Riparian reforestation to increase water infiltration and reduce run-off

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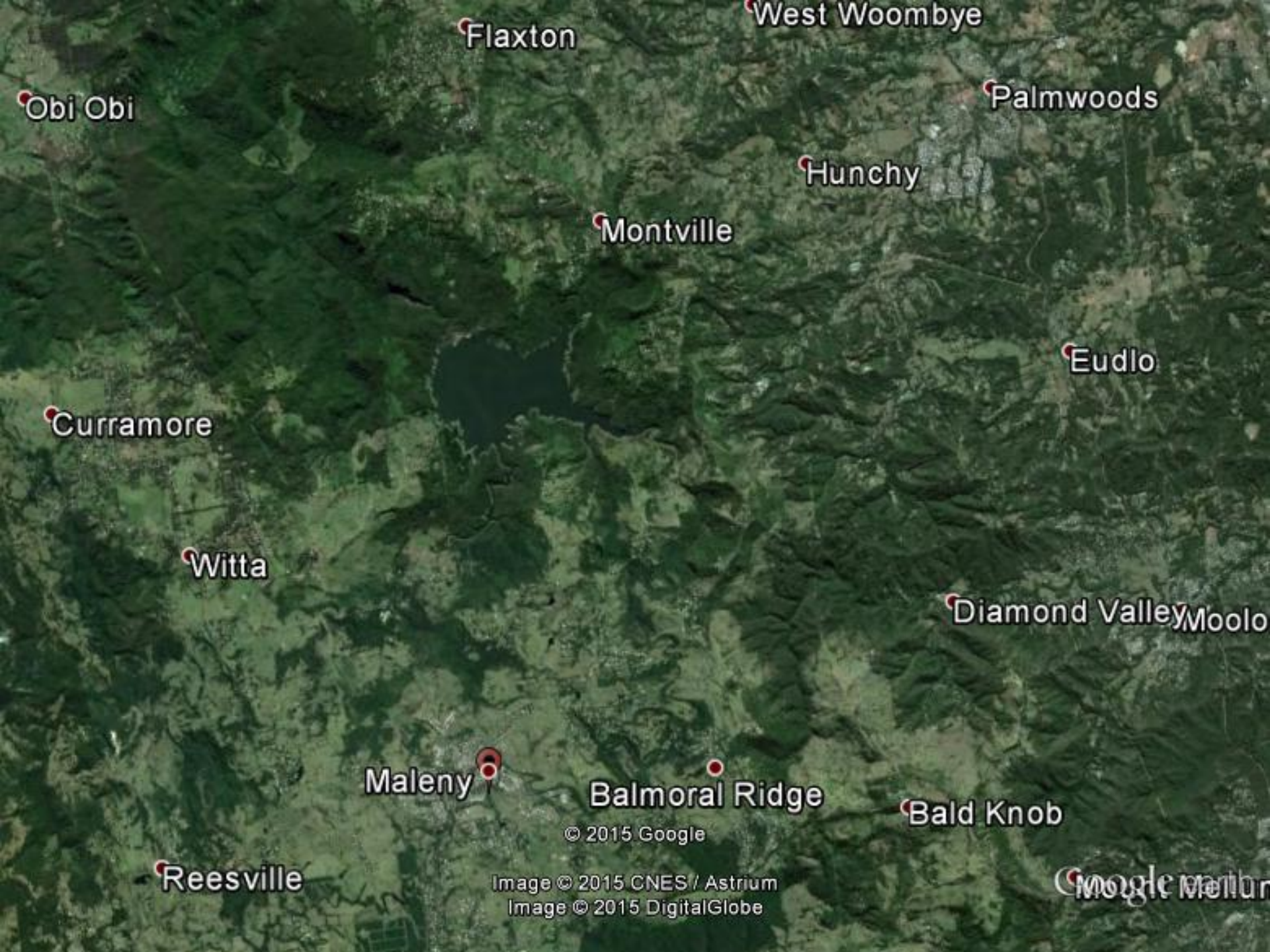
Lake Baroon Catchment Care Group
Working with our community...for our waterways


