

Dear Principal / Stage Coordinator

Re Invitation to Participate in the 2021 B&B Highway Project

I would like to invite your school to participate in the B&B Highway project, a sustainability project aimed at making cities sanctuaries for pollinator species. Pollinators are critical for healthy ecosystem functioning however research shows they are in alarming decline. B&B stands for bed and breakfast for bees, bugs, birds and biodiversity. The project involves retrofitting existing school gardens to increase biodiversity and the establishment of a school native stingless beehive (please note these bees do not sting and there is no concern for students and staff with anaphylaxis).

Schools involved in the project will be contributing to a sanctuary ‘Highway’ for native stingless bees across Sydney, thereby contributing to the school’s environmental sustainability initiatives and credentials.



Students involved in the project will learn about the importance of pollinator species through an incursion science lesson. They will also take part in an ongoing citizen science project by monitoring the school’s native bee (and other pollinator) populations, thereby contributing to a state-wide pollinator data base.

The project is run by *PlantingSeeds* a non-profit community organisation, in partnership with Observatory Hill Environmental Education Centre, a specialised school within the Department of Education staffed by specialist DoE teachers.

Syllabus Links

The project provides strong links to many K-10 syllabus outcomes, particularly Science, Geography and the Sustainability Cross Curriculum Priority. The S2 *Science and Technology* syllabus for example, in the topic of *Living Things*, describes how living things depend on each other and specifically lists **bees and flowers**.

School Commitment

Schools involved will need to prepare appropriate gardens for planting the pollinator plants, and commit to ongoing data collection by students about the school’s native bees. **PlantingSeeds may be able to help with gardening volunteers.**

The project will be coordinated by *PlantingSeeds* which involves preliminary meetings and program planning with stage coordinators, sourcing materials (plants and hives), coordinating incursion lessons in partnership with Observatory Hill EEC teachers, and monitoring the hive post incursion.

Costs

Costs vary may depending on the scale you would like to participate at, but a basic exclusive EEC/B&B offer to schools involves:

A Native stingless bee hive	\$875
Native ‘pollinator’ plants, mulch and gardening equipment for an existing school garden bed	\$200
Project management (including initial site assessments, planning meetings with Stage coordinating teachers, sourcing pollinator plants/ mulch etc and sourcing hives.	\$200
One day B&B incursion for up to 4 classes (minimum 90 students @\$10.00 per student)	\$900
Total \$1,275 from school funds (or grants) and \$900 from student contributions	\$2,175

The B&B incursion involves:

- an introduction to biodiversity, pollination, and pollinator habitat requirements
- an examination of different pollinators (insects mounted in perspex and under microscopes)
- students undertaking a bug hunt with identification sheets and magnifying glasses,
- planting native Australian pollinator plants in existing garden beds, including an explanation of the qualities, needs, importance and benefits of native plants
- a presentation about the ecology of bees
- a data collection exercise for students to practice identifying and tallying pollinator species, in order to effectively participate in the ongoing citizen science project.



The incursion will involve up to 4 classes across the day in two half day (approx. 2.5h) sessions – two in the morning and two in the afternoon. The schools involved so far have enthusiastically embraced the project with many teachers extending the project into prolonged units of work and integrating it into their STEM lessons, for example having students to design insect hotels.



Schools may wish to engage with the project at a larger scale, for example by increasing garden beds, having more immersive lessons, installing rainwater tanks to water the beds or integrating the highway with an existing school kitchen garden.

The Department of Education is providing a *Sustainable Schools Grant* of up to \$15,000. The grants are open to any Department of Education school for the next three years. 2021 grants round opens in November 2020.

These grants are designed to improve school sustainability, provide hands-on activities and must provide links to curriculum.

Grant support

In order to help you write the Sustainable Schools grant application (or any other grant like a local government grant) for a B&B Highway pollinating garden for your school, please find below some sample budgets.

