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Frogs

There are over 240 described species of frogs in Australia, with 130 species known to occur in Queensland. At least 28 species i.e. approximately 11% of the Queensland fauna have been recorded within the City of Ipswich. Photos and information on 20 of these species have been included.

Ipswich frog fauna consists of 28 species, consisting of four families-

- ·13 species of tree frogs (Family Hylidae)
- ·14 species of ground frogs (Families Limnodynastidae and Myobatrachidae)
- ·1 species of true toad (Family Bufonidae)

Of these species, only one is scheduled as threatened under either State and/or Commonwealth legislation, the tusked frog (*Adelotus brevis*).

Although Ipswich has fewer species of frogs than other nearby cities and shires, it does benefit from the fact that it has areas of undeveloped rural land, which provides habitat for three species which are generally more commonly recorded further to the west. These are the greenstripe frog (*Cyclorana alboguttata*), superb collared frog (*Cyclorana brevipes*) and salmon striped frog (*Limnodynastes salmini*).



Stony Creek Frog (Litoria wilcoxii) - female





Greenstripe Frog Cyclorana alboguttata

Call: Repeated high-pitched quacking.

Description: Large size, up to 80 mm SVL.

Variable in colour, grey or olive-brown with bright green stripes and a cream to white belly. **Habitat:** Prefers woodland and flooded grassland areas.

Remarks: Rare in Ipswich, known only from the west of the city and probably declining.

Records: Grandchester.



Superb Collared Frog Cyclorana brevipes

Call: Drawn out nasal like moan 'waaaaa'. **Description:** Medium-sized, up to 50 mm SVL. Variable in colour and pattern. Generally

mottled with dark brown-olive markings above over a paler background.

Habitat: Prefers open grassland and lightly

forested areas.

Remarks: Rare in Ipswich, known only from a

few locations in the west of the city.

Records: Calvert.



Green-thighed Frog Litoria brevipalmata

Call: A series of 'quacks' increasing in pace.

Description: Medium-sized, 45 mm SVL.

Generally chocolate brown above,
sometimes paler. Groin and backs of thighs
bright green-blue to green with black spots.

Habitat: Wet and dry sclerophyll forest and

ephemeral paperbark swamps.

Remarks: Rare in Ipswich, breeds in spring

and summer following heavy rain.

Records: Bellbird Park.



Green Tree Frog Litoria caerulea

Call: Deep drawn out 'wroop', 'wruh' or 'wroo'. **Description:** Very large, 110 mm SVL, sometimes larger. Colour variable dark or light green, brown-olive or even bluish, often with white spots.

Habitat: Numerous habitat types with exception of rainforest.

Remarks: Common in Ipswich, including urban areas. Breeds in spring and summer. **Records:** Camira, Ipswich and White Rock.













Bleating Tree Frog Litoria dentata

Call: High pitched bleat 'creeeeee'. Description: Medium-sized, 45 mm SVL. Cream-brown to grey-brown above, often with indistinct broad darker band on the back.

Habitat: Numerous habitat types including wetlands, permanent water bodies and dams. Remarks: Relatively common in Ipswich. Breeds in spring and summer.

Records: Goodna, Raceview, Redbank Plains, Rosewood and White Rock.



Eastern Sedge Frog Litoria fallax

Call: Sharp high pitched 'reek ...pip...pip'. Description: Small-sized, up to 35 mm SVL. Colour varies from green, pale brown or brown above, sometimes with dark spots or flecks. The posterior of thigh is orange.

Habitat: Occurs in ponds, dams, wetlands, creeks, streams and disturbed habitat.

Remarks: Very common in Ipswich, including urban areas. Breeds in spring and summer. Records: Brookwater, Marburg, New Chum,

Spring Mountain and Yamanto.



Graceful Tree Frog Litoria gracilenta

Call: Long drawn out moan 'aaaaaare'.

Description: Medium-sized, 45 mm SVL. Granular skin, bright to dark green dorsally with a faint yellowish stripe extending back over the eye and tympanum, thighs purple.

Habitat: Numerous habitat types including streams, ponds, dams and wetlands.

Remarks: Common in Ipswich, including most habitat types. Breeds in spring and

Records: Goolman, Grandchester, Purga, Spring Mountain and White Rock.



Broad-palmed Rocket Frog Litoria latopalmata

Call: Series of accelerating 'yeps' or 'yips'.

Description: Medium-sized, up to 45 mm SVL. Light to dark brown above, often with darker blotches. Back of thighs and groin are yellow with darker brown and black mottling.

Habitat: Most habitats, including streams, ponds and wetlands.

Remarks: Common in Ipswich. Breeds in spring and summer.

Records: Ripley, Swanbank and Walloon.











Call: Low 'chirps' accelerating to rapid 'yeps'. **Description:** Medium-sized to 55 mm SVL. This species has long legs and a long-pointed snout, yellow-brown to tan with stripes above. **Habitat:** Inhabits ephemeral water bodies in dry forest, woodland and grassland habitats.

Remarks: Generally common in Ipswich. Breeds in spring and summer.

Records: Flinders View, Goodna, Redbank

Plains and White Rock.



Emerald-spotted Tree Frog

Litoria peronii

Call: Loud descending 'cackle'.

Description: Medium-sized, up to 65 mm SVL. Variable species, whitish above, with grey or brown mottling. There may also be very small green spots, which are not always visible. The iris is cross shaped.

Habitat: Occurs in most habitat types including ponds, dams, wetlands and streams.

Remarks: Relatively uncommon in Ipswich. Breeds in spring and summer.

Records: Brassall, Churchill and White Rock.



Call: Soft 'p-tuk' or 'p-t-tuk'.

Description: Medium-sized up to 45 mm SVL. Mottled dark brown, grey or beige with small warts above. Red on groin and calf. Males have 'tusks',' broad heads and are larger than females which is unusual for Australian frogs. Eyes with dark cartwheel markings.

Habitat: Numerous habitat types including rainforest streams, dry forest and urban areas

Remarks: Rare in Ipswich.
Records: Bellbird Park and Wacol.

Striped Marsh Frog Limnodynastes peronii

Call: Short 'toc' repeated regularly.

Description: Medium-sized 75 mm SVL. Light to grey-brown above with dark stripes, mid dorsal stripe broken in two by a pale cream stripe.

Habitat: Present in all habitats including urban areas, with the exception of rainforest.

Remarks: Very common in Ipswich, most common species in backyard ponds. Breeds and calls in most months of the year.

Records: Amberley, Bundamba, Goodna, Purga and Raceview.

















Salmon Striped Frog Limnodynastes salmini

Call: Short 'wok' repeated every 1-3 seconds.

Description: Large size, up to 80mm SVL. A smooth skinned frog with a rounded snout. Variable shades of brown above with darker blotches and broken stripes. The dorsal surface has a salmon-pinkish colouration.

Habitat: Occurs in a variety of habitats including flooded grassland and swamps.

Remarks: Rare in Ipswich

Records: Purga.



Scarlet-sided Pobblebonk Limnodynastes terraereginae

Call: Resonant 'bonk'.

Description: Large-sized, 80 mm SVL. Dorsally grey to brown often with scattered spots. A broad dark band from nostril to arm and a raised cream, yellow or orange glandular stripe below the eye to base of arm. Often red in groin and thigh area.

Habitat: A burrowing species which occurs in numerous habitat types.

Remarks: Common in Ipswich. Breeds in spring and summer following heavy rain. Records: Redbank Plains, Swanbank, White



Mixophyes fasciolatus

Call: Loud resonant "waaaark"

Description: Large-sized, females 100 mm SVL; males smaller, up to 70 mm SVL. Tan, brown, reddish brown or grey above with irregular darker markings.

Habitat: Wet and dry forest, rainforest

streams, dams and ponds.

Remarks: Uncommon in Ipswich. Breeds in

spring and summer.

Records: Goodna, Pine Mountain, Redbank

Plains and White Rock.



Ornate Burrowing Frog Platyplectrum ornatum

Call: Resonant 'goonk'.

Description: Medium-sized, 45 mm SVL. A highly variable round bodied species with short limbs and bulging eyes. Can range in colour from reddish through to orange-brown. Habitat: Occurs in most habitats including disturbed areas with exception of rainforest. Remarks: Common in Ipswich, a burrowing species which breeds in spring and summer. Records: Redbank Plains, Walloon, White Rock, Pine Mountain and Yamanto.











Call: High-pitched nasal squelch-like 'neep'. **Description:** Small-sized, less than 25 mm SVL. Highly variable colour pattern ranging from shades of brown to grey, plain or patterned often including stripes. The underside is granular, cream or light grey in colour with dark peppering.

Habitat: Occurs in dry sclerophyll, paperbark and heath habitat, including disturbed habitat. Remarks: Common in Ipswich. Calls and breeds throughout much of the year.

Records: Haigslea, Marburg, Raceview, White Rock and Yamanto.

Clicking Froglet Crinia signifera

Call: Rapid 'crick-ick', 'crick-ick', 'crick-ick' often increasing in speed, May be heard calling during both day and night.

Description: Small-sized, generally less than 30 mm SVL. Like most *Crinia* spp. highly variable in colour, ranging from a blotchy pattern to stripes.

Habitat: Occurs in most habitats including disturbed areas.

Remarks: Common in Ipswich. Breeds and calls throughout the year.

Records: Goodna, Kholo and Purga.

Copper-backed Brood Frog Pseudophryne raveni

Call: Ratchet 'ehhhhk' with upward inflection.

Description: Small size, 35 mm SVL.

Colouration above red-brown to copper often with darker flecks. A narrow dark band runs down the side of the head and body. Underside boldly marked with grey and white.

Habitat: Most habitats with the exception of rainforest, breeds in soaks and gullies.

Remarks: Common in Ipswich, a terrestrial breeder, breeds throughout much of the year. **Records:** Bellbird Park, Redbank Plains, Pine Mountain and White Rock.

Sandy Gungan Uperoleia fusca

Call: A short buzzing rattle/squelchy 'ehhhk'. **Description:** Small-sized, up to 30 mm SVL. Brown or grey-brown above with areas of darker and/or light orange-brown pigment. Skin rough above with numerous low warts, underside salt and pepper appearance.

Habitat: Open dry forest and heath associated with ponds, dams and swamps. **Remarks:** Uncommon in Ipswich. Breeds in spring and summer.

Records: Pine Mountain, Redbank Plains and White Rock.















Reptiles

There are over 1000 described species of reptiles in Australia, with almost 500 species known to occur in Queensland. At least 72 species or approximately 15% of the Queensland fauna have been recorded within the City of Ipswich. Photos and information on 40 of these species have been included.

Ipswich reptile fauna consists of at least 72 species which are represented by 12 families -

- ·4 species of turtle (Family Chelidae)
- ·6 species of gecko in three families
- ·4 species of flap-footed lizard (legless lizards) (Family Pygopodidae)
- ·27 species of skink (Family Scincidae)
- ·4 species of dragon (Family Agamidae)
- ·2 species of monitor (Family Varanidae)
- ·25 species of snake in four families

Of these species, three are scheduled as threatened under either State and/or Commonwealth legislation, including the common death adder (*Acanthophis antarcticus*) and grey snake (*Hemiaspis damelii*).

As with frogs, the richness of the reptilian fauna of Ipswich benefits by its location. The city is home to several species which reach the eastern extent of their distribution, including the shaded-litter rainbow skink (*Carlia munda*), eastern ranges rock skink (*Liopholis modesta*), Boulenger's snake-eyed skink (*Morethia boulengeri*), Low's dwarf skink (*Pygmaeascincus timlowi*), Carpentaria snake (*Cryptophis boschmai*) and spotted black snake (*Pseudechis guttatus*).

Southern Spotted velvet Gecko (Oedura tryoni)



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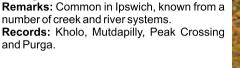


Description: Carapace (shell) 25 cm, this species has a small head and thin long neck. Dark brown above, plastron (ventrally) white to cream in colour with broad black sutures.

Habitat: Inhabits swamps, lagoons and slowmoving waters of creeks and rivers.

number of creek and river systems. Records: Kholo, Mutdapilly, Peak Crossing

and Purga.





Description: Carapace (shell) 28 cm, olivebrown in colour. Plastron (ventrally) white. Head and limbs grey, yellow stripe on side of head, extending back from the jaw.

Habitat: Rivers, large streams and ponds and dams, often in large numbers.

Remarks: Common in Ipswich in creeks, streams and dams.

Records: Dinmore, Ipswich, Kholo, Muirlea,

Redbank and Rosewood.





Thick-tailed Gecko Underwoodisaurus milii

Description: 9.6 cm SVL. Pink to purplish brown with small cream spots. Covered in tubercles with a carrot shaped tail and a number of white bands, regenerated tail tends to lack bands. A nocturnal terrestrial species with no pads on fingers and toes.

Habitat: Generally, prefers dry woodland/rocky areas with an open understory.

Remarks: Rare in Ipswich, restricted to large

reserves and habitat systems.

Records: White Rock.



Robust Velvet Gecko Nebilifera robusta

Description: 8.5 cm SVL. Brown to blackish brown with cream to grey squarish blotches dorsally and a thick flattened tail. Regenerated tail doesn't have the blotches. Fingers and toes flatted to form large pads.

Habitat: An arboreal species which prefers dry forests, often associated with rock faces. Remarks: Uncommon in Ipswich, restricted

to rocky areas, although often occurs on buildings in suitable habitat.

Records: Amberley, Goolman, Redbank

Plains and White Rock.













Southern Spotted Velvet Gecko Oedura tryoni

Description: 8 cm SVL. This species has a smooth velvety texture, is yellowish-brown in colour and patterned with small dark edged pale cream spots and a thick flattened tail.

Habitat: Inhabits a number of habitats included dry forest and is often associated with rocky/granite areas.

Remarks: Uncommon in Ipswich, with few records. Generally restricted to larger bushland environments.

Records: White Rock.



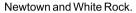
Dubious Dtella Gehvra dubia

Description: 6.5 cm SVL. Varies from grey to brown with bands of pale spots with a dark anterior edge. Markings can form a net like pattern or pair of irregular longitudinal lines.

Habitat: Occurs in numerous habitat types with the general exception of wet forest.

Remarks: Common in Ipswich in both good quality bushland and highly urban areas.

Records: Brookwater, Camira, Ipswich,





Collared Delma Delma torquata

Description: 6.5 cm SVL. Very small species of flap-footed lizard. Reddish brown to greyish-brown on the tail with glossy black head and neck markings, extending to throat with narrow yellowish bands.

Habitat: Generally found in dry open often rocky forest habitat.

Remarks: Rare in Ipswich, likely only present in northern suburbs, but known to be present in nearby Mount Crosby and Anstead.

Records: Possible Chuwar, Karalee and Kholo.



Burton's Snake-lizard Lialis burtonis

Description: 29 cm SVL. A species with a pointed wedge-shaped snout and very small hindlimb flaps and a long tail. Colour highly variable grey, brown, yellow with or without stripes.

Habitat: Dry forest and heath often seen on the ground in native grasses. Active both day and night and often mistaken for a snake.

Remarks: Common in Ipswich, particularly in dry forest in the larger reserves.

Records: Redbank Plains, Spring Mountain, and White Rock.









Major Skink *Bellatorias frerei*

Description: 18 cm SVL. A large robust variable skink species. Light brown with fine darker lines above, sides dark brown with pale spots. Juveniles more noticeably patterned and coloured.

Habitat: Edge of wetter forest, dry forest and heath areas. A shy species which basks near the entrance to shelter sites, logs or rocky areas.

Remarks: Rare in Ipswich.

Records: Old records from North Ipswich.



Scute-snouted Calyptotis Calyptotis scutirostrum

Description: 6 cm SVL. Species with a relatively long body and five digits on each relatively small limb.Generally coppery brown Above, yellow below with pink flush under tail.

Habitat: Present in almost all habitat types including rainforest, dry forest and urban backyards.

Remarks: Common in Ipswich, but rarely encountered as it is secretive and rarely ventures far from cover.

Records: Finders – Goolman, Ipswich, Kholo and White Rock.



Open-litter Rainbow Skink Carlia pectoralis

Description: 4.7 cm SVL. Four fingers and five toes. Dorsal scales with three ridges/keels (mid body). Brown in colour with paravertebral rows of black and white dots. Breeding males have orange stripes laterally from the arm to the groin.

Habitat: Dry forest often with a grassy understory.

Remarks: Uncommon in Ipswich, in better quality bushland, absent from urbanised areas and backyards.

Records: White Rock.



Tussock Rainbow Skink Carlia vivax

Description: 4 cm SVL. Four fingers and five toes. Dorsal scales with two ridges (mid body). Dorsally brown to grey, with a lateral white stripe in females. Breeding males have an orange flush along the sides.

Habitat: Dry forest often with a grassy understory on stony or sandy soils.

Remarks: Common in Ipswich in bushland habitat, absent from urbanised areas.

Records: Finders-Goolman, Grandchester, White Rock and Spring Mountain.













Dark Bar-sided Skink Concinnia martini

Description: 5.5 cm SVL. Coppery-brown above with dark regular blotches. A broad ragged lateral stripe and dark bands on tail. Habitat: Moist and dry forest types and also

urban areas and backyards. Often seen basking on fallen timber or rocky areas.

Remarks: Common in Ipswich, including urban bushland and backyards.

Records: Grandchester, Ipswich, New Chum, Redbank Plains, Spring Mountain and White Rock.



Bar-sided Skink Concinnia tenuis

Description: 6.5 cm SVL. Shades of brown marked with small black blotches. A broad dark lateral stripe runs the length of the body and irregular narrow black bands on the tail.

Habitat: Occupies a number of habitat types including rainforest, dry forest and urban gardens. Often seen on the sides of large trees and fallen timber.

Remarks: Uncommon in Ipswich, appears to be restricted to better quality bushland.

Records: Kholo, Spring Mountain and White Rock.



Elegant Snake-eyed Skink Cryptoblepharus pulcher

Description: 4 cm SVL. Flat bodied skink with five digits on each limb. Black to brownish with a pair of widely spaced pale lines, which look like racing stripes along the edge of the back.

Habitat: Most habitat types with exception of rainforest, including urban areas.

Remarks: Very common in Ipswich, particularly in urban areas and dry sclerophyll forest, often seen on fences is urban areas.