West Woombye
Flaxton
Obi Obi
Palmwoods
Hunchy
Montville
Eudlo
Curramore
Witta
Diamond Valley
Moolo
Maleny
Balmoral Ridge
Bald Knob
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Reesville
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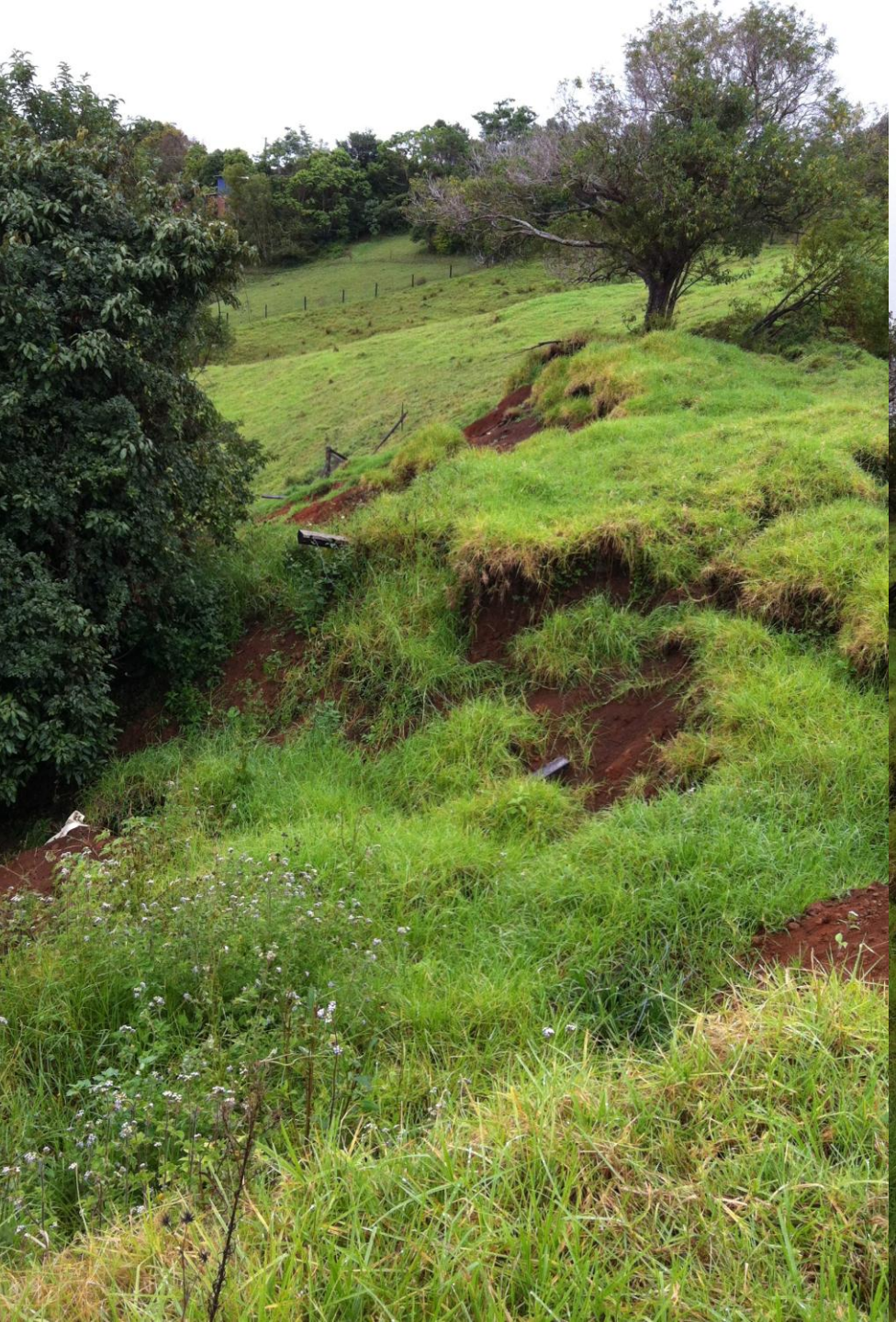
Many reasons for restoring riparian vegetation

