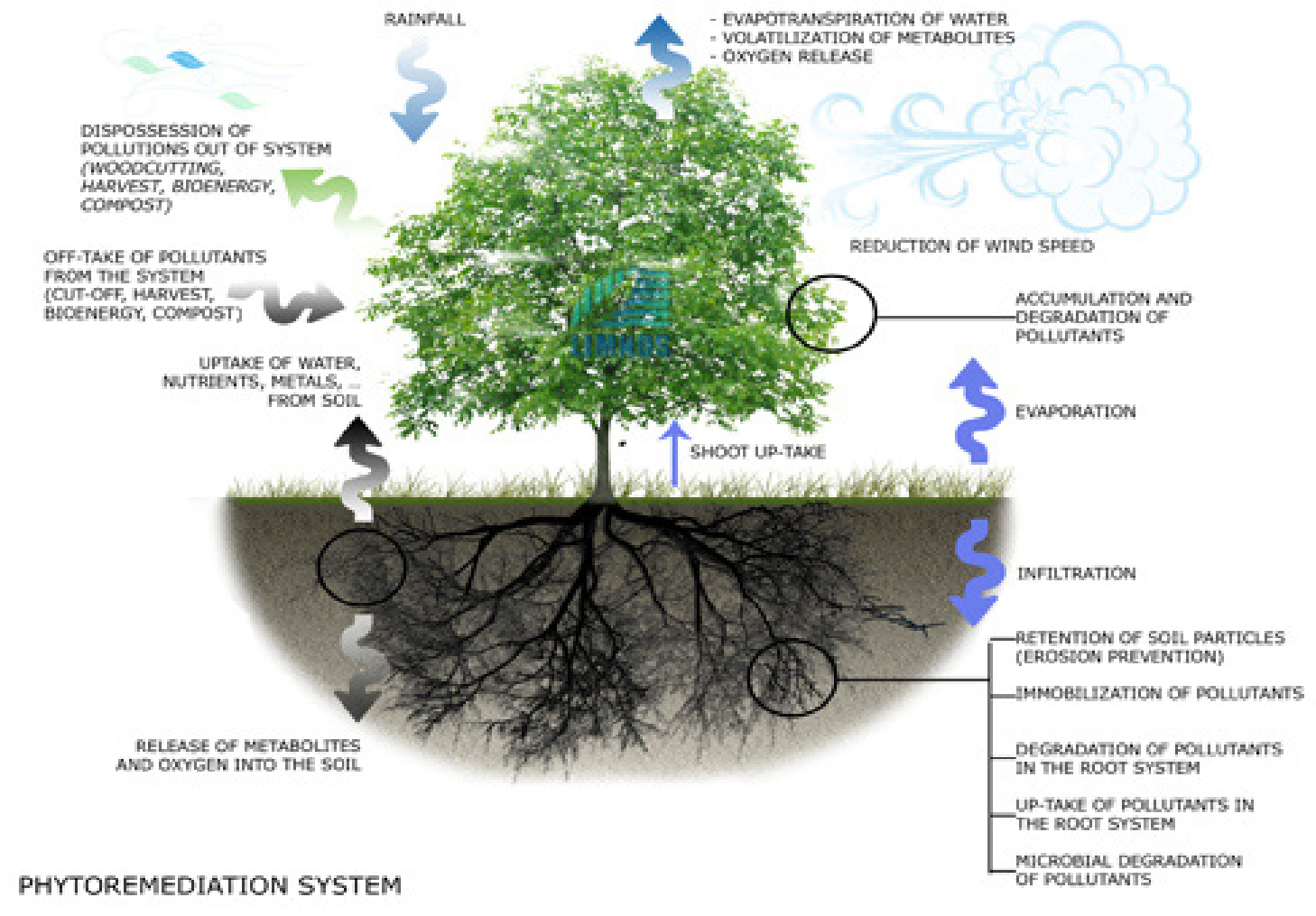
02.



04.

Garden Typologies - Examples				
Four garden typologies				
	Scientific Grid	Shrub Border	Meadow	Pattern
	Random sowing of seed mix, 1.0m x 1.0m grid quadrants	Layered gardenesque approach to phytoremediation garden. Individual plant groupings will vary	Plant species grouped in patches	Plant species varies according to plant absorption rate and growth
Vegetation Diversity	Up to 10 plant varieties	>10 plant varieties graduating heights for effect	Up to 20 plant varieties	4 to 5 plant varieties
Maintenance	Medium / low	Medium	Low	Medium

03.



05.



06.

GOAT LAND

THE PROJECT

White Bay Power Station (WBPS) is a unique site with a rich cultural and industrial heritage. The Power Station is envisioned to be a hub for knowledge-intensive and advanced technological industries, making WBPS an anchor of innovation and technology district for The Bays Precinct.

However, its previous operation as a coal fired power station generated site contaminants that remain in situ. This collaborative project proposes to use phytoremediation techniques and (in later stages) goat communities for expressing rehabilitation and restoring balance to publicly-owned contaminated sites. It combines both innovative science with a unique activation opportunity for WBPS.

Phytoremediation is a low cost, plant (vegetative) and solar energy driven, soil remediation technique. Initial establishment of a series of phytoremediation gardens will remove a percentage of toxins from contaminated soils, sludges, sediments, surface water and ground water through the selected plants absorbing and metabolising various pollutants into their tissues. After the initial harvesting of three successive gardens in stages, introducing hardy and resilient goat communities to hazardous sites can further breakdown harmful contaminations through the consumption of plants and breaking down PH imbalances through bio agents found within their bodies.

The project is two-fold: Cleansing contaminated lands and utilising ecological processes in an artful, performative, playful and educative manner. The project proposes to celebrate phytoremediation techniques and goats herds as productive ecologies, which rejuvenate, degraded land in a beautiful and expressive manner. Thus, reconnecting WBPS with its broader communities.

BACKGROUND TO THE SITE

The eight destinations of the Bays Precinct total 95 hectares of land and 94 hectares of Sydney Harbour. The Bays Precinct has a rich indigenous, multicultural and industrial history of transformative functions for Sydney and Australia. It was a place of trade between Aboriginal clans to essential maritime commerce in the new colony to industrial and recreation uses. The Bays Precinct is currently a place that sleeves the iconic Sydney Harbour surrounded by well-established urban villages.

Its waterways (94 hectares of Sydney Harbour) and most of its land (95 hectares) is Government owned and predominately used for port, maritime and commercial uses. However, a significant part of its 5.5 kilometres of foreshore is not publicly accessible. The Bays Precinct contains several significant heritage items like Glebe Island Bridge and the White Bay Power Station, which was built on the shores of The Bays Precinct to power Sydney's train network.

The White Bay Power Station is one of the immediate destinations for action by UrbanGrowth NSW and will anchor a broader innovation district that when completed will incorporate Glebe Island.

"We want White Bay Power Station to be the best example in Sydney of how living, working and learning can be woven together to create a prosperous and thriving economy. This requires us to think about the most appropriate mix of uses, including residential, for the Power Station and surrounding land and how this can benefit nearby areas, We want to activate the Destination outside working hours, position the Power Station at the heart of The Bays Precinct, and draw on international examples that have returned industrial spaces to their cities. A global and regional destination within the Asia-Pacific that co-locates research, business, education, science, academia, technology and start-up incubators to drive global competitiveness and innovation is part of our vision for The Bays Precinct. (UrbanGrowth NSW, 2015).