Records: Gailes, Ipswich, Rosewood, South Ripley and Yamanto.



Robust Striped Ctenotus Ctenotus robustus

Description: 13 cm SVL. A robust, brown species with a pale edged black vertebrate stripe. Other stripes are present dorsally and laterally. Also blotches or spots present on the upper lateral area.

Habitat: Dry forest, woodlands, heathlands and well vegetated backyards.

Remarks: Common in Ipswich, in both bushland and urban habitats.

Records: Ipswich, Mount Marrow, Newtown,

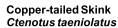
New Chum and White Rock.











Description: 6.5 cm SVL. A species with several pale and dark stripes, including a pale edged black vertebratal stripe. A copper flush may be present on the tail.

Habitat: Dry forest and heathland, particularly in sandy environments.

Remarks: Uncommon in Ipswich, generally restricted to larger better-quality habitat systems.

Records: Bellbird Park, Ripley, Spring Mountain and White Rock.



Pink-tongued Skink Cyclodomorphus gerrardii

adults and blue in juveniles.

Description: 20 cm SVL. A species with an elongate body and a long prehensile tail. Generally tan or brown with or without dark bands and a dark tip on snout. Tongue pink in

Habitat: Prefers wet and moist forest types and vine-forest but can also occur in moist well vegetated gardens. A species which is a good climber.

Remarks: Rare in Ipswich, very few reliable records.

Records: Flinders-Goolman.



Elf Skink

Eroticoscincus graciloides

Description: 3.2 cm SVL. Only member of its genus. A very small skink with a pointed snout and relatively large eyes. Iridescent dark brown to reddish brown in colour with a rusty dorsolateral stripe on the tail.

Habitat: Occurs in a variety of habitats including vine forest, wet forest and rainforest. Often shelters under rocks and other cover. **Remarks:** Rare in Ipswich, restricted to a few

locations in better quality bushland. **Records:** Kholo and Pine Mountain.



Friendly Sunskink *Lampropholis amicula*

Description: 3.5 cm SVL. A weak limbed relatively small skink, brown above with dark to black sides with a fine pale dorsolateral line. Scales underneath are generally conspicuously dark edged.

Habitat: Prefers dry forest and vine thickets with a well-developed understory.

Remarks: Common in Ipswich, restricted to better quality bushland, absent from urban environments

Records: Flinders-Goolman, Kholo, New Chum, Spring Mountain and White Rock.













Garden Skink Lampropholis delicata

Description: 5 cm SVL. A variable species which is grey to brown above, darker laterally often with a mid-lateral white stripe and cream helow

Habitat: Most habitat types including wet and dry forest and urban areas.

Remarks: Very common in Ipswich, present in most bushland reserves and most backyards.

Records: Brookwater, Ipswich, Peak Crossing, Swanbank, White Rock and Woodend.



Secretive Litter-skink Lvaisaurus foliorum

Description: 3.9 cm SVL. Four fingers and five toes. A small skink, olive brown in colour with black barring on the lips. Breeding males have the throat, hind limbs and tail flushed with a pinkish-orange colour.

Habitat: Dry forest and woodlands often found hiding in leaf litter.

Remarks: Common in Ipswich, in better quality bushland habitat.

Records: Grandchester, New Chum, Purga

and White Rock.



Eastern Fire-tailed Skink Morethia taeniopleura

Description: 4.2 cm SVL. Brown to greyish brown above with a narrow pale dorsolateral stripe and relatively large eyes. Tail, hips and hindlimbs flushed with red.

Habitat: Prefers dry forests and woodlands and often associated with rocky areas and outcrops.

Remarks: Uncommon in Ipswich, restricted to larger bushland habitats and reserves.

Records: Grandchester, Mutdapilly, Redbank Plains, Spring Mountain and White



Yolk-bellied Snake-skink Ophioscincus ophioscincus

Description: 9.7 cm SVL. A species which is silvery-grey above with a number of lines of black spots on the body and tail. Black on the sides with yellow to orange below and black colouration under the tail. Limbs are absent.

Habitat: Wet forest. rainforest and vine thickets and moist gullies in dry forest.

Remarks: Rare in Ipswich, likely restricted to vine thickets in better quality bushland.

Records: Camira, Gailes, Kholo and Pine

Mountain.











Description: 7.5 cm SVL. A long-bodied species with four short limbs and three fingers and toes. Brown in colour with a series of dark lines or dashes on the back with much darker sides. Bright yellow to orange below.

Habitat: Occupies a variety of habitat types including wet and dry sclerophyll forest, woodlands and rainforest.

Remarks: Uncommon in Ipswich, with few records.

Records: Rosewood, Spring Mountain and White Rock.

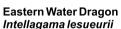


Description: 30 cm SVL. Very large robust skink with a short thick tail. A triangular shaped head with a blue-violet tongue. Body brown to yellowish-brown or grey with darker bands.

Habitat: Numerous habitat types, except higher altitude rainforest.

Remarks: Very common in Ipswich, particularly in open forest and urban areas.
Records: Bundamba, Goodna, Ipswich,

Kholo, Raceview, Purga and Marburg.



Description: 25 cm SVL. Crest of spines on neck and a tail which is long, tapered and laterally compressed. Grey-brown to olivegreen with darker markings on the body, including dark stripe from eye to neck, chest and belly dull red.

Habitat: Along waterways and surrounding habitat in most habitat types.

Remarks: Very common in Ipswich, including urban parklands etc.

Records: Brookwater, Goodna, Ipswich, Marburg and Raceview.

Common Bearded Dragon Pogona barbata

Description: 25 cm SVL. A robust species which is greyish in colour with lighter blotches. Small spines over much of the body and a yellow mouth lining. A squarish beard present, black in mature displaying males.

Habitat: Dry forest and parkland, including urban areas.

Remarks: Common in Ipswich, in bushland and urban parks.

Records: Kholo, New Chum, Raceview Redbank Plains and White Rock.



















Lace Monitor Varanus varius

Description: 55 cm SVL. Very large lizard with a long slender laterally compressed tail. Grey to black in colour with pale bands and transverse rows of pale spots. A blunt snout with pale yellow bands under the chin.

Habitat: Widespread in dry and moist forest. Remarks: Very common in Ipswich, including bushland in the urban environment.

Records: Chuwar, Mount Marrow, Mount Mort, Redbank and White Rock.



Blackish Blind Snake Anilios niarescens

Description: 75 cm TL. Smooth worm like largely fossorial snake, with a rounded snout from above and in profile. Dark purplish to grey dorsally, pinkish white below.

Habitat: Most habitat types including dry and wet forest. A burrowing species with poor vision.

Remarks: Likely common in Ipswich, often overlooked although sometimes active above ground on warm nights following rain.

Records: White Rock.



Carpet Python

Morelia spilota mcdowelii

Description: Up to 300 cm TL. Very large snake with blotches, bands and/or stripes. Variable colour pattern generally brown to olive, pale ventrally. Has a series of sensory pits along the lower jaw.

Habitat: All habitat types from urban areas including house roof cavities, to dry and wet forest.

Remarks: Very common in Ipswich, in all habitat types. Often encountered crossing roads, particularly at night.

Records: Grandchester, Kholo, Northern Ipswich, Redbank Plains and White Rock.



Brown Tree Snake Boiga irregularis

Description: Up to 200 cm TL. Long slender non-poisonous snake. Bulbous head with narrow neck and large eyes, with cat-like vertical pupils. Brown to reddish-brown with ragged edges crossbands above, pink to salmon below.

Habitat: Most habitat types including dry forest and rainforest, a nocturnal species.

Remarks: Uncommon in Ipswich, with few

Records: Chuwar, Dinmore, Mutdapilly and Redbank.









Southern Dwarf Crowned Snake Cacophis krefftii

Description: 35 cm TL. Very small inoffensive nocturnal species. Dark grey dorsally with a narrow yellow band across the nape. Yellow below with scales that are dark edged. Feeds on small skink species.

Habitat: Most moister habitat types including heath and rainforest.

Remarks: Rare in Ipswich, with only one recent record.

Records: Camira.

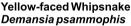


Golden Crowned Snake Cacophis squamulosus

Description: 75 cm TL. Dark grey to brown above with a pale brown to yellow streak along the sides of the neck, forming an incomplete band which extends forward to the snout. Orange ventrally with a row of brown blotches along the mid-line.

Habitat: Generally restricted to rainforests and wet forest.

Remarks: Rare in Ipswich, probably restricted to better-quality bushland areas. **Records:** Dimore, more common to east and west of the city, particularly in moister habitat.



Description: 100 cm TL. A slender variable, grey to olive species with a rusty flush or two reddish brown stripes, along the back. A pale rim and dark streak around the eye which forms a distinctive 'comma' shape.

Habitat: Occurs in numerous habitat types including dry forest, woodlands and heath. **Remarks:** Common in Ipswich, mainly

restricted to better quality habitat.

Records: Bundamba, Redbank Plains, Swanbank and White Rock.



Red-naped Snake Furina diadema

Description: 40 cm TL. A small slender snake, dark brown to reddish-brown above with a dark edge to each scale. In contrast, the head and neck are glossy black which encloses a blotch of red on the neck.

Habitat: Occurs in most habitat types with the exception of rainforest. A nocturnal species generally encountered hunting skinks in the evening.

Remarks: Common in Ipswich, generally restricted to drier habitat.

Records: Amberley, Blackstone, Bellbird Park, Peak Crossing and White Rock,







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Red-bellied Black Snake Pseudechis porphyriacus

Description: A large snake up to 200 cm TL (generally smaller). Shiny black dorsally, cream ventrally with a pink to red tinge on outer scales and extending up the flanks.

Habitat: Most moist habitats including swamps, stream edges and rainforest. A diurnal species often seen basking near water

Remarks: Common in Ipswich, recorded from a number of locations.

Records: Calvert, Bellbird Park, Mutdapilly, New Chum, Walloon, Ripley and Redbank Plains.



Eastern Brown Snake

Pseudonaia textilis

Description: Up to 200 cm TL. Variable dorsally from tan brown to black. Cream ventrally with paired orange to dark grey spots. Juveniles has a dark blotch on the head and often has bands which are generally lost as it matures.

Habitat: Most drier habitats, common in rural and outer urban areas.

Remarks: Common in Ipswich, could be encountered at almost any location.

Records: Bundamba, Brassall, Mutdapilly Newtown, North Ipswich, Redbank Plains, and Rosewood.



Freshwater Snake (Keelback)

Tropidonophis mairii

Description: 95 cm TL. Large eyes with strongly keeled (low ridges) scales. A variable harmless species, grey to brown-olive to almost black with a mix of dark blotches/spots and broken bands above.

Habitat: Most habitat types including heath, swamps to wetter forest, generally near water. Active day and night.

Remarks: Common in Ipswich, particularly in lowland moister habitat.

Records: Muirlea, North Booval, New Chum, Ripley and White Rock.



Bandy Bandy Vermicella annulata

Description: 75 cm TL (generally smaller). Body cylindrical and shiny with white and black rings encircling the body. When threatened responds by contorting and raising body into vertical hoops and thrashing around.

Habitat: In all habitat types although fossorial so often overlooked. It emerges after rain on warm nights and feeds on blind snakes.

Remarks: Uncommon in Ipswich, rarely encountered due to burrowing habit.

Records: Calvert, Mount Mort, Swanbank, Walloon and White Rock.







Birds

There are well over 800 described species of birds in Australia, with approximately 630 species known to occur in Queensland. Almost 300 species or approximately 47% of the Queensland fauna have been recorded within the City of Ipswich. Photos and information on 88 of these species have been included.

Ipswich bird fauna consists of approximately 300 species which are represented by 70 families, some of the better known and/or more species rich families include -

- ·19 species of ducks and geese (Family Anatidae)
- ·16 species of pigeons and doves (Family Columbidae)
- ·11 species of crakes, rails and bitterns (Family Ardeidae)
- ·16 species of kites and eagles (Family Accipitridae)
- ·21 species of parrots (Families Cacatuidae and Psttaculidae)
- ·23 species of honeyeaters (Family Meliphagidae)
- ·12 species of Gerygones and thornbills (Family Acanthizidae)

Of these species, eight are scheduled as threatened under either State and/or Commonwealth legislation, including the Australian painted-snipe (Rostratula australis), black-breasted button-quail (Turnix melanogaster), powerful owl (Ninox strenua), glossy black-cockatoo (Calyptorhynchus lathami) and regent honeyeater (Anthochaera Phrygia).

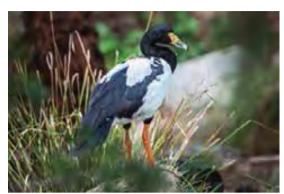
Birds are undoubtedly the most diverse and obvious of all vertebrate faunal groups. They occur in all habitat and vegetation types from urban backyards, dense rainforest, dry forest, woodlands and farmlands, to mangrove and marine environments.



Little Wattlebird (Anthochaera chrysoptera)







Magpie Goose

Anseranas semipalmata

Description: 75 - 90 TL. A large bird which is black and white, with long orange-red legs and a reddish narrow bill. The immature bird is duller and has more black on the upper parts of the wings.

Song: High pitched honking.

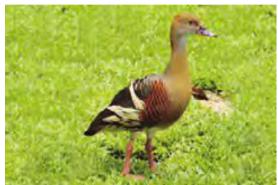
Habitat: Floodplains, grasslands, wetlands

Remarks: Common in Ipswich, recorded

from a variety of habitats.

Records: Blacksoil, Mutdapilly, Swanbank,

Tallegalla and South Ripley.



Plumed Whistling-duck Dendrocvana evtoni

Description: 41 - 52cm TL. An erect pale brown duck with a patchy coloured pink bill and pink legs. Light coloured upswept plumes on the flanks. A light coloured throat and reddish colouration on the sides of the chest.

Song: High pitched whizzing whistle.

Habitat: Wetlands, swamps, farm dams, estuarine pools.

Remarks: Common in Ipswich, although restricted to areas of suitable habitat.

Records: Swanbank, Walloon, Willowbank,

South Ripley and Springfield.



Wandering Whistling-duck Dendrocygna arcuate

Description: 55 – 61 cm TL. Duck with a dark crown and nape, a yellow-buff face and neck and chestnut coloured shoulders. Short plumes on the flanks and chestnut underparts.

Song: High pitched nasal whistle.

Habitat: Wetlands, swamps and larger water bodies. Often seen in flocks of dozens to thousands on the edges of swamps and

Remarks: Uncommon in Ipswich, known from a number of locations with larger water bodies.



Pink-eared Duck

Malacorhynchus membranaceus

Description: 36 - 45 cm. A relatively small distinctive duck with brown back and wings. The sides are light coloured and the underparts have dark brown vertical irregular stripes. It has a long bill which ends in a leathery flap a dark brown-black patch around the eye with a pink patch on the ear.

Song: 'Chirrup'

Habitat: A specialist and nomadic species which utilises temporary ponds and lakes including shallow saline or brackish waters.

Remarks: Uncommon visitor to Ipswich.

Records: Mutdapilly, Rosewood and Swanbank.









Hardhead

Aythya australis

Description: 45 – 60 cm TL. A rich-mahogany coloured species. The male has a white eye and a blackish bill, with a lighter cross-band. The female is paler, has a dark eye and a blue-

Song: Male soft whistle, female harsh rattle. Habitat: Deep wetlands, coastal swamps, dams and sewerage ponds.

Remarks: Very common in Ipswich, often seen in large numbers on suitable

Records: Haigslea, Kholo, Rosewood, Swanbank and South Ripley.



Anas aracilis

Description: 40 – 46 cm. A relatively small species, which is mottled grey-brown in colour. Has a whitish throat and area around the bill and red eye.

Song: Male has a high pitched 'peep'; female laughing cackle.

Habitat: Most waterbodies, tidal mudflats, billabongs, dams, ponds and wetlands.

Remarks: Common in Ipswich, generally only associated with suitable waterbodies.

Records: Goolman, Karalee, Kholo, Mutdapilly, Rosewood and South Ripley,



Anas castanea

Description: 40 - 48 cm TL. The male has a green head, rich chestnut body and a white mark in the flank, eclipse male looks more the female. Female is mottled grey- brown with a darker crown and a red eye.

Song: Male high pitched 'peep'; female laughing cackle or loud 'quark, quark, quark' Habitat: Swamps, saltmarshes, estuaries, freshwater wetlands and lakes.

Remarks: Uncommon in Ipswich, generally restricted to areas with suitable waterbodies.

Records: Marburg, Peak Crossing, South Ripley and Swanbank.

Australian Brush-turkey Alectura lathami

Description: 70 cm TL. Large black bird with a long prominent tail which is flattened sideways. They have a bare red head and neck, and a bright yellow wattle which is larger in breeding males.

Song: Hoarse grunt.

Habitat: Foothill and hinterland rainforest and wet sclerophyll forest, also common in well vegetated suburban gardens.

Remarks: Common in Ipswich including urban areas.

Records: Blacksoil, Chuwar, Ipswich, Redbank Plains and White Rock.













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Australiasian Grebe Tachybaptus novaehollandiae

Description: 23 - 26 cm TL. Attractively coloured during the breeding season, with a black head and neck with a chestnut stripe and oval shaped yellow facial mark.

Song: Far carrying chitter, alarm call a sharp

Habitat: Still or slow-flowing wetlands, dams and ponds with water plants.

Remarks: Common in Ipswich, present on many suitable waterbodies.

Records: Karalee, Mutdapilly, Raceview, Roswood, South Ripley and Swanbank.



Great Crested Grebe

Podiceps cristatus

Description: 25 cm TL. Large brown grebe (largest in Australia) with a dark crest and light brown flanks and red eye. The neck and bill are long and legs are blackish-brown. The young are distinctive with striped black and white heads.

Song: Loud chittering.

Habitat: Large lakes, wetlands, rivers and

dams.

Remarks: Uncommon in Ipswich, but can turn up at any time on larger lakes, rivers and wetlands.

Records: Karalee, Ripley and Swanbank.



Wonga Pigeon

Leucosarcia melanoleuca

Description: 38 cm TL. Large slatey-grey pigeon with white forehead and grey breast with white V. Black spots on flanks and reddish legs.