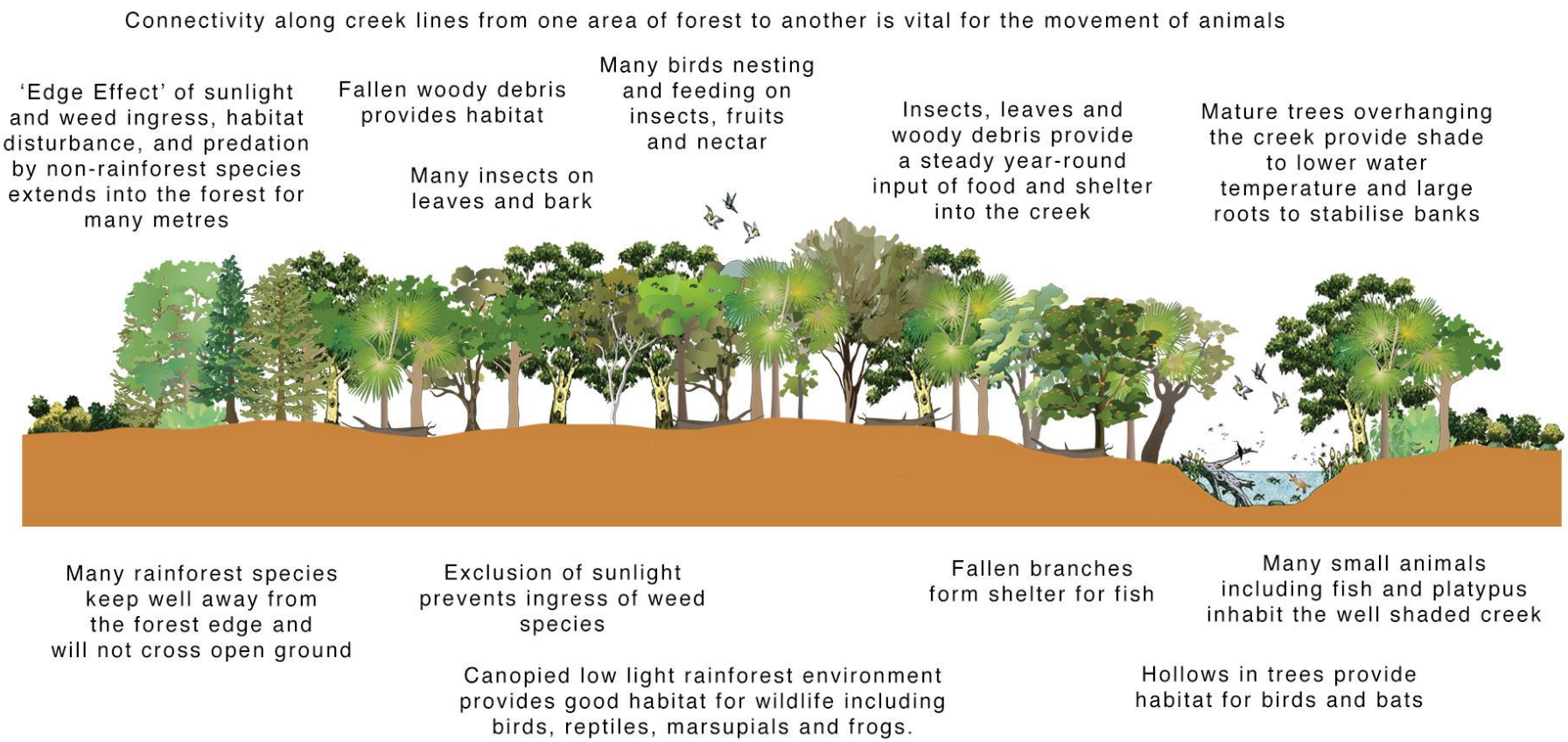
Regulation of stream flow

Stream bank stabilisation

Critical habitat for biodiversity

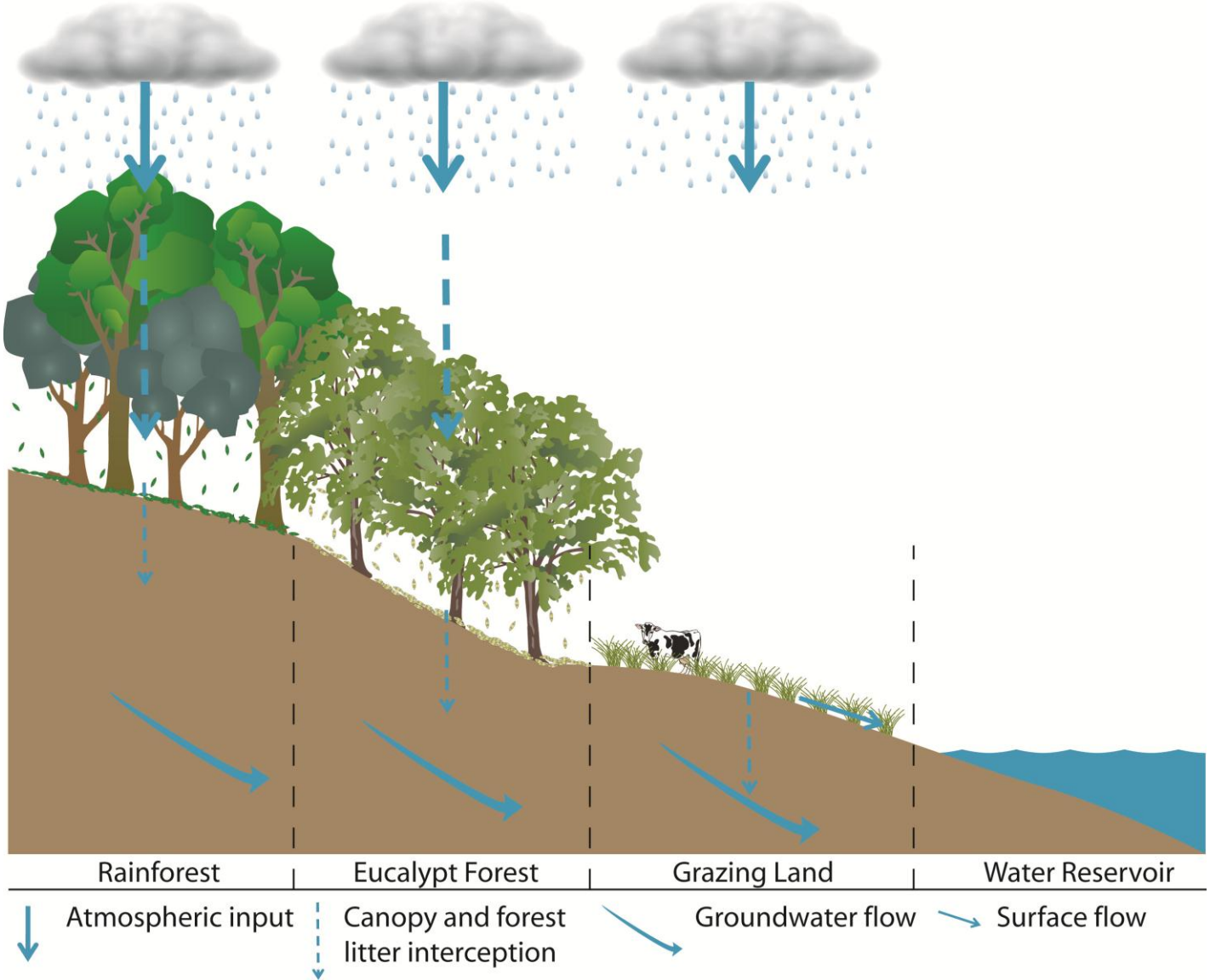


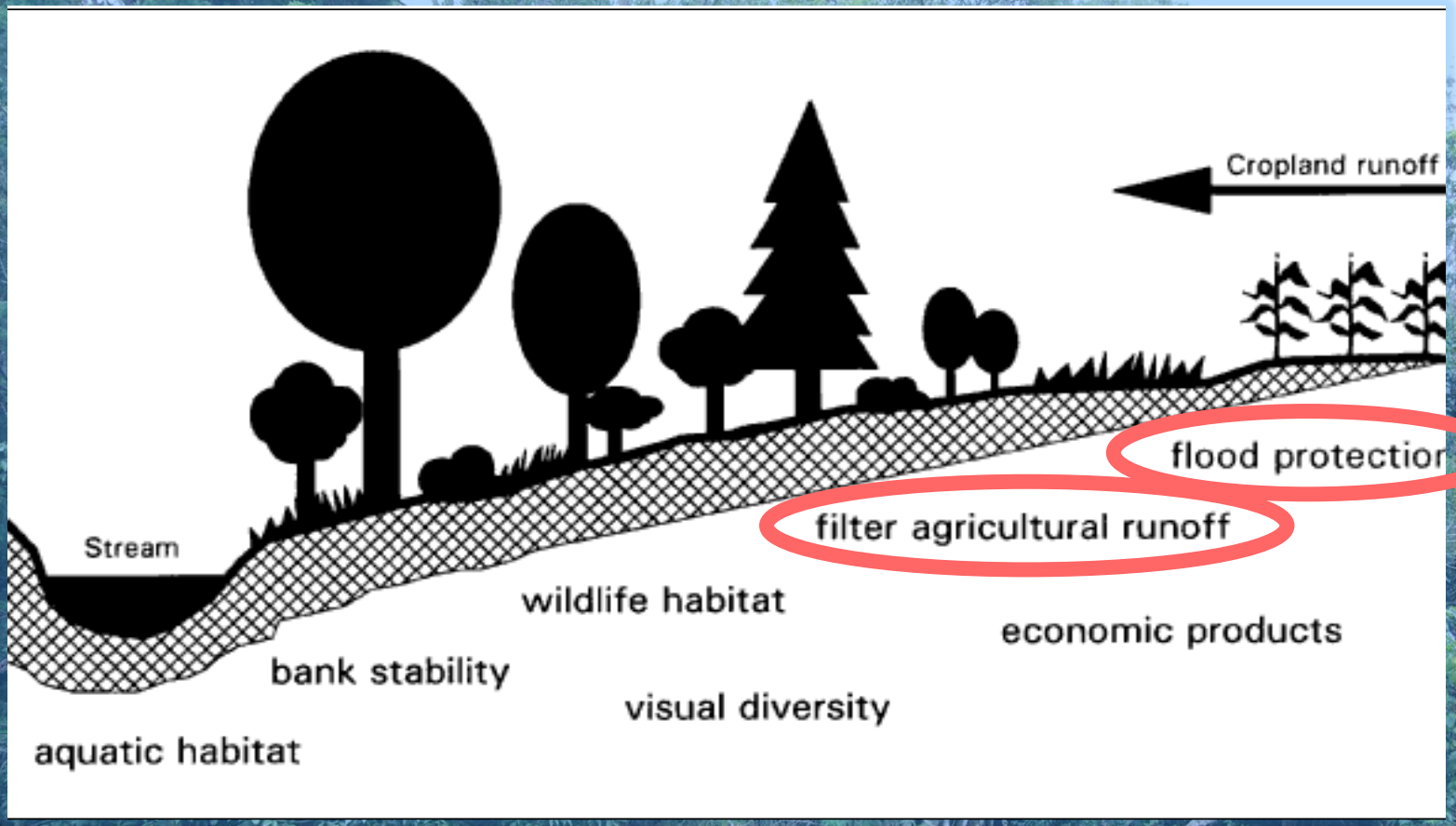
Many reasons why riparian vegetation is important



http://www.obiobiparklands.com/riparian.php

Questions about how vegetation influences the hydraulic properties of soil




Cropland runoff
flood protection
filter agricultural runoff
Stream
wildlife habitat
economic products
bank stability
visual diversity
aquatic habitat

Does riparian vegetation reduce water and nutrient flow?

