

# WHAT WE NEED TO BE HEALTHY



## What a stream needs to be healthy

- Shade - from a continuous edge of overhanging plants. That could be from long grasses or from native trees or shrubs
- Cleansed water coming in - low in silt, nutrients and pollution. Water can be filtered through surface vegetation before entering the stream. Permeable surfaces are critical, and swales and sand filters are good ways of filtering run-off
- Time for ground to soak water - water that enters a stream by seeping through the ground is naturally cleansed of pollutants through filtering and microbial action. Water travelling quickly through pipes arrives before this happens
- Naturally shaped stream bottoms and sides - so the groundwater can seep, eddy and flow (fast and slow) - and life can live, shelter and function within
- Leaves and twigs and loose rocks - on the banks and in the water, to provide homes and food for the water and amphibious creatures.



## What birds need to be healthy

- Food - insects, fish, berries, nectar - depending on what sort of bird and what time of year.
- Perching sites - from which to look for food and be with their mates
- Connected cover - as forest birds keep safe by not flying over open ground
- Secret places for nests - in branches and holes in big old trees
- Loose bark, soft ground, rotten branches - for insect food to live in
- Removal of pests that prey - like possums and cats (bells for pet cats to warn the birds).



## What geckos and skinks, insects, worms and other small native creatures need to be healthy

- Rotten wood, loose rocks, soft ground, mulch and loose leaves (hanging and on the ground) - to live in, eat, burrow through, keep safe in or to keep warm on



- Trees or bushes - for cover, food and shelter
- Connected cover - bush connecting to other bush areas to allow animals who need cover to move from one bush area to another
- Places, and undisturbed time - to pupate
- Removal of pests.

## What trees and shrubs need to be healthy



- Fertile soil - made from ground mixed with leaf litter eaten by insects and birds.
- Soft soil with holes made by worms - so they can get air and water to their roots, and so their roots can grow
- Leaf litter left on the ground - to retain moisture in the ground
- Removal of pests and weeds - that take over and break down natural systems
- Other plants as close neighbours - to help shelter, shade the ground, pollinate each other, inhibit weed growth, providing conditions for the next lot of seedlings to thrive
- Solid vegetation down to ground level (edge vegetation) - to keep invasive weeds, sun and wind out
- Lots of birds, insects, lizards, worms, fungi and bacteria - to help transport their seeds, make the soil good, fertilise their flowers and provide nutrients.

## and ... What do people need to be healthy?



- A good supply of products from nature to supply food, materials for building, pharmaceuticals, art etc
- Good services from nature to decontaminate and break down wastes, compost organic material for soil fertility, produce oxygen, take up carbon dioxide etc, and to supply clean water for drinking, farming, gardening and the streams and landscape that make up our world
- Good inspiration for recreation, spirituality, art, beauty, relationships, being involved and close to nature and feeling 'glad to be alive'; and ...
- Good diversity of living things and places for them to live (collectively called biodiversity) to drive healthy nature, and thus allow for healthy human society through the economic, social and cultural benefits illustrated above.

That's what I call a system - an **eco-system!**

What different choices can I make in order to *live with*, and encourage more healthy nature at *my place* - and in *my local stream*?