Song: Repetitive 'woo-woo-woo'

Habitat: Occurs in several forest types both wet and dry. Often seen foraging on the around.

Remarks: Uncommon in Ipswich, largely restricted to areas with better quality bushland.

Records: Flinders-Goolman, Bellbird Park, Peak Crossing and Swanbank.



Common Bronzewing

Phaps chalcoptera

Description: 32 – 36 TL. Largely a ground dwelling species with pale fringes to feathers on the upperparts giving a scaly appearance. The male has yellow-buff forehead and purplish crown, female duller.

Song: Low pitched 'oom' repeated every 3 seconds.

Habitat: Wet and dry forest, woodlands, acacia thickets and heathlands.

Remarks: Common in Ipswich, in bushland areas away from the urban environment.

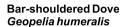
Records: Karalee, Kholo, Redbank Plains, Spring Mountain, Walloon and White Rock.











Description: 28 cm TL. Largely brown dove with a blue-grey upper-breast, black barred copper coloured nape and dark barring on wings.

Song: 'wook-oo-co'.

Habitat: Numerous vegetation types with the exception of rainforest.

Remarks: Common in Ipswich, particularly in drier forest types.

Records: Goolman, New Chum, Pine Mountain, Spring Mountain and White Rock.



Emerald-Dove

Chalcophaps indica

Description: 23 – 28 cm TL. Small tubby dove with green wings and reddish-brown head and body. A white patch is present on the shoulder.

Song: Repetitive 'hoo-hoo-hoo'.

Habitat: Generally inhabits rainforest and moist forest but sometimes recorded in drier forest and vine forest.

Remarks: Uncommon in Ipswich, probably partly due to the lack of wetter forest in the region.

Records: Bellbird Park, Muirlea and Swanbank.



Eudynamys orientalis

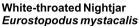
Description: 40 – 46 cm TL. A large cuckoo species. Male glossy blue-black with a whitish bill and red eye and long tail. Female has a back crown, nape and face, brown upperparts with white spots.

Song: Male far-carrying slow 'kooeel' and brisk rising 'quoy-quoy-quoy-quoy'.

Habitat: Most forested areas or parkland.

Remarks: Very common in Ipswich, during spring and summer when it migrates from Papua New Guinea - Indonesia.

Records: Ipswich, One Mile, Purga, Rosewood, Spring Mountain and White Rock.



Description: 32 – 37 cm. The largest nightjar in Australia which is dark grey-brown in colour with a small amount of white in the wings and a small bill.

Song: Series of rising deep 'kooks' which accelerate into a staccato laugh.

Habitat: Prefers dry forest, woodlands and coastal heath.

Remarks: Uncommon in Ipswich, largely restricted to areas with suitable bushland.

Records: Brookwater, Marburg, Redbank Plains, Swanbank and White Rock.

















Australian Owlet Nightjar Aegotheles cristatus

Description: 20 - 24 cm TL. Small nightjar with relatively dark plumage and darker markings on the head. It has a long tail with light and dark barring, a small broad bill and cat like whiskers.

Song: High pitched 'chirr-chirr-chirr'.

Habitat: Occurs in many habitat types including rainforest, wet and dry forest.

Remarks: Apparently uncommon in Ipswich, although likely to be common in large bushland reserves.

Records: Mount Forbs, Redbank, Swanbank and White Rock.



Buff-banded Rail

Hypotaenidia philippensis

Description: 31 cm TL. A short-billed rail which is red-brown in colour, with a white eyebrow. Barred underparts with a buff patch on the breast and dark markings on the wings.

Song: Arapid 'tuk-e-to-ka' and 'swit-swit'.

Habitat: Swamps, wetlands and creek and stream vegetation.

Remarks: Common in Ipswich, in suitable aquatic habitat, including roadsides, parks and urban areas

Records: Ipswich, Kholo.



Baillon's Crake Zapornia pusilla

Description: 15 - 16 cm. A small crake with a pale grey breast and an olive back which is streaked with black and white. It has light underparts with dull barring, a red eye and dull greenish bill and legs.

Song: 'krek-krek'; 'churrr'.

Habitat: Generally in freshwater wetlands and water bodies with fringing vegetation. Remarks: Uncommon in Ipswich, recorded

from a small number of wetlands.

Records: Mutdapilly, South Ripley &

Swanbank.



Eurasian Coot

Fulica atra

Description: 32 - 42 cm TL. A slate-greyblack bird which is darker on the head. Adults have a white bill and a white frontal shield and beak. Legs are grey, the toes have flattened lobes which assist in swimming.

Song: Aloud 'kwok' and screech.

Habitat: Wetlands, slow moving water bodies and dams, often seen out of water.

Remarks: Very common in Ipswich, particularly near suitable aquatic habitat. Records: Flinders View, Goolman, Karalee,

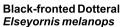
Newtown, Rosewood and Swanbank.











Description: 20 cm TL. A small wading bird with a black forehead and breast-band, a chestnut shoulder patch and a bright red bill with a black tip.

Song: High pitched 'tink - tink' and rapid 'tikik-ik-ik....

Habitat: Generally prefers freshwater habitats including ponds, dams and lake edges.

Remarks: Common in suitable habitat in the Ipswich region.

Records: Chuwar, Marburg, Mount Walker, South Ripley, Swanbank and Willowbank.

Banded Lapwing Vanellus tricolor

Description: 28 cm TL. Black cap on head with a bold white line through the eye curving towards the nape. Sides of the neck are black and a bold black breast-band, forms a white throat. Red colour above bill in mature birds.

Song: Wild, plaintive cries.

Habitat: Prefers areas with short grass including stony ground, fields and edges of swamps.

Remarks: Rare in Ipswich, seemingly an infrequent visitor to the region.

Records: Pine Mountain, Rosewood and South Ripley.

Masked Lapwing Vanellus miles

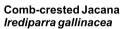
Description: 38 cm TL. A white bird with a black top of head and collar, light brown wings and yellow facial wattles.

Song: A loud 'keer-kik-ki-ki.....tek'.

Habitat: Prefers open habitat and wetlands often encountered on sporting fields.

Remarks: Very common in Ipswich, in open areas including school ovals and parks etc. Records: Booval, Ebenezer, Haigslea,

Ipswich, Springfield and Swanbank.



Description: 20 - 26 cm. Bronze in colour above with a white face and throat and a broad black breast band. They have a pinkreddish head comb, long legs and very long feet and toes.

Song: Squeaky chitter or piping.

Habitat: Waterbodies, including slow-moving rivers, dams and large ponds.

Remarks: Common in Ipswich, recorded from waterbodies often with floating vegetation.

Records: Karalee, Mutdapilly, South Ripley, Springfield lakes and Swanbank.



















Painted Button-quail Turnix varius

Description: 17 - 19 cm TL. The female has a red eye, a bright chestnut shoulder patch. Largely grevish below with lighter spots below and on the face and neck. Male is paler/duller.

Song: Deep sweeling 'oom'.

Habitat: Dry forest, open woodlands,

heathlands, and mallee. Remarks: Uncommon in Ipswich, restricted

to areas with better quality bushland and

Records: Pine Mountain, Redbank Plains,

Swanbank and White Rock.



Caspian Tern

Hydroprogne caspia

Description: 48 - 55 cm TL. The largest of the terns with a large robust bill. In nonbreeding birds the forehead is white and the rear crown and ear feathers are streaked brownish, during breeding the forehead and ear feathers are black.

Song: Deep harsh 'kraa-uh', 'kah'.

Habitat: Coastal and offshore waters. mudflats, estuaries and larger rivers.

Remarks: Rare in Ipswich, restricted to

waterbodies and larger rivers.

Records: Jeebropilly, Karalee and South Ripley.



Black-necked Stork

Ephippiorhynchus asiaticus

Description: 115 cm TL. Very large black and white stork with long red legs. It has a very large glossy black slightly upturned bill and glossy green-black head. The male has a black eye, females have a yellow eye.

Song: Dull booms and sharp bill claps.

Habitat: Large swamps, wetlands, mangroves and tidal floodplains.

Remarks: Rare in Ipswich, a species which has declined in recent years throughout the local region.

Records: Jeerbropilly, Rosewood, South Ripley, Swanbank and Willowbank.



Nankeen Night Heron Nycticorax caledonicus

Description: 60cm TL. A stocky species with a large head and short neck and a black crown. Upper parts are cinnamon in colour while it is largely white below. Breeding plumage consists of two or three slender white head-plumes.

Song: Loud, peevish 'kyok', often at night.

Habitat: Prefers shallow waters associated with the edges of rivers, wetlands and estuaries.

Remarks: Common in Ipswich, although never seen in large numbers.

Records: Flinders View, Muirlea, Redbank Plains, South Ripley and Swanbank.











Butorides striatus

Description: 50 cm TL. A small heron with a large head and bill. It has a black cap which runs down the nape. Bill is grey above and yellowish below. Legs short and dull yellow in colour. There are different colour phases largely grey or grey and reddish brown.

Song: Sneeze-like 'kew', 'tch-aah'.

Habitat: Mangroves and associated estuarine habitat.

Remarks: Uncommon in Ipswich, often associated with estuarine habitat in larger river systems.

Records: Karalee.



Description: 50 cm TL. Small egret with relatively short neck, dark legs and yellow bill and eyes. During breeding bill turns almost red and head and neck plumage turns orange. Song: Generally quiet but sometimes

deliivers a coarse, throaty call.

Habitat: A gregarious species found in wetlands and paddocks often associated with cattle.

Remarks: Very common in Ipswich, around water bodies and open paddocks.

Records: Blacksoil, Calvert, Karalee, Rosewood, Wulkuraka and Yamanto.

White-necked Heron Ardea pacifica

Description: 76 – 106 cm TL. A large species with slate-grey wing, back and body and long white head and neck. When breeding it has plum coloured breeding-plumes on the back and breast.

Song: Aguttural croak.

Habitat: Prefers habitat with shallow freshwater, including wetlands and dams.

Remarks: Common in Ipswich, generally recorded in wetland areas, but also seen foraging in grassland.

Records: Goolman, Ebenezer, Pine Mountain, South Ripley and Swanbank.

Intermediate Egret Ardea intermedia

Description: 65 cm TL. A large white egret with a yellow bill which is red when breeding. Legs dark, grey below knee and yellow, grey or reddish above. Breeding plumage includes a veil of long thin erectile plumes on the back and breast.

Song: Rattling croak.

Habitat: Wetlands, swamps and dams.

Remarks: Common in Ipswich, often around waterbodies.

Records: Augustine Heights. Newtown. Muirlea, Mutdapilly and Swanbank.



















White-faced Heron Egretta novaehollandiae

Description: 70 cm TL. A relatively small grey heron with a white face, yellow legs and dark bill. The immature is a lighter grey and only the throat is white.

Song: Gobbling, gravelly croaking.

Habitat: Most open habitats including urban areas, parklands and coastal wetlands.

Remarks: Very common in Ipswich, often seen on the side of the road or parkland hunting insects.

Records: Ebbw Vale, Ipswich, Ironbark, Purga, Spring Mountain and Walloon.



Straw-necked Ibis

Threskiornis spinicollis

Description: 58 – 76 cm TL. A large ibis with iridescent black on the sides of breast and above, a white collar and underparts. Legs are red in mature birds. Breast plumes are a straw-like tuft.

Song: Hoarse grunts.

Habitat: Wetlands, flooded areas, pastures,

grassland.

Remarks: Common in Ipswich, often seen in

parkland feeding in open areas.

Records: Bundamba, One Mile, South

Ripley, Tallegalla and Walloon.



Royal Spoonbill Platalea regia

Description: 80 cm TL. Large white spoonbill with a black bill, black legs and a yellow mark above the eye. Has long plumes on the head, a small red mark on the forehead and a slight buff on the chest during the breeding season.

Song: Generally silent.

Habitat: Wetlands, large dams, estuaries,

tidal flood plains.

Remarks: Common in Ipswich,

Records: Goodna, Marburg, Peak Crossing,

Swanbank and Willowbank.



Glossy Ibis Plegadis falcinellus

Description: 48 – 60 cm TL. Small ibis with a dark iridescent body, a reddish-brown neck which is purplish-brown when breeding. The bill is long and curved. A distinctive white line borders the skin on the face.

Song: Long crow-like croak, also grunts.

Habitat: Occurs in shallow water including ponds, wetlands, floodplains and coastal mudflats.

Remarks: Uncommon in Ipswich, largely restricted to wetland areas.

Records: Goolman, Jeebropilly, South

Ripley, Swanbank and Tallegalla.











Description: 55 cm TL. This is the smallest species of Australian cormorant. Black and white in colour with a short stubby yellowish bill and black feet. The white eyebrow extends over the bill and eye.

Song: Croaking 'tuk-tuk-tuk'.

Habitat: Freshwater bodies including dams and slow-moving rivers and estuaries.

Remarks: Common in Ipswich, associated with suitable water bodies.

Records: Brookwater, Karalee, New Chum, Redbank, Swanbank and South Ripley.



Description: 60 - 65 cm TL. Small, relatively slim, black cormorant with a dark grey-black slender bill and black feet. Tends to appear more bronzed when in breeding plumage.

Song: Ticking and croaking call.

Habitat: Freshwater bodies including dams and slow-moving rivers and estuaries.

Remarks: Common in Ipswich, around suitable water bodies.

Records: Amberley, Peak Crossing, Swanbank, Woodend and White Rock.



Description: 86 - 94 cm TL. Both sexes have a long yellowish bill and long snake-like kinked neck. The male is black with a white neck-streak. The female is largely pale grey.

Song: Brassy sounding clang and mechanical like clicking.

Habitat: Often associated with large waterbodies including lakes, dams and rivers. Remarks: Common in Ipswich, often seen on

Records: Brookwater, Chuwar, Goolman, Karalee, South Ripley and Swanbank.

Osprey Pandion haliaetus

Description: 50 – 65 cm TL. A large bird dark brown above and largely white below. There is also a bold dark brown mark through the eye and down the neck.

Song: Plaintive 'pee-ee' and various squeals. Habitat: Occurs in coasts, estuaries, bays and inlets, but often seen far from water.

Remarks: Uncommon in Ipswich, generally associated with waterbodies including the Bremer and Brisbane rivers.

Records: Jeebropilly, Karalee, Kholo and Swanbank.





















Pacific Baza Aviceda subcristata

Description: 38-43 cm TL. A small hawk with a grey head and slim black crest. The breast is white with bold pale rufous bars. It has a yellow eye and grey legs.

Song: Aloud 'ee-chew'.

Habitat: Dry and wet closed forest, edges of rainforest and well treed suburbs. Plunges into the foliage of trees when hunting, feeds on large invertebrates including stick insects.

Remarks: Common in Ipswich.

Records: Brookwater, Goodna, Goolman, Ipswich, New Chum and Willowbank.



Brahminy Kite

Haliastur indus

Description: 43 – 51 cm TL. Adults are deep chestnut in colour with white head, neck and breast. The wings when in flight are rounded with black tips and the tail is also rounded and pale-tipped.

Song: Stuttered 'peeah-h-h'.

Habitat: Often near water including, beaches, estuaries, mangroves, harbours, dams and rivers.

Remarks: Uncommon in Ipswich, generally restricted to the local rivers and larger dams. **Records:** Karalee, Kholo, Muirlea Swanbank and Willowbank.



Black Kite

Milvus migrans

Description: 48 – 55 cm TL. Plumage is shades of brown, with a slight pale patch at the base of the primary feathers. There is a fawn band across the shoulder and a dark mark through the eye.

Song: Stuttering trills.

Habitat: Grasslands, open country, farmland

and timbered watercourses.

Remarks: Common in Ipswich, often seen

flying overhead scanning the ground.

Records: Goodna, Rosewood, South Ripley, Tivoli, White Rock and Willowbank.



Brown Falcon Falco berigora

Description: 40 – 50 cm TL. The plumage of this species varies from dark almost uniform sooty brown to light red-brown and whitish below. There is a dark double 'tear-drop' which encloses a pale cheek-patch.

Song: Noisy screeches and hoarse chuckles and rattles.

Habitat: Generally open habitat including, woodlands, farmland, cropping areas.

Remarks: Common in Ipswich, often seen on power poles or dead trees.

Records: Jeebropilly, Marburg. Pine Mountain, South Ripley and Yamanto.









Powerful Owl Ninox strenua

Description: 60 – 65 cm TL. Largest owl in Australia, grey-brown above, white or buff-white below with V-shaped bars. Goldenvellow eyes with large powerful claws.

Song: Loud 'hoo-hoooo'.

Habitat: Most sclerophyll forest types with suitable large hollows for nesting. Occupies very large home-ranges.

Remarks: Rare in Ipswich, occurs in areas of suitable vegetation and adjoining suburbs.
Records: Bellbird Park, Flinders-Goolman,

Kholo and White Rock.



Southern Boobook Ninox boobook

Description: 30 – 35 cm TL. Small owl with dark facial markings, white spots on the back and brown streaks on the underparts. Dark markings (goggles) around each eye and large pale spots on the wings.

Song: Loud repeated 'book'book'.

Habitat: Numerous habitats including rainforest, wet and dry forest and open areas. **Remarks:** Common in Ipswich, often heard calling in suburban areas.

Records: Grangchester, Ipswich, Marburg, Rosewood, White Rock and Woodend.



Rainbow Bee-eater Merops ornatus

Description: 23 cm TL. A very colourful blue, green and orange species with a relatively long down turned bill. It has a red eye with a blue lined long black eyeline.

Song: 'prrrp-prrrp' and single 'plk' when alarmed.

Habitat: Numerous open habitats, including dry and wet forest and woodlands.

Rémarks: Common in Ipswich, sometimes recorded in large numbers.

Records: Bellbird Park, Ipswich, Raceview, Rosewood and White Rock.



Azure kingfisher Ceyx azureus

Description: 17 – 19 cm TL. A vibrant glossy blue above and orange-rufous below. A whitish spot in front of the eye and red feet. Immatures are duller with a shorter bill.

Song: Shrill 'peet peet', generally in flight. **Habitat:** Present along creeks, streams as

Habitat: Present along creeks, streams and sometimes mangroves and estuaries.

Remarks: Uncommon in Ipswich, largely restricted to waterbodies and waterways within the City

Records: Goolman, Muirlea, Peak Crossing, Redbank Plains and Silkstone.