Trees

Pasture

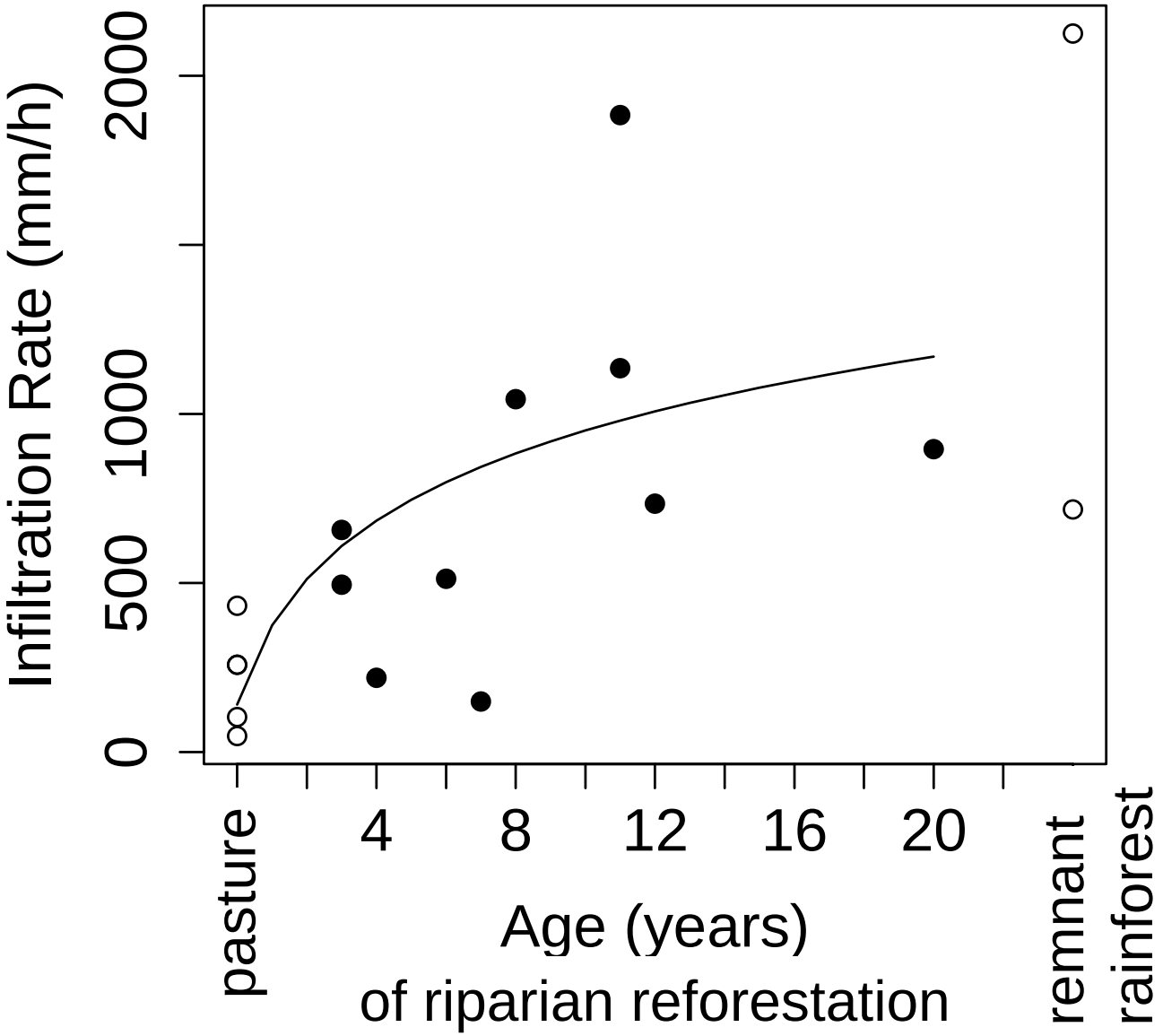
Does riparian vegetation reduce water and nutrient flow?