B & B Highway		
Sample Small Budget for Sustainable Schools Grant		
Item	Estimate	Notes
Garden Assessment, Design & Support*	\$1,000	10 hours total of garden assessment, design and ongoing support from PlantingSeeds team
Garden equipment & tools	\$350	Tools to be utilised in the garden i.e. wheelbarrow, gloves, watering cans etc.
Native Stingless Beehive*	\$800	Tetragonula Carbonaria Hive, roof and platform/stand
Hive Installation*	\$350	Installation of hive including delivery and any extra materials as well as follow up check 1 month later
Raised garden beds/planters & installation	\$1,000	3 - 5 raised garden beds/planters depending on available space within school
Native organic soil, mulch, fertiliser & delivery	\$750	Sufficient nutrient dense organic matter for native and pollinating plants. Exact cubic amount TBC based on each schools available area
Pollinating Plants	\$550	Various tubestock and established plants to fill available area of each school. Exact number to be determined once garden assessment complete.
Education Session*	\$900	4 x 1.5 hour education sessions introducing the B & B Highway and key concepts to children
Educational resources*	\$300	B & B Highway resource package to support curriculum integration and at home learnings
Signage*	\$300	B & B Highway all-weather outdoor signage throughout garden - 1 x A5 and 2 x A4 delivered with pre-drilled holes
Supplementary Labour	\$700	Extra labour costs to prepare garden space and other miscellaneous labour needs
TOTAL	\$7,000	Total in Australian Dollars (ex GST)
*Service provided by PlantingSeeds		
NB: Should PlantingSeeds be required to manage the garden build, a 15% admin fee will be charged on top of the estimated costs		
NBB: All costs are estimates based on actual costings and subject to change		

B & B Highway		
Sample Small Budget for Sustainable Schools Grant		
Item	Estimate	Notes
Garden Assessment, Design & Support*	\$300	3 hours total of garden assessment, design and ongoing support from PlantingSeeds team
Native Stingless Beehive*	\$800	Tetragonula Carbonaria Hive, roof and platform/stand
Hive Installation*	\$350	Installation of hive including delivery and any extra materials as well as follow up check 1 month later
Raised garden beds/planters & installation	\$350	1 - 2 raised garden beds/planters depending on available space within school
Native organic soil, mulch, fertiliser & delivery	\$300	Sufficient nutrient dense organic matter for native and pollinating plants. Exact cubic amount TBC based on each schools available area
Pollinating Plants	\$200	Various tubestock and established plants to fill available area of each school. Exact numebr to be determined once garden assessment complete.
Education Session*	\$500	2 x 1.5 hour education sessions introducing the B & B Highway and key concepts to children
Educational resources*	\$200	B & B Highway resource package to support curriculum integration and at home learnings
Signage*	\$200	B & B Highway all-weather outdoor signage throughout garden - 1 x A5 and x A4 delivered with pre-drilled holes
Supplementary Labour	\$300	Extra labour costs to prepare garden space and other miscellaneous labour needs
TOTAL	\$3,500	Total in Australian Dollars (ex GST)
*Service provided by PlantingSeeds		
NB: All costs are estimates based on actual costings and subject to change		

B & B Highway		
Sample Large Budget for Sustainable Schools Grant		
Item	Estimate	Notes
Garden Assessment, Design & Support*	\$1,500	15 hours total of garden assessment, design and ongoing support from PlantingSeeds team
Garden equipment & tools	\$350	Tools to be utilised in the garden i.e. wheelbarrow, gloves, watering cans etc.
Native Stingless Beehive*	\$800	Tetragonula Carbonaria Hive, roof and platform/stand
Hive Installation*	\$350	Installation of hive including delivery and any extra materials as well as follow up check 1 month later
Decorative garden elements	\$750	pavers, bricks and other potential edging and design options
Raised wicking garden beds/planters & installation	\$2,750	3 - 5 raised garden beds/planters fitted with Water Ups wicking cells
Native organic soil, mulch, fertiliser & delivery	\$1,000	Sufficient nutrient dense organic matter for native and pollinating plants. Exact cubic amount TBC based on each schools available area
Pollinating Plants	\$1,000	Various tubestock and established plants to fill available area of each school. Exact numebr to be determined once garden assessment complete.
Education Session*	\$900	4 x 1.5 hour education sessions introducing the B & B Highway and key concepts to children
Educational resources*	\$500	B & B Highway resource package to support curriculum integration and at home learnings
Signage*	\$600	B & B Highway all-weather outdoor signage throughout garden - 4 x A5 and 4 x A4 delivered with pre-drilled holes
Supplementary Labour	\$1,500	Extra labour costs to prepare garden space and other miscellaneous labour needs
TOTAL	\$12,000	Total in Australian Dollars (ex GST)
*Service provided by PlantingSeeds		
NB: Should PlantingSeeds be required to manage the garden build, a 15% admin fee will be charged on top of the estimated costs		
NB: All costs are estimates based on actual costings and subject to change		

Where do I apply?

Applications will be available from the School Infrastructure NSW website at <https://education.nsw.gov.au/school-infrastructure-nsw/school-design-and-property-services/sustainable-schools-grants> from November 1 and close November 29.

For more information about *the B&B Highway* visit <https://www.ps.org.au/bbhighwayabout>

For more information about *Observatory Hill EEC* visit <https://observatoryhilleec.schools.nsw.gov.au/>

We look forward to your participation in the program

Regards

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