Sacred Kingfisher Todiramphus sanctus

Description: 20 – 23 cm. Blue-green above and on the cap. A black mask which passes through the eye and a buff mark in front of the eye and whitish to buff below.

Song: High-pitched 'dek dek dek' and 'keer keer keer'.

Habitat: Open forest and woodlands, along river systems, lakes and urban parkland.

Remarks: Common in Ipswich, generally a seasonal visitor in spring and summer.

Records: Bundamba, Ipswich, One Mile,

Spring Mountain and Woodend.



Laughing Kookaburra Dacelo novaequineae

Description: 41 - 47 cm TL. Wings brown and pale blue above with a white patch seen in flight. White below with a dark crown and mark through the eye. The bill is large and dark above and pale below.

Song: Laugh like 'kook-kook-kook-ka-ka-ka'. Habitat: Dry forest and woodland, also farms, open paddocks, parkland and backyards.

Remarks: Very common in Ipswich, present in bushland, urban parks and backyards.

Records: Bellbird Park, Bundamba, Ipswich, Marburg, Rosewood, Spring Mountain and Yamanto.



Rainbow Lorikeet

Trichoglossus moluccanus

Description: 30 cm TL. Blue headed lorikeet with orange-red breast, green wings and yellow at the back of the head. They have a red bill and red eye.

Song: Noisy screech and raucous chattering. **Habitat:** Occurs in most habitat types including wet and dry forest, heath and suburban areas.

Remarks: Very common in Ipswich, often seen in backyards and street trees.

Records: Amberley, Deebing Heights, Ipswich, Kholo, Woodend and White Rock.



Scaly-breasted Lorikeet Trichoglossus chlorolepidotus

Description: 23 cm TL. A largely green parrot with a red bill and eye. There are yellow scale-like markings on the breast and back of the neck.

Song: Noisy high-pitched screech.

Habitat: Occurs in most habitat types including wet and dry forest, heath and suburban areas.

Remarks: Very common in Ipswich, often seen with rainbow lorikeets.

Records: Brassall, Grandchester, Ipswich, Redbank, Flinders View and Spring Mountain.











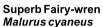
Description: 18 – 21 cm TL. Both sexes are similar being largely green above and buff below. Both have a black face and throat and electric blue shoulder patches. Red under tail-feathers

Song: Three-note whistle 'walk-to-work'.

Habitat: Rainforest, wet forest and moist gullies in drier forest.

Remarks: Rare in Ipswich, few records, although could be more common than the records suggest.

Records: Pine Mountain, Spring Mountain and Tallegalla.



Description: 14 cm TL. Breeding male bright blue and black with a white belly, female dull brown. Both have long tails and the adult female has some red around the eyes.

Song: Soft 'trrt' and trilling 'trrreee'.

Habitat: Open and closed forest and well

vegetated suburban backyards. **Remarks:** Very common in Ipswich, in both

bushland areas and backyards. **Records:** Blackstone, Ipswich, Marburg,

Purga, Swanbank and White Rock.



Description: 12 – 13 cm TL. Male is black with red back and blackish tail; female and male in eclipse are light brown with brown bill.

Song: Tinny reel and soft 'tssi'.

Habitat: Open forest, woodlands, grassland and suburban gardens.

Remarks: Very common in Ipswich, present in both bushland areas and well vegetated suburbs.

Records: Blacksoil, Mount Morrow, Newtown, One Mile and White Rock.

Scarlet Honeyeater Myzomela sanguinolenta

Description: 11 cm TL. Small brightly coloured honeyeater, male red, black and white. The female is duller, tawny brown with a slight reddish wash on the chin.

Song: High pitched wavering 'to-see' or 'falling-leaf'.

Habitat: Dry and wet forest, rainforest and paperbark forest.

Remarks: Very common in Ipswich, in bushland and urban areas.

Records: Amberley, Ipswich, Purga, Rosewood, Spring Mountain & White Rock.



















Brown Honeyeater Lichmera indistincta

Description: 12 - 16 cm TL. A plain olivebrown honeyeater with a small whitish-yellow patch behind the eye. Flight and tail feathers have a yellowish edge.

Song: Loud 'plik' and variations.

Habitat: Most habitat types including, wet and dry forest, woodlands, paperbark swamps,

mangroves and urban parklands.

Remarks: Very common in Ipswich, including

bushland, backyards and parkland.

Records: Booval, Grandchester, Ipswich, New Chum, Redbank and White Rock.

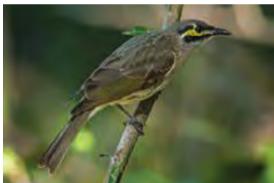


Striped Honeyeater Plectorhyncha lanceolata

Description: 20 - 23 cm TL. The head and nape are whitish, streaked black-brown. Paler below and darker above with shoulder stripes. The relatively fine short bill is blue-grey in

Song: Rich 'cher-cher-cherry'.

Habitat: Prefers drier and woodland habitat. Remarks: Common in Ipswich, in both bushland areas and well vegetated suburbs. Records: Blacksoil, Ipswich, Muirlea, Silkstone, Willowbank and White Rock.



Yellow-faced Honeyeater Caligavis chrysops

Description: 16 – 18 cm TL. A largely greybrown species, with a black mask and curved yellow streak from the bill to under the eye.

Song: A brisk 'chickup and descending 'calip, calip, calip,'

Habitat: Wet and dry forest, woodlands, paperbark swamps, heathlands and parks and gardens.

Remarks: Very common in Ipswich, recorded from bushland areas and urban areas and backyards.

Records: Haigslea. Ipswich, Tallegalla, Woodend, White rock and Yamanto.



White-plumed Honeyeater Ptilotula penicillatus

Description: 15 – 17 cm TL. A pale olive-grey species with an obvious white neck plume, often with a black margin above. A yellowish flush on the face and cheek.

Song: Varies, but includes 'due - wheat'; brisk 'chickowee' or 'chickabiddy'

Habitat: Tends to be recorded around water in dry open forest and woodlands.

Remarks: Uncommon in Ipswich, tends to be recorded more often inland.

Records: Ironbark, Pine Mountain,

Mutdapilly and Woodend.











Manorina melanocephala

Description: 24 - 27 cm TL. A largely greybrown species, darker above and paler below. They have a whitish forehead, black face mask, a yellow patch behind the eye.

Song: 'pwee pwee pwee, alarm call 'pee, pee pee'.

Habitat: Open forests, woodlands and grasslands. Often present in large numbers in parklands.

Remarks: Very common in Ipswich, in both bushland and urban areas.

Records: Booval, Kholo, Ipswich, Rosewood, Springfield and White Rock.



Anthochaera chrysoptera

Description: This species is dullish brown in colour with silver streaks above and below. It has blue-grey to brown eyes and dark grey legs. They have no wattles and a darker chin than the rest of the body.

Song: Variable song, including squeaky notes to raucous 'fetch the gun'.

Habitat: Eucalypt and Banksia woodland and heath dominated vegetation.

Remarks: Uncommon in Ipswich, relatively few records.

Records: Goolman, Muirlea, Redbank Plains and Swanbank.

Little Friarbird

Philemon citreogularis

Description: 25 – 29 cm TL. A small friarbird largely tan and cream in colour. Naked bluish skin on face and no knob on the bill.

Song: 'quook' and raucous 'rrach-coo'.

Habitat: Numerous forest types including dry eucalyptus forest, heathlands and paperbark forests.

Remarks: Common in Ipswich, recorded in drier bushland habitat and urban areas.

Records: Brookwater, Goolman, Ipswich, Pine Mountan, South Ripley and White Rock.

Noisy Friarbird

Philemon corniculatus

Description: 31 - 35 cm TL. A largely greybrown bird which is paler below. A naked black head with an angular bill-knob. The eye is red and legs dark.

Song: Loud harsh cackling, 'ch – will'; mellow 'chew, chewip'.

Habitat: Open generally dry forest and woodlands. Often in suburban gardens.

Remarks: Very common in Ipswich, recorded in both bushland areas and urban backyards.
Records: Camira. Grandchester. Ipswich.

One Mile, River View and White Rock.



















Striated Pardalote Pardalotus striatus

Description: 9.5 - 11.5 cm TL. A small bird with a black crown, sometimes streaked with white and yellow and white eyebrows. Washed out yellow below.

Song: Sharp 'chip-chip' or 'pick-it-up', 'wittachew'.

Habitat: Wet and dry forests, woodlands, paperbark forests mangroves & urban areas. Remarks: Very common in Ipswich, often heard rather than seen.

Records: Chuwar, Ipswich, One Mile, Redbank, Springfield and White Rock.



White-throated Gerygone Gervoone olivacea

Description: 11 cm TL. Buff-grey above, a white throat and yellow breast. They have small white patch in front of a bright red eye.

Song: Repeated silvery 'falling-leaf' song. Habitat: Prefers open forest and woodlands, but also found in vegetated in parklands. Remarks: Common in Ipswich, present in bushland areas.

Records: Goolman, Brookwater, South Ripley, Spring Mountain, Thagoona and White Rock.



Speckled Warbler Pyrrholaemus sagittata

Description: 12 cm TL. Male is brown above with a black crown and a long whitish eyebrow. Pale below with bold black streaks. The female is similar, but has a chestnut streak in the eyebrow.

Song: Pleasant descending warble.

Habitat: Dry woodlands, vine scrub and edges of disturbed habitat.

Remarks: Common in Ipswich, present in a number of bushland locations.

Records: Ashwell, Goolman, Ironbark, South Ripley, Swanbank and White Rock.



Brown Thornbill Acanthiza pusilla

Description: 10 cm TL. Warm brown above, with olive to yellowish white flanks, with buff scallops on the forehead. They have a large red eye and small black bill.

Song: 'pee-orr' and assorted squeaks and zizzing.

Habitat: Occurs in numerous forest types including rainforest, wet and dry forest.

Remarks: Uncommon in Ipswich, restricted to larger bushland habitat and reserves.

Records: Pine Mountain, Spring Mountain,

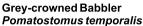
Tallegalla and White Rock.











Description: 29 cm TL. Largely brown-black above with a pale grey crown and nape. They have a broad white eyebrow over a black mask.

Song: 'yahoo' and chorus of go-wah-hee, go-wah-hee'.

Habitat: Open forest and woodlands and farmland.

Remarks: Rare in Ipswich, few records and probably decling in SEQ.

Records: Haigslea and Peak Crossing.



Black-faced Cuckoo-shrike Coracina novaehollandiae

Description: 30-36 cm TL. Blue-grey above, with a jet-black face and throat in mature individuals. White underparts, with a grey tail and with a black margin and white tip.

Song: Musical rolling churring.

Habitat: Most forest types including, rainforest, wet and dry forest, woodlands and urban parks and local streets.

Remarks: Very common in Ipswich, present in both bushland and urban areas.

Records: Booval, Grandchester, Ipswich, Pine Mountain, Raceview and Spring Mountain.

Varied Triller Lalage leucomela

Description: 17.5 cm TL. Grey above with a white eyebrow and bold white wing bars. Underparts are whitish with a buff flush lower down and fine bars.

Song: Repeated 'breeer'.

Habitat: Various, including rainforest, wet and dry forest, woodlands and vine forest.

Remarks: Common in Ipswich, largely restricted to bushland habitat.

Records: Goolman, Muirlea, Pine Mountain, Tallegalla and White Rock.



Rufous Whistler Pachycephala rufiventris

Description: 16 – 17.5 cm. The male has grey upperparts, a grey crown and a black mask which extends to the breast to form a breast-band. The female is brownish-grey above, has a whitish throat.

Song: A loud vigorous song, 'ee-chong'; 'joey-joey-joey'.

Habitat: Open forest and woodlands, including well vegetated urban areas.

Remarks: Very common in Ipswich, present in many bushland areas in the city.

Records: Bundamba. Ipswich, Marburg, Mount Forbs and Spring Mountain.















Grey Shrike-thrush Colluricincla harmonica

Description: 22 – 26 cm TL. A greyish bird with a brown back. The bill is largely black and there is some white associated with the front eve.

Song: Variable call, including 'pip pip pip hoo-ee' and sharp 'yorick'.

Habitat: Wet and dry forest, mangroves, woodlands and paperbark forests.

Remarks: Common in Ipswich, restricted to bushland areas.

Records: Brassall, Goolman, Flinders View, Redbank Plains and White Rock.



White-browed Woodswallow Artamus supercioliosus

Description: 18 - 21 cm TL. Upperparts and upper breast is blue-grey with pale rufous underparts. Both sexes have a white eyebrow over a small black face mask.

Song: Musical 'chap chap', also includes mimicry.

Habitat: Rainforest margins, dry forest and woodlands, parks and golf-courses.

Remarks: Rare in Ipswich, few reliable

Records: Purga, Redbank and Swanbank.



White-breasted Woodswallow Artamus leucorynchus

Description: 16 - 18 cm TL. Upperparts and breast is brownish/slate-grey, with pure white underparts. A white rump and dark grey tail. Song: Brisk 'pert pert', song can include

mimicry.

Habitat: Prefers open areas with dead or living trees often near waterbodies.

Remarks: Very common in Ipswich, present in both bushland and urban areas.

Records: Ipswich, Karalee, Pine Mountain, Swanbank, Woodend and White Rock.



Spangled Drongo Dicrurus bracteatus

Description: 29 - 32 cm TL. An attractive glossy black bird with a bright red eye. The bill is robust and black with hair-like feathers at its base. They also have a long 'fishtail'.

Song: Harsh chatterings and metallic notes. Habitat: Rainforest, wet and dry forest, woodlands, farmland and backyards.

Remarks: Very common in Ipswich, including in well vegetated suburbs and parklands.

Records: Ipswich, Jeerbropilly, Pine Mountain, Swanbank and Willowbank.











Description: 14 – 16 cm TL. Deep blue- grey above, with a black mark on the face and throat and through the eye. White below with an orange-buff breast.

Song: Scratchy chatterings, and quiet drawn out 'breer, breer'.

Habitat: Prefers wet forest and rainforest and moist gullies in drier forest.

Remarks: Uncommon in Ipswich, generally restricted to areas with good bushland cover. Records: Goolman, Ironbark, Mount Marrow,

Pine Mountain and White Rock.



Apostlebird

Struthidea cinerea

Description: 29 – 33 cm TL. A dark, ashy grey species which lives in groups. They have brown flight feathers, a black tail and a short solid black bill.

Song: Scratchy 'ch-kew, ch-kew' and rough nasal repeated 'git-out' when disturbed.

Habitat: Prefers open dry forests and woodlands, often near water.

Remarks: Rare in Ipswich, declining in SEQ, more common to the northwest of the city.

Records: Karalee.



Rose Robin

Petroica rosea

Description: 11 cm TL. A slender brownishgrey, white and pink robin. The male is coloured deep grey above and on the upper throat and has a rose-red breast. The female is grey-brown above and grey-white below.

Song: Whistling 'we-are, we-are, we-are the champions'.

Habitat: Rainforest and wet forest.

Remarks: Common in Ipswich, generally seen in the autumn and winter months.

Records: Goodna, Goolman, Marburg, Walloon, White Rock and Woodend.



Eastern Yellow Robin

Eopsaltria australis

Description: 15 cm TL. Grey above with a washed out olive rump. Bright yellow below and a dark tail. Male and female very similar.

Song: Whistle like 'tewp, tewp' and monotonous'pi, pi, pi, '.

Habitat: Numerous habitats including rainforest, wet and dry forest.

Remarks: Common in Ipswich, largely restricted to bushland habitats.

Records: Chuwar, Goolman, Kholo, Tallegalla, Redbank Plains and White Rock.















Grey Fantail Rhipidura fuliginosa

Description: 16 cm TL. Black, white and grey fantail often with buff underparts. They have a white throat and white eyebrow, a dark breast - band and short whiskers.

Song: Sweet chatter and sharp 'jeck'.

Habitat: Most habitat types including, rainforest, wet and dry forest, mangroves, urban environments and backyards.

Remarks: Very common in Ipswich, located in both bushland habitat and well vegetated

Records: Ipswich, New Chum, Redbank Plains and Spring Mountain.



Torresian Crow

Corvus orru

Description: 48 - 53 cm TL. A large black bird with a whitish-yellow eye when mature. Down at the base of feathers is snow white in colour. which separates it from other closely related species.

Song: Nasal staccato 'uk-uk-uk-uk'.

Habitat: Most habitat types including the edges of rainforest, dry forests, woodlands and urban areas.

Remarks: Very common in Ipswich, present in both bushland and urban areas.

Records: Brookwater, Ebenezer, Ipswich, Karalee, New Chum and Spring Mountain.



Leaden Flycatcher Myiagra rubecula

Description: 14 - 16 cm TL. A glossy bluegrey species on the back and upper-breast, white below. The female varies in that she is duller above with a pale orange-buff throat.

Song: Guttural 'zhirrp' singly or repeated and 'see-hear, see-hear'.

Habitat: Open dry forest and woodlands,

paperbark forest and mangroves.

Remarks: Common in Ipswich, although generally restricted to bushland areas.

Records: Blackstone, Goodna, Marburg,

Muirlea, Redbank and White Rock.



Restless Flycatcher Myiagra inquieta

Description: 16 – 21 cm TL. Both sexes are similar, glossy blue-black above and white below. Often has a washed yellow-buff across the breast.

Song: Arasping 'zhap' sometimes repeated. Habitat: Open forest and woodlands, as well as well vegetated parkland.

Remarks: Common in Ipswich, recorded at many locations particularly in better vegetated suburbs.

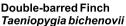
Records: Brookwater, Goolman, Jeerbropilly, South Ripley, Swanbank and Tallegalla.











Description: 11 cm TL. A finch with a brown back and two thin black bars across the lower throat and breast. It has a white face and underparts and a dark eye.

Song: Nasal 'tiaaat, tiaaat' and low 'tat, tat'. Habitat: Open woodland and grassland. Remarks: Very common in Ipswich, including both bushland habiat and urban areas.

Records: Amberley, Blackstone, Bundamba, Ipswich, One Mile, Walloon and Spring Mountain.



Golden-headed Cisticola

Cisticola exilis

Description: 9 – 11.5 cm TL. Head and body buff coloured with a dark tail and buff-tip. Back and parts of wings darkly streaked. During the breeding season, the male has a golden head and neck.