3 to 20 year old plantations and remnant rainforest

Discovery 1: Soil density very quickly declines with time since reforestation

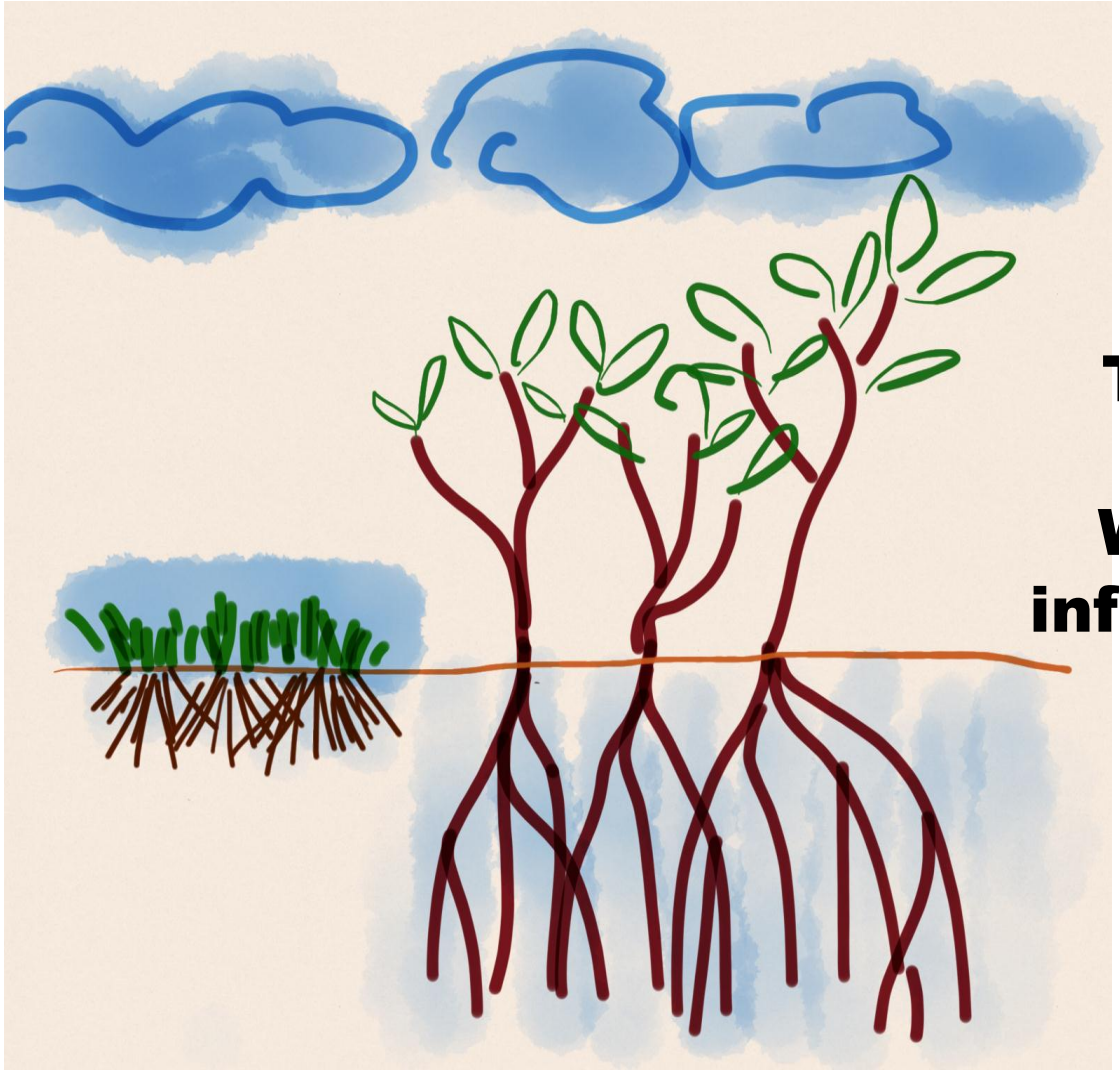
Discovery 2: Water infiltration rates are much higher in reforested and forest sites than pasture



Discovery 2: Water infiltration rates are much higher in reforested and forest sites than pasture