Song: Far-carrying insect-like 'bhzzt' followed by 'lek'.

Habitat: Prefers shrub and grasses in swamps, wetlands, grassland, ditches.

Remarks: Common in Ipswich, in both good quality habitat and disturbed areas.

Records: Grandchester, Goodna, Haigslea, New Chum, Purga and White Rock.



Zosterops lateralis

Description: 10 – 12.5 cm TL. A small bird with a greyish breast and back. Olive-green head with a dark eye with a whitish eye-ring. Flanks a buff-chestnut.

Song: Various, including 'psee', and wavering 'wee-ee-ee-ee'.

Habitat: Numerous vegetation types including rainforest, wet and dry forest.

Remarks: Very common in Ipswich, often seen in bushland and urban areas.

Records: Amberley, Bundamba, Goodna, Ipswich, New Chum and White Rock.





Common Myna Acridotheres tristis Scheduled: Introduced

Description: 23- 25 cm TL. Distinctive species chocolate brown in colour with a glossy black head and neck. The bill and legs are yellow and there is a patch of naked yellow skin behind the eye.

Song: Creaky-growls and rattles, alarm-call 'scairrr'.

Habitat: Occurs in urban areas, pastoral and farmlands, open parklands, disturbed habitat. Remarks: Very common in Ipswich, often in urban areas, backyards and open parklands.

Records: City wide.











Mammals

There are over 360 described species of mammals in Australia, with almost 250 species known to occur in Queensland. At least 67 species (57 native species) or approximately 26% of the Queensland fauna have been recorded within the City of Ipswich. Photos and information on 28 of these species have been included.

Ipswich mammal fauna consists of at least 67 species which are represented by 24 families, some of the better known and/or more species rich families include -

- ·5 species of carnivorous marsupial (Family Dasyuridae)
- ·8 species of possums and gliders in four families
- ·7 species of kangaroos and wallabies (Family Macropodidae)
- ·21 species of insectivorous bats in five families
- 6 species of native rodents (Family Rodentia)

Of these species, six are scheduled as threatened under either State and/or Commonwealth legislation, including the spotted-tailed quoll (*Dasyurus maculatus*), koala (*Phascolarctos cinereus*), southern greater glider (*Petauroides volans volans*), brush-tailed rock-wallaby (*Petrogale penicillata*), grey-headed flying-fox (*Pteropus poliocephalus*) and snubfin dolphin (*Orcaella heinsohni*). Ipswich is also home to two iconic mammal species scheduled as *special least concern*, the short-beaked echidna (*Tachyglossus aculeatus*) and platypus (*Ornithorhynchus anatinus*).

Due to the relatively large size of mammals compared to many other faunal groups they are often observed by local residents. However, many are secretive and nocturnal and have in many cases not adapted well to urbanisation. Generally, few native mammals are encountered in highly urbanised areas with the exception of bats such as the black flying fox (*Pteropus alecto*), the common brushtail possum (*Trichosurus vulpecula*), and the northern brown bandicoot (*Isoodon macrourus*).









Ornithorhynchus anatinus

Description: 50 cm TL, including a long tail. An egg laying mammal with dense fur brown to reddish-brown above and lighter below. Flattened duck like bill and webbed feet. Male has poisonous spurs on the back legs.

Habitat: Inhabits numerous waterbodies including - freshwater streams, creeks, dams and ponds, from tropical rainforests to high mountainous areas.

Remarks: Rare in Ipswich, although it is easily overlooked.

Records: Pine Mountain.



Short-beaked Echidna

Tachvalossus aculeatus

Description: 45 cm TL up to 7 kg in weight. An egg laying mammal with dark brown fur with cream-yellow quills with black tips, short tail, long tube-like snout and long sticky tongue. Females have a rudimentary pouch, while males have a small spur on the ankle of the hindlegs.

Habitat: Inhabits a wide variety of vegetation types including rainforest, dry forest and well vegetated suburbs.

Remarks: Common in Ipswich.

Records: Ebenezer, Gailes, Goodna, Kholo, Purga, South Ripley and White Rock.

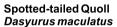
Yellow-footed Antechinus Antechinus flavipes

Description: 12 cm BL, 10 cm tail. A marsupial with a flattish broad head, pointed snout and sharp pointed teeth. Grey head white eye ring and orange-brown sides, yellow feet. Males die shortly after mating at approximately 10 months of age.

Habitat: Moist and drier forest, generally absent from rainforest.

Remarks: Common in Ipswich, but largely restricted to larger bushland environments.

Records: Bellbird Park, Flinders-Goolman, Swanbank and White Rock.



Description: 50 cm BL 45 cm tail. Large powerful ginger-brown mammal with dense fur with white spots on the body and tail.

Habitat: Associated with large tracts of wet, dry and rainforest habitat. They are a largely nocturnal solitary species, with a large homerange up to 500 Ha.

Remarks: Rare in Ipswich, no recent confirmed records, but known to occur nearby in Logan City.

Records: Currently unknown.

















Common Planigale Planigale maculata

Description: 7 cm BL 6 cm tail. Mouse-sized marsupial which is grey-brown above and paler below, with a flatten head, pointed snout, sharp teeth and round ears.

Habitat: Dry forest, woodlands and heathlands often with a grassy understory. **Remarks:** Uncommon in Ipswich, although it is potentially more widespread than records suggest, but absent from urban areas.

Records: Brookwater, Kholo, New Chum, and Peak Crossing.



Brush-tailed Phascogale Phascogale tapoatafa tapoatafa

Description: 21 cm BL, 20 cm tail. Grizzled grey above and cream to white in colour on the belly. Large hairless ears and a black hairy tail which is shorter in length than the body.

Habitat: Utilises a vary of habitat types from rainforest to dry forest with an open understory.

Remarks: Uncommon in Ipswich, restricted to larger habitat systems.

Records: Flinders – Goolman, Grandchester, Purga and White Rock.



Long-nosed Bandicoot Perameles nasuta

Description: 40 cm BL 14 cm tail. Long pointed snout with pointed ears. This species has soft greyish-brown fur above and creamy white below. A nocturnal largely solitary species which forages (digs) for invertebrates, fungi and tubers.

Habitat: Wet forest, rainforest and moist gullies in drier forest.

Remarks: Uncommon in Ipswich, occurs in larger bushland habitats.

Records: Flinders–Goolman, Grandchester and Kholo.



Koala

Phascolarctos cinereus

Description: 90 cm BL, over 10kg in weight. A large arboreal marsupial with wooly grey fur and white chest. It has large broad rounded ears, a vestigial tail and a short snout. Feeds on the leaves of *Eucalyptus* spp. and closely related plants.

Habitat: Eucalypt forests, woodlands and also paper bark dominated bushland.

Remarks: Common in Ipswich, although declining in many areas of SEQ.

Records: Amberley, New Chum, Redbank, Rosewood, Pine Mountain and White Rock.



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Petaurus breviceps

Description: 17 cm BL, 19 cm tail. Rat-sized glider with soft grey fur above, cream below with a mid-dorsal black stripe. Gliding membrane extends from wrist to ankles. Tail as thick as or slightly thicker than a human thumb.

Habitat: Generally wetter forest, including rainforest but also drier forest and woodlands. **Remarks:** Common in Ipswich, known from a number of older and more recent records.

Records: Brassall, Brookwater, Flinders-Goolman, Swanbank, Thagoona and White Rock.



Petaurus norfolcensis

Description: 21 cm BL 27 cm tail. Body large rat-sized, with soft grey fur above, white or creamy-white below, with a mid-dorsal black stripe. Gliding membrane from wrist to ankles. Tail thick particularly where it joins the body, with a black-tip never a white-tip.

Habitat: Dry and moist forest and woodlands, generally absent from altitudes above 300m.

Remarks: Common in Ipswich, larger than sugar gliders, with a bushier tail.

Records: Kholo, New Chum, Purga, Spring Mountain, and White Rock.



Description: 35 cm BL 35 cm tail. A variable species ranging from silver-grey to brown above, reddish flanks and lighter below. Ears are relatively small, with a white patch behind each ear. Tail is tapered and prehensile with a white tip.

Habitat: Occurs in a number of vegetation types including wet sclerophyll, rainforest, dry forest and woodlands, common in suburbs of lpswich.

Remarks: Common in Ipswich, including suburbia and larger bushland areas.

Records: City wide.

Short-eared Brushtail Possum Trichosurus caninus

Description: 50 cm BL, 40 cm tail. Cat-sized possum which varies in colour from steely grey to black above, with a whitish belly and short ears. A bushy tail that tapers at the tip.

Habitat: Wet sclerophyll forest, rainforest, moist creek side vegetation and vine forest. Does not generally occur in urban areas.

Remarks: Uncommon in Ipswich, generally restricted to larger bushland areas.

Records: Flinders – Goolman, Grandchester, Deebing Creek and White Rock.



















Common Brushtail Possum Trichosurus vulpecula

Description: 50 cm BL, 38 cm tail. A large catsized possum, which varies in colour from light grey to reddish above and white to pale grey below. Large pointed ears with a black bushy tail.

Habitat: Common species in dry and wet forest, very common in suburbia. Feeds on a wide variety of foods.

Remarks: Very common in Ipswich, in most habitat types and suburbs.

Records: City wide.



Rufous Bettong Aepvprvmnus rufescens

Description: 35 - 48 cm BL 44 cm tail. A medium sized marsupial with grey to reddish brown fur and a square shaped head. A generally solitary nocturnal species which feeds on herbs, grasses, roots, Excavates shallow nests (daytime retreats) with grasses and plant material and a single entrance.

Habitat: Open dry forest and woodland often with a dense grassy understory.

Remarks: Rare in Ipswich, restricted to large reserves and habitat systems.

Records: Goolman and Spring Mountain.



Black-striped wallaby Macropus dorsalis

from northern QLD to inland northern

Description: 80 cm BL, 60 cm tail. It is a small to medium-sized wallaby, grey-brown in colour with a narrow black stripe along the centre of the back. They have rust-red patches on shoulders, arms and upper legs.

Habitat: Occurs in variety of habitat types including wet and dry forest and vine thickets. within dense woody or shrubby understory.

Remarks: Rare in Ipswich, only confirmed from a small number of records.

Records: Flinders-Goolman.



Whiptail Wallaby Macropus parryi

Description: 100 cm BL, 85 cm tail. Light grey to brownish-grey in colour (lighter in winter). White stripe on upper lip and a light brown stripe down neck to shoulder and a white hip-stripe. Light patches between the ears and on the outside of the ear tips.

Habitat: Hilly areas with dry open forest with a grassy understory.

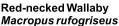
Remarks: Uncommon in Ipswich, restricted to a few locations in larger bushland reserves. Records: Bellbird Park. Flinders-Goolman. Grandchester, Rosewood and White Rock.











Description: 90 cm BL, 90 cm tail. Greybrown colour with rusty-red shoulders, white or pale grey below. White stripe on upper lip, black tipped ears and paws.

Habitat: Dry open forest with grassy to shrub understory, also farmland sedge lands.

Remarks: Very common in Ipswich, most commonly seen wallaby in Ipswich.

Records: Grandchester, Flinders-Goolman, Grandchester, Purga, Rosewood and White Rock.



Brush-tailed Rock-wallaby Petrogale penicillata

Description: 55 cm BL, 60 cm tail. Dark brown above with a reddish rump and grey shoulders. Light coloured, white to buff cheek stripe and a dark mid-dorsal head stripe and dark long brushy tail.

Habitat: Numerous habitat types, wet and dry forest and woodlands with rocky regions including gorges, caves and cliffs.

Remarks: Rare in Ipswich, known from a few rocky areas in bushland areas and reserves.

Records: Flinders-Goolman.



Black flying-fox Pteropus alecto

Description: 28 cm BL, WS over 1 metre. Short black fur over the entire body, reddish collar at the back of neck only, a brown eyering sometimes present and black wing membranes.

Habitat: Utilises many habitat types including rainforest, wet and dry forest, woodlands and wetlands, also forages in urban areas.

Remarks: Very common in Ipswich, including several local camps.

Records: Amberley, Booval, Ipswich, Kholo, One Mile and White Rock.



Grey-headed Flying-fox Pteropus poliocephalus

Description: 28 cm BL, WS over 1 metre. A large bat with a reddish-yellow to ginger shoulder mantle which encircles the neck. Head silver-grey and body grey-brown.

Habitat: Often roosts in trees near water and forages in all habitat types with flowering and fruiting trees and shrubs.

Remarks: Very common in Ipswich, important species for pollination and seed dispersal.

Records: Amberley, Booval, Ipswich, New Chum, Raceview and White Rock.













Little Red Flying-fox Pteropus scapulatus

Description: 23.5 cm BL, WS less than 1 metre. Short reddish-brown to dark brown fur, no distinct shoulder mantle. Sparsely furred legs and reddish wing membranes.

Habitat: Roost in large colonies often with other flying-fox species. Generally, a summer visitor to SEQ migrating from northern regions.

Remarks: Very common in Ipswich, can be entirely absent at certain times of the year. **Records:** Barellan Point, Collingwood Park, Goodna, Spring Mountain and Woodend.



Ride's Free-tailed Bat Mormopterus ridei

Description: 6.0 cm BL, 3.0 cm tail. Chocolate-brown fur above and paler below. Triangular ears and the upper lip overhangs the lower lip. Roosts in hollows and roofs.

Habitat: Tends to prefer habitat associated with watercourses but also present in drier areas

Remarks: Rare in Ipswich, only recorded in the larger bushland reserves.

Records: Flinders-Goolman and Kholo.



Gould's Long-eared Bat Nyctophilus gouldi

Description: 6.0 cm BL, 5.0 cm tail A variable species which has dark brown to dark grey fur above and lighter grey below.

Habitat: Occurs in rainforest, wet and dry forest and woodlands. Roosts in tree hollows and under exfoliating bark on the sides of trees.

Remarks: Uncommon in Ipswich, few records for this species in the city, although it is probably more widespread than the records suggest.

Records: Flinders-Goolman, Swanbank and White Rock.



Gould's Wattled Bat Chalinolobus gouldii

Description: 6.5 cm BL, 4.5 cm tail. This species has black fur on the head and shoulders which contrasts with mediumbrown fur on the remainder of the upper body. **Habitat:** Open drier habitat woodlands

Habitat: Open drier habitat, woodlands, mallee, farmland and urban areas. Roosts in tree hollows, buildings and bird nests.

Remarks: Common in Ipswich, one of the more common microbat species in the city.

Records: Camira, Dinmore, Grandchester, Swanbank and White Rock.









Chocolate Wattle Bat Chalinolobus morio

Description: 6 cm BL, 4.8 cm tail. This species is uniform chocolate-brown above, with a domed shape head.

Habitat: Occupies most habitat types ranging from rainforest to arid areas. Roosts in tree hollows, buildings and caves.

Remarks: Uncommon in Ipswich, seemingly restricted to larger bushland reserves.

Records: Flinders-Goolman, Spring Mountain, Swanbank and White Rock.



Eastern Cave Bat

Vespadelus troughtoni

Description: 4.0 cm BL, 3.5 cm tail. Long dark brown fur above, marginally lighter below. Have a broad muzzle and short ears.

Habitat: Various habitats, including rainforest, dray and wet forest, woodlands and semiarid areas. Roosts in caves, mines, tunnels.

Remarks: Common in Ipswich, mainly recorded from the large bushland reserves in the city.

Records: Flinders-Goolman, Spring Mountain, Swanbank and White Rock.



Fawn-footed Melomys

Melomys cervinipes

Description: 12 cm BL, 16 cm tail. Rodent which is variable in colour from grey to reddish-brown above and light coloured below. Tail smooth and hairless with scales arranged in a mosaic pattern.

Habitat: Moist forest including rainforest, wet forest, vine forest and wet gullies in dry forest. Remarks: Uncommon in Ipswich, restricted to vine forest and moist gullies in larger bushland areas.

Records: Brassall and Kholo.



Bush Rat

Rattus fuscipes

Description: 16 cm BL, 15 cm tail. A relatively large variable species with brown-grey to reddish-brown fur with lighter belly. Tail no longer than the body ringed with bands of scales and rounded ears.

Habitat: Rainforest, wet forest and dry forest with dense understory.

Remarks: Common in Ipswich, although largely absent from fragmented bushland in urban areas, often replaced by *Rattus rattus*.

Records: Brassall, Flinders-Goolman and Kholo.















Glossary

Adipose fin Small fin located behind the dorsal fin

Abdomen Third segment of insects body

Anal fin Small fin located ventrally towards the rear of fish Barbel Slender tentacle-like protuberance located near

fishes

mouth

BL Body length (tip of nose to vent)

Caudal fin Tail fin of fish
Carapace Upper shell of turtle
Dorsal Upper Surface

Dorsal fin A fin along the back of a fish with rays (spine)
Dorsolateral Junction of the upper (dorsal) and side (Lateral)

surfaces

Eclipse Non-breeding colouration in male birds
EPBC Environmental Protection Biodiversity Act

Flank Side of body

Granular Not smooth, appearing rough

LS Leg span Mandibles Mouth parts

NCA Nataure Conservation Act

Parotoid gland External skin gland on the back, neck and shoulder

of

toads and some frogs

Pectoral fins Fins found on each side of a fishes body

Pelvic fin A pair of fins located ventrally towards the rear of a

fishes body Able to grip

Primaries Outer-most and longest flight feathers
Rump Plumage below the back and above the tail

Rostrum Snout

SVL Snout to vent length (body length)
Thorax Second segment of an insects body

Tibial gland Gland on the tibia

TL Tail length

Tubercles Small rounded projection or protuberance Tymbals Sound producing organ in male cicadas

Tympanum External ear structure

Vent Opening at the rear of the body for waste

evacuation

Prehensile

and/or breeding purposes

Ventral Lower surface
Vertebral Along the spine
WS Wing span







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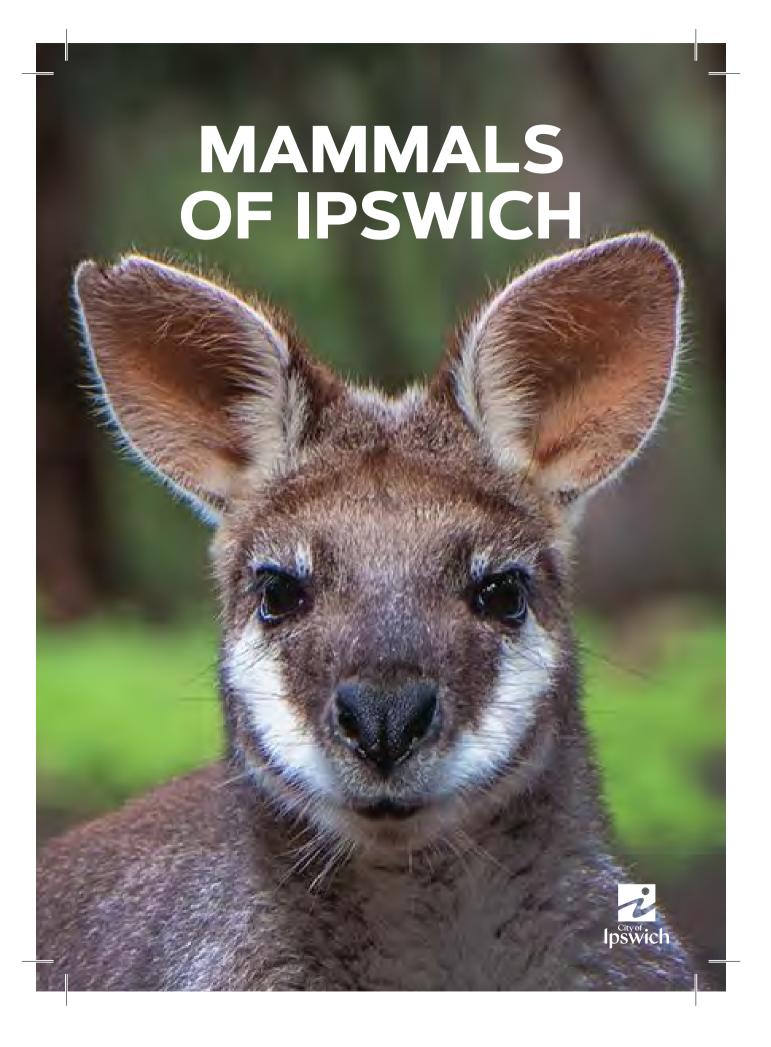


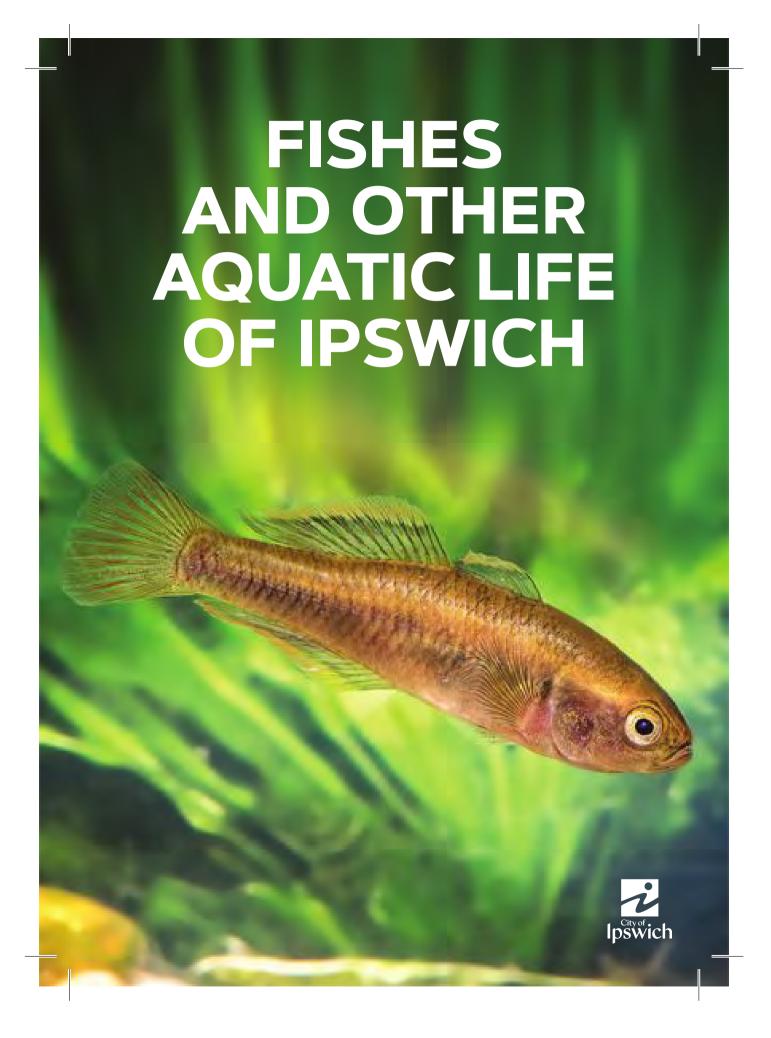


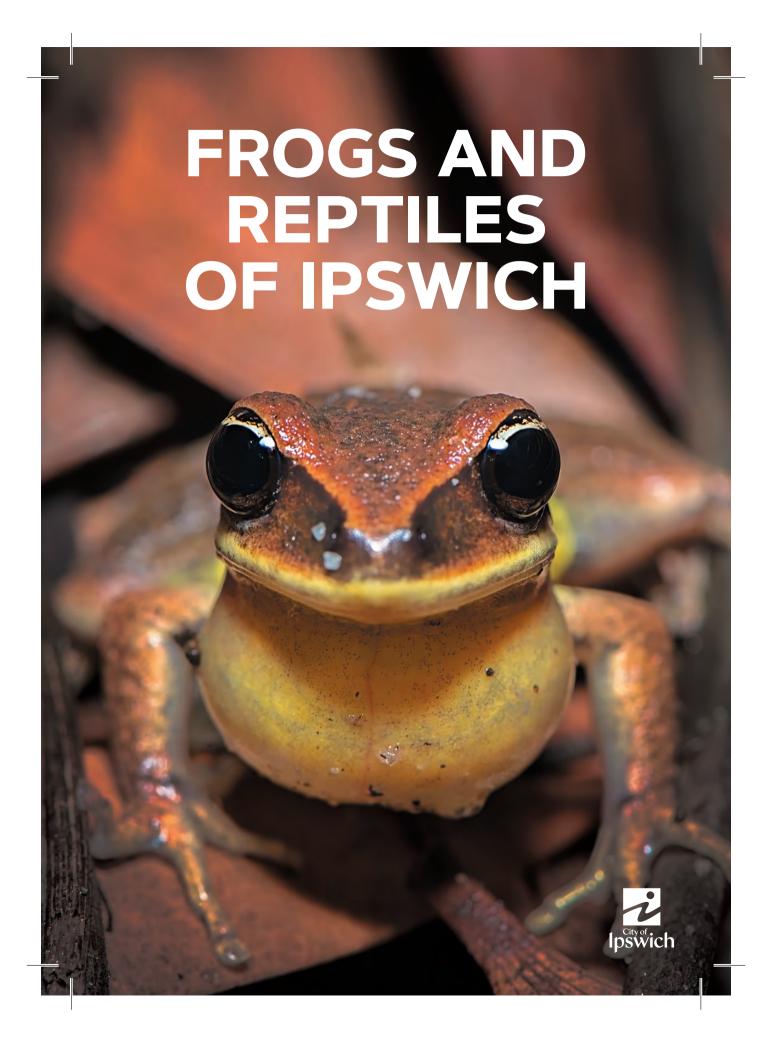


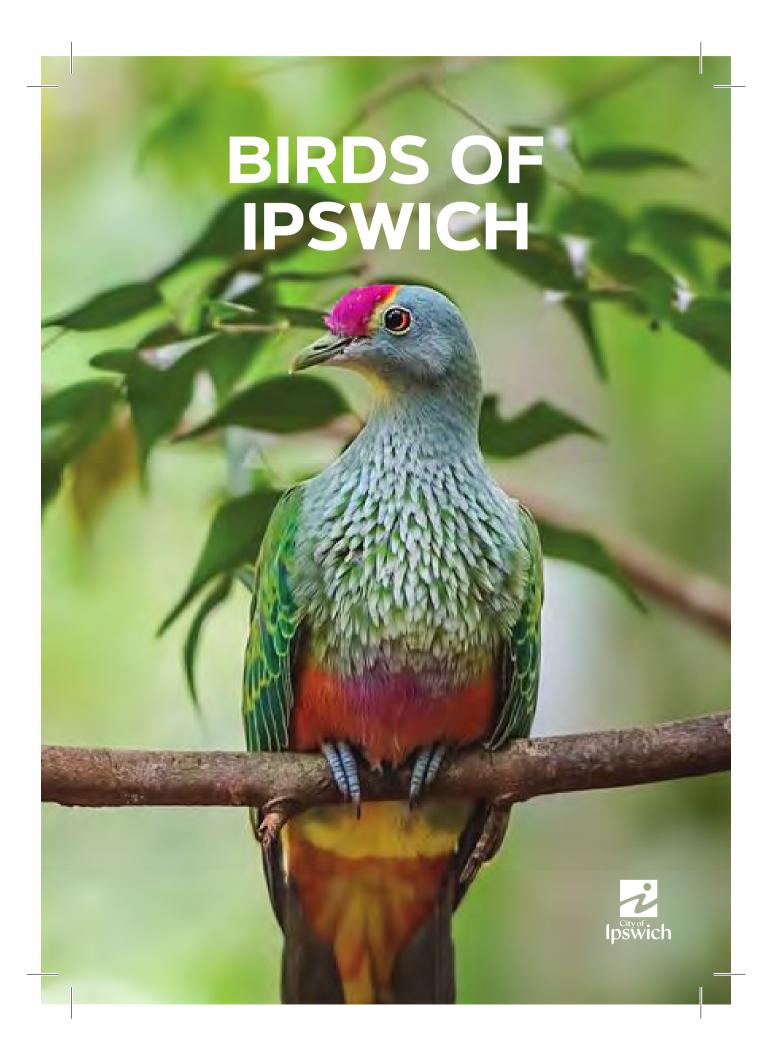












Conservation and Environment

Committee

Mtg Date: 19.03.18 OAR:

Authorisation: Bryce Hines

YES

EKC: EKC

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27 February 2018

MEMORANDUM

TO: ACTING CHIEF OPERATING OFFICER (WORKS, PARKS AND RECREATION)

FROM: ACTING SPORT RECREATION AND NATURAL RESOURCES MANAGER

RE: REQUEST FOR COUNCIL TO CONSIDER CONTRIBUTION TO THE CATCHMENT

INVESTMENT PROGRAM AS PART OF THE RESILIENT RIVERS INITIATIVE

INTRODUCTION:

This is a report by the Acting Sport Recreation and Natural Resources Manager dated 27 February 2018 concerning a request for Council to consider a contribution to the Catchment Investment Program as part of the Council of Mayors (SEQ) Resilient Rivers Initiative.

BACKGROUND:

The Resilient Rivers Initiative was launched in December 2014 by the Council of Mayors (SEQ) and the Queensland Government.

The aim of the Resilient Rivers Initiative is to set a strategic direction and coordination of high-level investment in waterways across SEQ, primarily focussed on sediment reduction and climate resilience. The investment priorities are to be guided by the Catchment Actions Plans (CAP's) which to date have been completed for Lockyer Creek, Mid-Brisbane River, and Logan-Albert Rivers.

Council is currently leading the development of a Catchment Action Plan for the Bremer River, in partnership with key stakeholders across the catchment. The Bremer River CAP is due for completion in June 2018.

CATCHMENT INVESTMENT PROGRAM:

The Council of Mayors (SEQ) has established a Catchment Investment Program to direct funding received from investing partners to priority on-ground projects. In December 2014, Council received an initial letter seeking consideration for investment in the Program. This letter was presented to City Works, Parks, Sport and Environment Committee No. 2017(01) of 23 January 2017 and Council Ordinary Meeting 31 January 2017 (Attachment A). Council resolved:

- A. That Council seek further information from the Council of Mayors Resilient Rivers
 Taskforce on the Catchment Investment Program with a non-commitment of
 funding until a governance structure and funding model is determined and provided
 to Council for consideration.
- B. That Council continue to invest in Council's Waterway and Stormwater Management projects as outlined in the report by the Principal Officer (Natural Resources) dated 9 January 2017.
- C. That Council advise the Council of Mayors (SEQ) of Council's current investment in on-ground projects within the Mid-Brisbane River catchment for the reduction of sediment and provide opportunities for joint promotion of these projects under the banner of the Resilient Rivers Initiatives.

Since then, Council has received \$60,000 in funding through the Catchment Investment Program for a revegetation project in the Black Snake Creek catchment. Under the Resilient Rivers Initiative Council has also received \$30,000 for the development of the Bremer River CAP.

CURRENT REQUEST FOR COUNCIL'S CONTRIBUTION:

On 29 January 2018, Council received a letter from Cr Graham Quirk, Resilient Rivers Task Force Chair, urging Council to investigate the opportunity to contribute towards the Catchment Investment Program (Attachment B). Any contribution is voluntary, and the funding model and amount is at the discretion of Council.

INTER-CONNECTIONS WITH EXTERNAL PROGRAMS, PARTNERS AND FUNDING WITH COUNCIL'S PROJECTS:

Council is currently engaged in the development and delivery of a number of regional water, catchment and floodplain management programs through funding and / or representation on steering committees and working groups. These include:

- ∑ Brisbane River Catchment Flood Study
- ∑ Brisbane River Strategic Floodplain Management Plan
- \(\sum_{\text{Healthy Land and Water (Eg: Ecosystem Health Monitoring and Clean Up Program)}\)
- Σ Mid-Brisbane Catchment Action Plan
- Σ Lower-Brisbane Catchment Action Plan

- ∑ Ipswich Rivers Improvement Trust annual works program
- Σ Seqwater Mid-Brisbane River Partnership Program

These programs align with Council initiatives such as the development of the Ipswich Rivers Flood Study (in progress) and subsequent Strategic Floodplain Management Plan, Waterway Health Strategy, and Bremer River Catchment Action Plan.

The Ipswich Rivers Flood Study and Strategic Floodplain Management Plan are being developed in accordance with recommendations that will come from the Brisbane River Strategic Floodplain Management Plan, with significant investment from Council in 2017-2018 and proposed in 2018-2019. In addition, Council is also investing in a suite of onground and community engagement actions as outlined in the previous report (Attachment A).

OPTIONS:

The following options have been identified in response to the request:

- A. Determine a funding amount to support regional waterway improvement projects through the Council of Mayors Catchment Investment Program that is above current investment in Council's Waterway and Stormwater Management projects to be considered in the 2018-2019 operational budget.
- B. Continue Council's current investment in regional and local water, catchment and floodplain management as Council's contribution to regional waterway health in 2018-2019, and provide advice to Council of Mayors that a contribution is not available.
- C. Continue Council's current investment in the development of the Ipswich Rivers Flood Study and Strategic Floodplain Management Plan in 2018-2019, and initiate conversations with Council of Mayors to investigate opportunities for Council's contribution in 2019-2020.

Option C is recommended due to Council's extensive financial and technical commitment to floodplain management and waterway improvement in 2017-2018 and 2018-2019. This includes projects currently underway and the development of substantial documents to inform our future investment priorities.

CONCLUSION:

Council is a key stakeholder in the Council of Mayors Resilient Rivers Initiative, and is currently developing the Bremer River Catchment Action Plan under this initiative.

Council is also a key stakeholder and funding partner in the development of the Brisbane River Flood Study and Strategic Floodplain Management Plan. As an outcome of this, Council has committed significant funds to develop the Ipswich Rivers Flood Study and subsequent Strategic Floodplain Plan. These documents will guide future catchment investment priorities.

ATTACHMENTS:

Name of Attachment	Attachment
City Works, Parks, Sport and Environment Committee No. 2017(01) of 23 January 2017 and Council Ordinary Meeting 31 January 2017 Committee Report	Attachment A
Letter received 29 January 2018 from Cr Graham Quirk	Attachment B

RECOMMENDATION:

That Council initiate discussion with the Council of Mayors to investigate opportunities for Council's contribution to the Catchment Investment Program in 2019-2020.

Kaye Cavanagh

ACTING SPORT RECREATION AND NATURAL RESOURCES MANAGER

I concur with the recommendation/s contained in this report.

Bryce Hines

ACTING CHIEF OPERATING OFFICER (WORKS PARKS AND RECREATION)

City Works, Parks Sport and Environment Committee		
Mtg Date: 23.01.17 OAR: YES		
Authorisation: Craig Maudsley		

EKC: EKC

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9 January 2017

MEMORANDUM

TO: SPORT RECREATION AND NATURAL RESOURCES MANAGER

FROM: PRINCIPAL OFFICER (NATURAL RESOURCES)

RE: COUNCIL CONTRIBUTION TO THE CATCHMENT INVESTMENT PROGRAM OF THE

RESILIENT RIVERS INITIATIVE

INTRODUCTION:

This is a report by the Principal Officer (Natural Resources) dated 9 January 2017 concerning Council's contribution to the Catchment Investment Program of the Resilient Rivers Initiative through Council of Mayors South East Queensland.

BACKGROUND:

The Resilient Rivers Initiative was launched in December 2014 by the Council of Mayors (SEQ) and the Queensland Government, resulting from the High Level Agreement signed by key organisations in early 2014.

The aim of the Resilient Rivers Initiative is to set the direction for high-level investment in management actions to improve waterways in SEQ, primarily focussed on sediment reduction in Lockyer Creek and Mid-Brisbane River. The investment priorities are to be guided by the Catchment Actions Plans (CAP's) which have been completed for these two catchments. Additional CAP's are currently being completed for other SEQ catchments, including the Bremer River which is expected to be completed by late 2017.

CATCHMENT INVESTMENT PROGRAM:

The Council of Mayors (SEQ) have established a bank account as the 'landing pad' for investor funds from Federal, State and Local Government's which will then be distributed to relevant parties as determined by the Catchment Investment Program Project Team for onground delivery. The purpose of the Catchment Investment Program is to act as a database of implementation projects identified in the Catchment Actions Plans and to direct funding from investing partners to on-ground implementation of these projects (see Attachment A).