Pastures

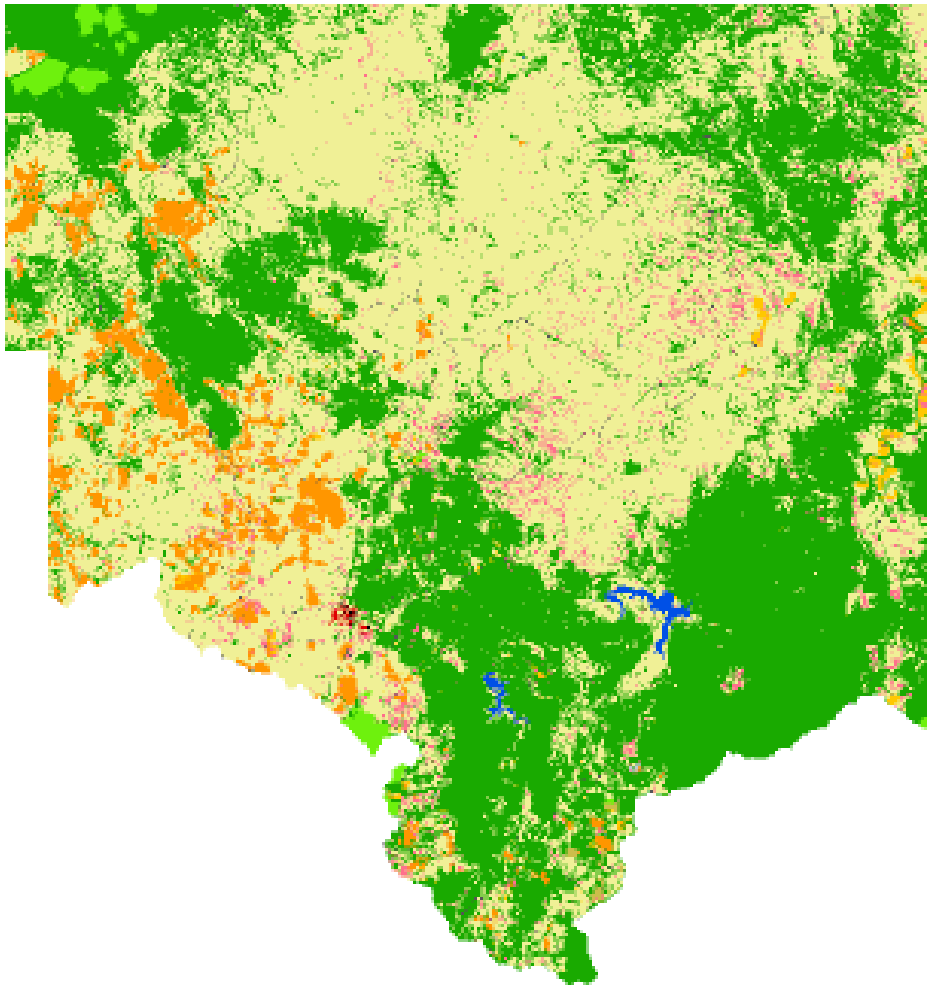
water infiltrates slowly

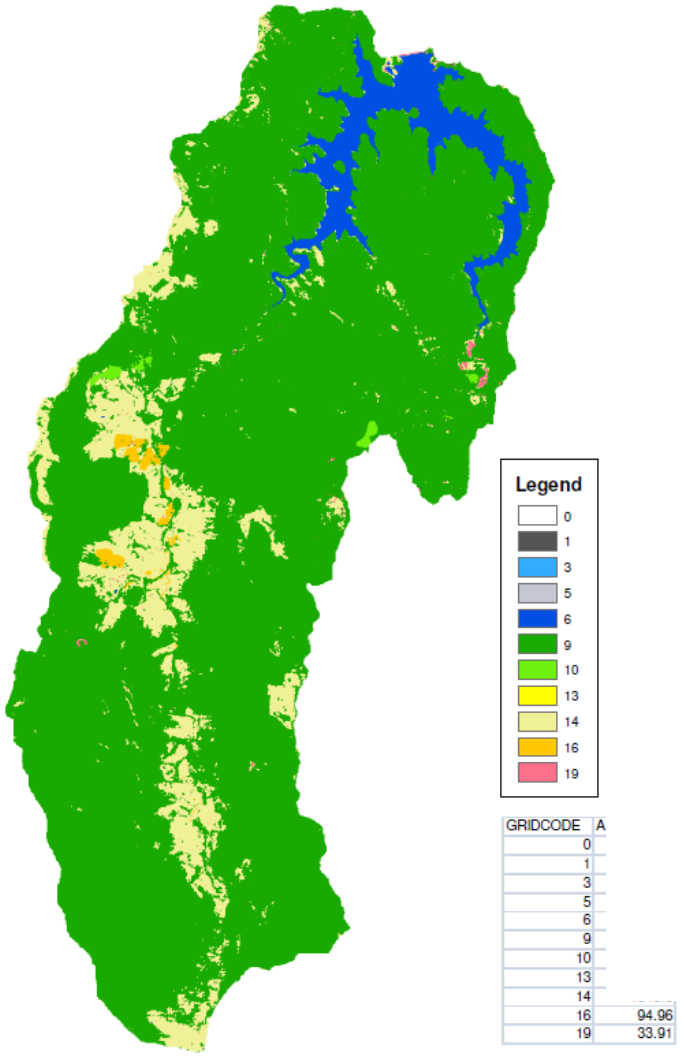


Trees

Water infiltrates fast

Would less runoff occur in pasture-rich catchments after reforestation?





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19	33.91

Vegetation for flood prevention?

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Early Response of Soil Properties and Function to Riparian Rainforest Restoration

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August 2014 | Volume 9 | Issue 8 | e104198