A letter received from Council of Mayors dated 14 December 2016 (Attachment B) is seeking Council's consideration for investment in the Catchment Investment Program in 2017–2018. A payment relative to the number of rate payers within a local government area has been suggested. However, the letter states 'that there is no compulsion or assessed amount of contribution per Council.' It proposes that Council funds for regional waterway projects be directed through the Council of Mayor's bank account towards the Resilient Rivers Catchment Investment Program.

COUNCIL'S CURRENT WATERWAY AND STORMWATER MANAGEMENT PROJECTS:

Council currently invests in a number of waterway and stormwater management projects at a local and regional scale, including:

STRATEGY AND PLANNING:

- 1. Waterway Health Strategy review the 2009 Ipswich Waterway Health Strategy sets the strategic direction and priority actions to improve waterway health in Ipswich. The review will bring the Strategy up-to-date with information sourced through Council's Catchment Condition Assessment, Fish and Platypus surveys, Stream Order Mapping and Wetland Assessment.
- 2. Deebing Creek Corridor Plan unlike standard catchment management plans, the corridor plan seeks to integrate multiple networks including transport, flood, walkways / bikeways, public parks, land use and urban growth, and waterway condition, to guide priority investment and management actions.
- **3. Floodplain Management Strategy** Council's first Floodplain Management Strategy is completed and will be publicly released in February 2017. The FMS gives recognition to Ipswich's flood history in setting the direction for on-going flood and stormwater management across the City. Community resilience and asset protection are key aspects of the document.

STORMWATER MANAGEMENT:

- Stormwater Quality Asset Management an internal audit of stormwater quality assets has been undertaken, and localised service standards and maintenance guidelines are proposed for development in mid-2017.
- **2. Stormwater Harvesting** 2 stormwater harvesting projects have recently been undertaken at *Redbank Plains Recreation Reserve* and *Jim Donald Parklands*.

- **3. Stormwater Quality Offsets** a number of stormwater quality offset projects are underway, including
 - a. **Wallaby Ware bioretention** a replacement bioretention basin that will see a far greater outcome for the local community in urban stormwater treatment
 - Pollard Park Channel Naturalisation replacement of an open channel with natural features and vegetation, creating a more aesthetic community asset whilst significantly reducing sediment transport and improving waterway health
 - c. Small Creek a major creek naturalisation project to replace a concrete lined channel with a natural waterway, improving visual amenity, waterway health, fish and frog habitat and creating an active transport link from the local high school and surrounding community
 - d. **Iron Pot Creek** an extensive bank stabilisation and riparian revegetation project, improving the stability of the waterway and reducing the risk to adjoining land and private assets
 - e. **Franklin Vale Creek** dedicated funding to support rural landholders with creek rehabilitation to reduce sediment transport, improve the health and stability of Franklin Vale Creek, provide stock watering and protect private land

WATERWAY HEALTH:

- 1. Platypus survey in partnership with Wildlife Preservation Society and Platypus watch, a number of community surveys have revealed good platypus populations across the City. Further to this, Council engaged consultants to undertake eDNA sampling as a trial for identifying platypus presence in local waterways.
- 2. Bremer River Fish Ladder Queensland's longest fish ladder was recently constructed, providing a vital passage for native fish on the Bremer River at Berry's Lagoon. Freshwater bass and Mary River Cod fingerlings were recently released and monitoring will be undertaken to show how fish are using the ladder.
- **3. Habitat Connections** now in its 4th year, the Habitat Connections program directs dedicated funding to urban waterways, primarily focussed on increasing riparian vegetation within linear parklands. This program actively engages individuals and community groups through planting days and community events.
- **4. Fish Survey** our second fish survey is about to commence in early 2017. The first survey revealed a diversity of native fish species in the Bremer River and tributaries.

NATURAL DISASTER RESILIENCE:

- Sapling Pocket funding received through the National Disaster Relief and Recovery Arrangements, and in partnership with Seqwater, will see a significant investment in the stabilisation and revegetation of the inset floodplain at Sapling Pocket on the Mid-Brisbane River.
- Woogaroo Creek Council in partnership with Ipswich Rivers Improvement Trust is investing in the reprofiling and stabilisation of a large scour on Woogaroo Creek as a result of the 2013 flood, and potential threat to Council's landfill and QUU infrastructure.

COMMUNITY ENGAGEMENT AND LANDHOLDER PARTNERSHIPS:

- **1.** Trees for Mum now four years on, Trees for Mum has resulted in over 7,000 plants in ground along Bundamba Creek.
- 2. Father's Day Fishing Fest held over the past three years, the Father's Day Fishing Fest encourages families to re-engage with waterways in Ipswich through nature-based recreation, including fishing and canoeing. The Fishing Fest has seen a variety of native fish caught in the Bremer, highlighting the value of this waterway as native fish habitat.
- **3.** Waterway Partnerships a dedicated voluntary conservation partnership program specifically designed to support private landholders with riparian rehabilitation and erosion control works. The program offers technical and financial support (up to \$6,000 / yr) for landholders.
- **4. Other community events** Council supports Clean Up Australia Day and National Tree Day activities on urban waterways.
- **5. Ipswich Creek Catchment Group** established to support volunteers and community groups undertaking creek restoration activities.
- 6. Bremer River Network following the Bremer River Forum in 2010 a dedicated fund was established with corporate funding to undertake works within the Bremer River Catchment. To date, over \$400,000 has been invested in projects primarily along Bundamba Creek, with some funding going to Scenic Rim Council to support their Riparian Trees program. The Bremer River Network was established in 2016 as a collaboration of local environment and catchment groups to support on-ground initiatives.
- 7. Black Snake Creek the Upper Black Snake Creek Improvement Plan completed in 2015 has directed investment towards the construction of a creek walkway and revegetation projects, working closely with West Moreton Landcare. Additional funding for community plantings has been received through State Government grants. Ipswich Rivers Improvement Trust also completed two bank stabilisation and flood mitigation projects on Black Snake Creek in 2016.

LOCAL AND REGIONAL ENGAGEMENT:

- 1. **Ipswich Rivers Improvement Trust** Council supports the Ipswich Rivers Improvement Trust through an annual precept of \$150,000 to undertake woody weed removal along waterways in Ipswich.
- **2. Healthy Waterways and Catchments** annual support of \$92,000 funds the core activities of Healthy Waterways and Catchments, and the Brisbane and Bremer River Clean Up program.
- **3. Seqwater** Council is continually working in partnership with Seqwater to fund projects within the Mid-Brisbane and Black Snake Creek catchments, including the project at Sapling Pocket.
- **4. Resilient Rivers Initiative** Council is in the process of working with Council of Mayors, who is providing funding support to Council of \$30,000 to develop the Bremer River Catchment Action Plan in 2017.

 Brisbane River Catchment Flood Study – Council is a key funding partner in the development of the Brisbane River Catchment flood study and floodplain management strategy.

OPTIONS:

The following options have been identified in response to the request:

- A. Determine a funding amount to support regional waterway improvements projects through the Council of Mayors Catchment Investment Program that is above current investment in Council's Waterway and Stormwater Management projects. A verbal indication from Council of Mayors is for funding to be of \$100,000 or greater. Funding for this will need to be considered in the 2017–2018 budget deliberations.
- B. Determine a funding amount to support regional waterway improvements projects through the Council of Mayors Catchment Investment Program within Council's current investment in Waterway and Stormwater Management projects. This could be through a movement of funds from existing local and regional engagement or other waterway projects.
- C. Seek further information from the Council of Mayors Resilient Rivers Taskforce on the Catchment Investment Program with a non-commitment of funding until a governance structure and funding model is determined and provided to Council for consideration.
- D. Continue to invest in Council's Waterway and Stormwater Management projects as outlined in this report.

Option C & D are recommended due to Council's extensive financial and technical commitment to waterway improvement across the City and region. This includes projects currently underway within the Mid-Brisbane catchment including Sapling Pocket and Black Snake Creek improvements. Both these projects are identified in the Mid-Brisbane River Catchment Action Plan (Attachment C).

CONCLUSION:

Ipswich City Council is a key stakeholder in the Council of Mayors Resilient Rivers Initiative. Council officers have been involved in the development of the Mid-Brisbane River Catchment Action Plan and the delivery of key projects at Sapling Pocket and Black Snake Creek. Through these projects, Council is currently investing in the reduction of sediment to the Mid-Brisbane River.

In addition, the development of a Bremer River Catchment Action Plan is expected to be completed in 2017, in partnership with Council of Mayors, Scenic Rim Regional Council and other key stakeholders. This will inform investment to priority sediment reduction projects within the Bremer River Catchment.

Council of Mayors (SEQ) is seeking funding support for the Resilient Rivers Catchment Investment Program in 2017–2018. Whilst no funding amount has been prescribed, verbal communications indicate that funding will need to be greater than \$100,000.

ATTACHMENTS:

Name of Attachment	Attachment
Catchment Investment Program Project Team Terms of Reference – Draft	Attachment A
Council of Mayors (SEQ) letter dated 14 December 2016	Attachment B
Mid-Brisbane River Catchment Investment Program – Action Summary	Attachment C

RECOMMENDATION:

- A. That Council seek further information from the Council of Mayors Resilient Rivers

 Taskforce on the Catchment Investment Program with a non-commitment of
 funding until a governance structure and funding model is determined and provided
 to Council for consideration.
- B. That Council continue to invest in Council's Waterway and Stormwater Management projects as outlined in the report by the Principal Officer (Natural Resources) dated 9 January 2017.
- C. That Council advise the Council of Mayors (SEQ) of Council's current investment in on-ground projects within the Mid-Brisbane River catchment for the reduction of sediment and provide opportunities for joint promotion of these projects under the banner of the Resilient Rivers Initiatives.

Kaye Cavanagh

PRINCIPAL OFFICER (NATURAL RESOURCES)

I concur with the recommendation/s contained in this report.

Bryce Hines

SPORT RECREATION AND NATURAL RESOURCES MANAGER

I concur with the recommendation/s contained in this report.

Craig Maudsley

CHIEF OPERATING OFFICER (WORKS, PARKS AND RECREATION)

TERMS OF REFERENCE

Catchment Investment Program Project Team

Version: 0.1

Date: 8 June 2016

Document Signoff

Version History

Version	Author	Change	Date
0.1	D. Dawson C. Wearing	Initial Draft	8 June 2016

Distribution List

Distributed to: Resilient Rivers Taskforce, CAP Working Group

Distribution date:

Resilient Rivers Taskforce Sign off

Representative	

CAP Working Group Sign-off

Meeting Date.		
Adopted:		
Chair:		
Signature:	Date:	

1.1 BACKGROUND

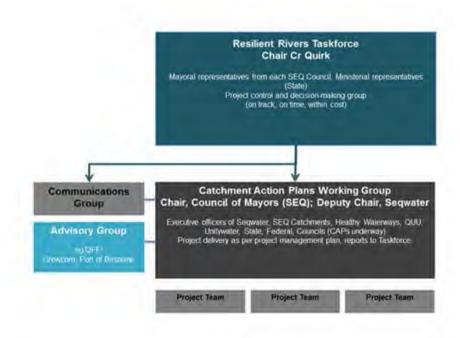
The Resilient Rivers Initiative is a collaborative effort between the Council of Mayors (SEQ), Queensland Government, Seqwater, Queensland Urban Utilities, Unitywater, Healthy Waterways Ltd, and SEQ Catchments Ltd to deliver better coordinated catchment management that protects our region's water supply security, keeps soil on the land and out of our creeks and increases the long-term resilience of our waterways. Resilient Rivers recognises that we can deliver more together than individually.

The Resilient Rivers Initiative was launched in December 2014 by the Council of Mayors (SEQ) and the Queensland State Government, building on work resulting from the High Level Agreement established in early 2014 by a number of key investing organisations in SEQ's catchments.

The Resilient Rivers Initiative aims to set the direction needed to establish a long lasting approach to the investment and management of the waterways of SEQ. It builds on the results achieved to date, whilst recognising that some change is needed and that a high level of collaboration between the key investing organisations is critical for the prioritisation of on ground action.

The challenge of stopping soil moving off the land into the waterways and ensuring infrastructure and industry continue to operate is a complex task. It involves a good understanding of the movement of water in the landscape, clear identification and agreement of high risk areas, incorporating the values of local communities and coordination of on-ground action.

The Resilient Rivers Taskforce provides the governance and decision-making mechanism required to ensure continued collaboration and action is driven by all three levels of Government. The Catchment Action Plans Working Group consisting of representation from the High Level Agreement signatories supports the Taskforce through coordination and the provision of advice. This Terms of Reference necessarily links to the Catchment Action Plans Working Group's Terms of Reference. The governance structure is outlined in the diagram below.



The Catchment Action Plans Working Group's annual work plan is guided by the Resilient Rivers Regional Strategy 2015-25. The Catchment Investment Program is identified in the Strategy as a key task.

The Catchment Investment Program provides a means for the Resilient Rivers Taskforce to review, endorse and/or allocate investment in programs or projects. The Catchment Investment Program will enhance coordination between investors for both existing and new activities with resulting improved on-ground delivery. The Catchment Investment Program is a key database of implementation projects that address the actions arising from Catchment Action Plans. The guiding principles, processes key tools for the Catchment Investment Program is attached (Attachment A).

Milestones for the Catchment Investment Program taken from the Resilient Rivers Project Management Plan are outlined below.

Strategic Actions (Regional Strategy 2015 – 25)	Q1 (July - Sep 16)	Q2 (Oct – Dec 16)	Q3 (Jan 17- Mar 17)	Q4 (Apr 17 – Jun 17)
Catchment Investment Program (CIP) for on-	Establish CIP Project Team	Commence on ground works as	Continue on ground works as	Continue on ground works as identified in
ground actions	Review processes and tools	identified in CIP	identified in CIP	CIP
	Populate database	CIP prepared which		Working Group to review Project Team
	CIP prepared which	includes		performance and ToR
	includes Mid Brisbane and Lockyer priorities	Pumicestone and Logan Albert priorities		

1.2 Purpose

The purpose of the Project Team is to guide the timely and efficient collation of project information to inform the Catchment Investment Program. This database will provide a rolling schedule of onground works.

The Project Team will report to the Catchment Action Plans Working Group. Members will seek input and sign-off from their respective organisations including the resourcing of relevant project deliverables.

On occasion, the Project Team may oversee the contracting of third parties for aspects of project delivery. Due to this role, potential conflicts of interest must be identified throughout the life of the project and such parties must absent themselves from related decision making activities. An example is the prioritisation of works delivery programs. The Project Team reserves the right to bring in independent persons from time to time if a conflict of interest arises and matters which cannot be resolved in a timely fashion will be escalated to the Catchment Action Plans Working Group for determination.

The Project Team is a collaborative forum and as such there is the opportunity to build longer term relationships for the benefit of catchment management.

The Project Team will be supported by the Council of Mayors (SEQ) Secretariat via a Coordinator.

1.3 MEMBERSHIP

The Project Team membership has been nominated by the Catchment Action Plans Working Group and the participating Councils:

Organisation	Member
Brisbane City Council	
Somerset Regional Council	
Lockyer Valley Regional Council	
Seqwater	
SEQ Healthy Waterways Catchments Ltd	
Queensland Urban Utilities	
Unitywater	
Port of Brisbane	
Department of Environment and Heritage Protection	
Department of Natural Resources and Mines	
Council of Mayors (SEQ)	

From time to time, the membership may need to cover a specific topic/geographic area which requires consideration.

1.4 WORKING ARRANGEMENTS

The Project Team will meet on an as-needs basis depending on the work program. Meetings will be minuted as per the agenda circulated prior to the meeting. Minutes and a meeting report will be circulated to the CAP Working Group.

1.5 DELEGATIONS OF AUTHORITY

The Project Team has no formal delegated authority.

Attachment A

Resilient Rivers Initiative Catchment Investment Program

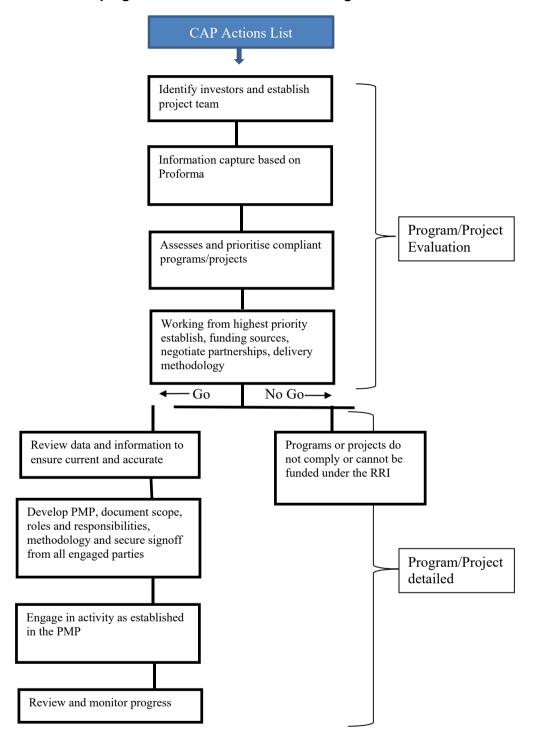
The Catchment Investment Program provides a means for the Resilient Rivers Taskforce to review, endorse and/or allocate investment in programs or projects. The Catchment Investment Program will enhance coordination between investors for both existing and new activities leading to improved efficiency and effectiveness of regional investment.

Guiding principles for the co-ordination, selection and investment in programs or projects

A project or program will be considered for inclusion in the Catchment Investment Program if it:

- 1. Delivers on one or more of the actions identified in the Resilient Rivers Catchment Action Plans
- 2. Provides outcomes for multiple investors albeit the activity may occur in a single catchment
- 3. Has an identifiable urgency and may be significantly delayed or not occur without the support of the Resilient Rivers Initiative (through investment, enhanced coordination, a leadership role or a combination of these)
- 4. Results in the identification, capture and dissemination of information and learnings applicable and useful across investor organisations
- 5. Is based on well researched, professional studies or reports that identify and rank similar or comparable activities (prioritisation developed through professional investigation, research and reporting is critical for ensuring value on investment, clarity in communication with stakeholders and investors and provides evidence of a clear, professional process path for program or project selection)
- 6. Provides a cost-to-benefit justification
- 7. Provides a baseline program from initiation to completion, identifying all key tasks including allowances for all key activities i.e. approvals, tenders, assessments, material supply, lead and lag times, resourcing
- 8. Identifies the anticipated proposal cost (within the available budget allocation or the justifies the seeking of additional funding)

Process for developing the Catchment Investment Program



Program/Project Assessment Proforma

The Program/Project Assessment Proforma includes recommended information fields and has been developed to assist investors in identifying suitable existing and new programs or projects. A program or project will potentially receive a higher priority the more information fields have been appropriately addressed.

Information checklist:

- 1. Proposed Program/Project provide detail of proposal,
- 2. Intended outcome/ opportunity development from proposal
- 3. Catchment/Council areas
- 4. Prioritisation Supporting reasoning for proposed prioritisation/urgency.
 Would this project occur without RR involvement, what does the RR engagement achieve for your entity
- Consultation undertaken, detail extent, over what period, identify roles and individuals consulted or undertook consultation - provide contacts where appropriate or available
- 6. Degree of resolution idea, concept, detailed program, business case (approved/not approved), brief, plan or design, contract documentation
- 7. Approvals gained and or required including internal proposer organisation approvals, budget or seed funding, extent of and degree of surety, partner commitment, landholder agreements)
- 8. Supporting documentation and or related studies
- 9. Potential partners including commitment, degree of engagement what role could they play financial, in kind, project/contract management, technical, delivery, administration.
- 10. Site or catchment detail Title or titles real description, address; boundaries, towns or natural features for catchments
- 11. Landholder- State/Council/Private relevant contacts including their title, primary and secondary contact details, phone, email and postal address,
- 12. GPS coordinates (If applicable)
- 13. Resources and anticipated extent required to deliver Program RR, proposer organisation, research, engineering, contracting, project management, construction management, administration support, civil, planting and maintenance contracting
- 14. Cost estimation (by stage if required) indicate degree of certainty and potential maintenance component responsibility/cost
- 15. Anticipated timing including identification of any constraints potentially impacting program for delivery
- 16. Environmental constraints/opportunities (offsets/carbon)
- 17. Risk register provide risk analysis, highlight key risks and mitigation strategy
- 18. Identification of scope for investor capacity building, organisational learning, inter council collaboration
- 19. Anticipated water quality/economic benefit, regional significance
- 20. Communication plan, media/education opportunities



14 December 2016

Mayor Paul Pisasale Ipswich City Council PO Box 191 IPSWICH QLD

Dear Mayor Pisasale

COUNCIL CONTRIBUTION TO THE CATCHMENT INVESTMENT PROGRAM OF THE RESILIENT RIVERS INITIATIVE

As you are aware, the Resilient Rivers Initiative is now at the 'ready to invest' stage. Whilst the Resilient Rivers Taskforce continues to determine long-term sustainable funding and governance arrangements, projects have been defined and are ready to be implemented now. A mechanism for prioritisation and interim governance has been developed and a 'landing pad' bank account has been established via Council of Mayors (SEQ).

At the Resilient Rivers Taskforce meeting of 18 November 2016, it was suggested that a catchment investment payment relative to numbers of rate payers within a local government area be considered in the short-term for the Catchment Investment Program. Whilst a formal resolution was not reached at the meeting, I am conscious that next year's budget decisions are being made in the near future by each Council.

The opportunity therefore exists now for your Council to contribute to the Catchment Investment Program for financial year 2017-18.

It should be stressed that whilst the funds would be administered by Council of Mayors (SEQ), the funds will not be spent by or used by Council of Mayors (SEQ). Rather funds will be distributed directly for on-ground works. If your Council contributes funds, it will be represented on the Catchment Investment Program project team.

I stress that there is no compulsion or assessed amount of contribution per Council. Rather, a considered effort to move local government funds to key regional waterways projects will become the catalyst for long-term funding uplift from State and Federal Governments.

Should you have any questions please do not hesitate to contact Peter Olah, Executive Director on (07) 3040-3470 or peter.olah@seqmayors.gld.gov.au.

Yours sincerely

Cr Graham Quirk

Chair

Attachment 3b Catchment	ment Investment Program (Mid Brisbane Projects, July 2016)							
Summary of Identified proposal/project/programs	CAP Risk Treatment Plan Reference	CAP Risk Addressed	Stage of development	Status	Proposed program	Cost estimate	Project Partners	Funding source
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Summary of Identified proposal/project/programs	CAP Risk Treatment Plan Reference	CAP Risk Addressed	Stage of development	Status	Proposed program	Cost estimate	Project Partners	Funding source	Funding Required
Sapling Pocket	Remediate high use informal recreation areas along macrochannel	Channel integrity: Sediment entering water through bank slumping; Pathogens entering water supply conduit causing acute illness	Tender	Fully researched, designed, tender documentation, funded and proceeding	Implementation to commence 1/07/2016 completed 12/2016	\$450k +/- 10%	NDRRA, ICC & Seqwater	NDRRA, ICC, Seqwater design & support	No
Blacksnake Creek	Restore deep rooted trees in recharge area of Black Snake Creek catchment	High saline groundwater table entering the water supply conduit	Planning with localised planting	, ,	Activity held back due to funding constraints	\$200k +/- 20%	ICC, West Moreton Land Care - Ipswich Rivers Improvement Trust - SEQ Catchments - Seqwater	ТВС	Yes
England Creek	Bank stabilisation at high risk sites along macrochannel and raising bed via instream islands or benches	Channel integrity: Sediment entering water through bank slumping; Sediment re-suspension affecting water quality	Concept design	On hold	ТВС	\$800k +/- 25%	ТВС	ТВС	Yes
Agricultural Practice Improvements			Investigation of agricultural practices at the confluence of the Mid Brisbane and Lockyer Creek	Under consideration	TBC	TBC	Seqwater, Growcom	ТВС	Yes
Source Protection Partnership	Fencing of the bank and provision of off- stream watering points/ irrigation infrastructure along macrochannel	Riparian zone degradation leading to loss of channel integrity; Pathogens entering water supply conduit causing acute illness	Investigation of partnerships with the Mid Brisbane Irrigators to address low flow bank issues, riparian management and potential partnership solutions (Farm Flow model)	Investigation and establishment of landholder engagement underway	Established 15/16 Formal Agreements 16/17 Implementation 17/18	твс	твс	твс	Yes
Hills Rd	Bank stabilisation at high risk sites along macrochannel and raising bed via in- stream islands or benches	Channel integrity: Sediment entering water through bank slumping; Sediment re-suspension affecting water quality	Investigation and assessment report with options package completed. Concept design developed.	On hold	ТВС	\$1.8 mil +/- 25%	ТВС	ТВС	Yes
Kholo Bridge	Bank stabilisation at high risk sites along macrochannel and raising bed via in- stream islands or benches	Channel integrity: Sediment entering water through bank slumping; Sediment re-suspension affecting water quality	Investigation and options report completed. Concept design developed, detail design subject to quarry rehabilitation design	On hold with quarry status and rehabilitation comitment unconfirmed. Actions at the quarry will dictate rehabilitation and stabilisation design	твс	\$1.5 mil +/- 25%	твс	твс	Yes
Onsite Sewerage Compliance	On-site sewerage facilities education and compliance program	Pathogens entering water supply conduit causing acute illness	Scoping Document under review	Investigation of trial proposal	ТВС	TBC	ТВС	ТВС	Yes
Meander Cut offs and Fluvial scours (low flow banks)	Bank stabilisation at high risk sites along macrochannel and raising bed via in- stream islands or benches	Channel integrity: Sediment entering water through bank slumping; Sediment re-suspension affecting water quality	Investigation underway Report with prioritisation of sites and options package due 07/16	Possible detailed designs 16/17 onsite investment 2017/18	ТВС	ТВС	ТВС	ТВС	Yes
Riparian Condition Improvements	Bank stabilisation at high risk sites along macrochannel and raising bed via in- stream islands or benches	Channel integrity: Sediment entering water through bank slumping; Sediment re-suspension affecting water quality	Mid Brisbane and Lockyer invasive weed (Cats claw & Celtis) management program	16/17 budget \$300k by Seqwater	16/17 with ongoing commitment required	\$300k 16/17 ongoing TBC	ТВС	ТВС	Yes



24 January 2018

Mayor Andrew Antoniolli Ipswich City Council PO Box 191 IPSWICH QLD 4305

Dear Mayor Antoniolli Andrew



COUNCIL CONTRIBUTION TO THE CATCHMENT INVESTMENT PROGRAM AS PART OF THE RESILIENT RIVERS INITIATIVE

Thank you for your ongoing vision and support for the Resilient Rivers Initiative. As you know, the Initiative was a response to the devastating impacts of the 2011 and 2013 floods on South East Queensland (SEQ).

While the work of the Resilient Rivers Initiative to-date has significantly increased our knowledge of the region's catchments and identified strategies to build better climate resilience, Cyclone Debbie has reminded us that this region remains vulnerable to severe weather events.

As part of the 2017-18 budget cycle, six member councils contributed to an interim funding solution known as the Catchment Investment Program as a means to deliver priority works identified by the Resilient Rivers Initiative. This has enabled the commencement of five projects across the Lockyer, Mid Brisbane and Logan Albert catchments.

Importantly, these councils contributed to the Catchment Investment Program with the understanding that their funds may not be spent directly in their LGA. Instead, the return on their investment comes from the completion of priority projects upstream where they can deliver a more strategic and advantageous outcome.

As you commence your budget discussions for the 2018-19 financial year, I would urge you to investigate whether an opportunity exists for your council to contribute to the Catchment Investment Program.

Any contribution to the Catchment Investment Program is voluntary, and the funding model and amount is at the discretion of each Council. However, the benefits of working together, from an advocacy, strategy and economic perspective, warrant careful consideration by each member council.

Again, I commend all member councils for leading the way in protecting SEQ's catchments and securing the region's water supply. I believe the Catchment Investment Program is the next step in delivering on our commitment to the Resilient Rivers Initiative, and a powerful catalyst for the Commonwealth and Queensland Government to build on.

Should you have any questions please do not hesitate to contact Scott Smith, Executive Director on (07) 3040-3479 or scott.smith@seqmayors.qld.gov.au.

Yours sincerely

Cr Graham Quirk

Chair

Conservation and Environment
Committee

Mtg Date: 19.03.18 OAR: YES

Authorisation: Bryce Hines

VH:VH

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19 February 2018

MEMORANDUM

TO: ACTING SPORT RECREATION AND NATURAL RESOURCES MANAGER

FROM: PARTNERSHIPS OFFICER

RE: TREES FOR MUM DAY 2018 COMMUNITY PLANTING EVENT

INTRODUCTION:

This is a report by the Partnerships Officer dated 19 February 2018 concerning the Trees for Mum Day planting event to be held on Sunday, 13 May 2018.

BACKGROUND:

Trees for Mum Day has grown into a national celebration each Mother's Day in cities across Australia. Specifically in Ipswich it has become a great event to enable families to celebrate their Mums on Mother's Day and help protect the environment.

Council has held an annual planting event for Trees for Mum Day since 2013 and has experienced significant growth in attendance for the event. The event receives positive feedback from the community and attracts new people each year and residents who have attended in previous years who come back to see the progress of their trees and remember their Mums.

Due to the continued success of the event in 2017, it is proposed that Council host the Trees for Mum Day planting event again in 2018.

BENEFITS TO COMMUNITY AND CUSTOMERS:

The Trees for Mum Day event delivers a range of positive outcomes for the community which include:

- Σ Social interaction
- Σ Recognition of the role Mothers and Grandmothers play in our lives
- Σ Physical activity from a relaxed gardening activity
- \(\) Numerous environmental benefits from increased waterway rehabilitation
- Σ Aesthetic and amenity benefits to parks and waterways
- Σ Activation of public open spaces through the community event

The event provides the opportunity for many families to attend with toddlers to grandparents and families with multiple generations planting and experiencing nature together.

Those in the community who have planted at previous events will be able to see how much their trees have grown, the benefits of their contribution and have a physical reminder of their loved ones to visit.

2018 PLANNING:

The Trees for Mum Day event is proposed to be held on Mother's Day, Sunday, 13 May 2018. The free community event will run from 9:00 a.m. to 11:00 a.m. at George Palmer Park, Silkstone.

As well as the opportunity to plant and spend time together in the park, a number of environmental and food partners will also be there on the day. In recognition of Mother's Day, Mothers will receive a small gift and coffee.

A suitable stretch of waterway following on from the previous plantings will be prepared for the day to continue the improvement of Bundamba Creek. The aim will be to plant over 2,000 trees on the day. A Site Map for the planting can be seen in attachment A.

Once this planting has been completed, it will mean that over 800 lineal metres of the Bundamba Creek beside the parkland will have been rehabilitated as a result of the Trees for Mum events and over 10,000 trees planted.

CONCLUSION:

As a result of continued success with the Trees for Mum tree planting events, it is proposed to host the event on Sunday, 13 May 2018 at George Palmer Park, Silkstone from 9:00 a.m. to 11:00 a.m. Attendees will be able to plant trees in recognition of their Mother's and contribute to the rehabilitation of Bundamba Creek.

ATTACHMENT:

Name of Attachment	Attachment
Trees for Mum Day Site Map	Attachment A

RECOMMENDATION:

That Council approve the Trees for Mum Day planting event in 2018 to be held at George Palmer Park, Silkstone on Sunday, 13 May 2018.

Vada Hoger

PARTNERSHIPS OFFICER

I concur with the recommendation/s contained in this report.

Kaye Cavanagh

ACTING SPORT RECREATION AND NATURAL RESOURCES MANAGER

I concur with the recommendation/s contained in this report.

Bryce Hines

ACTING CHIEF OPERATING OFFICER (WORKS, PARKS AND RECREATION)



Previous Sites

Proposed Site 2018

Conservation and Environment Committee				
Mtg Date: 19.03.18	OAR:	YES		
Authorisation: Bryce Hines				

BH:BH

H:\Departmental\Committee Reports\1802 BH Whitwood Rd Solar Farm.doc

6 March 2018

MEMORANDUM

TO: CHIEF EXECUTIVE OFFICER

FROM: ACTING CHIEF OPERATING OFFICER (WORKS PARKS AND RECREATION)

RE: PROPOSED SOLAR FARM – WHITWOOD ROAD LANDFILL

DIVISION 3

INTRODUCTION:

This is a report by the Acting Chief Operating Officer (Works, Parks and Recreation) dated 6 March 2018 concerning a proposal to establish a solar farm on Council's Closed Landfill situation at Whitwood Road, New Chum.

BACKGROUND:

During the operating life of the Whitwood Rd Landfill, Council entered into an agreement with LMS Energy to extract landfill gas from the landfill and utilise it to generate electricity. LMS Energy through their wholly owned subsidiary Joule Energy have approached Council to expand this operation with the establishment of a solar farm to augment the energy generation from landfill gas system. The full proposal from Joule Energy including the commercial proposition is provided as Attachment A.

The summary of the arrangement is that Joule Energy would be responsible for all elements including capital provision, construction and operations and would pay Council an agreed amount for the utilisation of the site. Legal advice has indicated that the contractual arrangements for the proposal can be dealt with through a Deed of Variation to the existing contract.

The first stages of the proposed solar farm are expected to have a capacity of 1.5Mw's which is enough to power approximately 600 homes. A possible third stage utilising the recently capped landfill area once settlement has occurred has also been proposed. Once complete the entire facility would have a capacity of 5-6Mw's which is enough to power approximately 2,000 homes.

While under existing power grid arrangements it is difficult to link the power generated by the solar farm to Council's electricity usage, there is an opportunity to promote both the solar farm and renewable energy through utilising the funds paid to Council by Joule Energy to acquire renewable energy from Council's energy retailers.

After a review of Council's energy usage it has been identified that the funds received from the development of the solar farm is approximately equivalent to the costs of providing green energy for River Heart Parklands. It is therefore proposed that the proceeds from the agreement with Joule Energy be utilized to purchase green energy for River Heart Parklands.

Should Council approve this approach, signage promoting this partnership and the use of green energy for River Heart Parklands would be erected to promote the initiative.

Joule Energy have indicated that should Council approve the partnership as per attachment A and subject to all necessary statutory approvals being received, the solar farm could be in operation in the first quarter 2019.

BENEFITS TO COMMUNITY AND CUSTOMERS:

This proposal benefits the community through maximising the utilisation of land with very little alternative uses. The site presents an ideal opportunity for a solar farm. By linking the proceeds received under the partnership to the purchase of green energy through our energy retailers Council can utilise green energy for a highly visible parkland allowing Council to further its sustainability agenda.

CONCLUSION:

Council has been approached by LMS Energy and their wholly owned subsidiary to establish a solar farm in conjunction with their existing landfill gas system at Council's Closed Landfill at Whitwood Road, New Chum. The establishment of a solar farm at this site is an excellent opportunity to maximise the use of land will little alternative uses while also allowing Council to demonstrate its commitment to sustainability.

CONFIDENTIAL BACKGROUND PAPERS:

This Confidential Background Paper is to be considered in a closed meeting Pursuant to Section 275(1)(e) of the Local Government Regulation 2012.

Name of Confidential Attachment	Confidential Attachment
Joule Energy Proposal – Commercial in Confidence	Attachment A

RECOMMENDATION:

- A. That Council enter into a Deed of Variation with LMS Energy Pty Ltd ACN 059 428 474 to vary the scope of the existing contract No: 11808, as detailed in the report by the Acting Chief Operating Officer (Works, Parks and Recreation) dated 6 March 2018.
- B. That the Chief Executive Officer be authorised to finalise the terms of the Deed of Variation to the existing contract Number 11808 with LMS Energy Pty Ltd ACN 059 428 474 and do any other acts necessary to implement Council's decision in accordance with section 13(3)(c) of the Local Government Act 2009.
- C. That the Chief Executive Officer be authorised to negotiate and finalise the proceeds from the Deed of Variation to be executed by Council, and to do any other acts necessary to implement Council's decision in accordance with section 13(3) (c) of the Local Government Act 2009.

Bryce Hines

ACTING CHIEF OPERATING OFFICER (WORKS, PARKS AND RECREATION)