

# Yeronga West – Orient Road Park Issues Paper

## Background

The land in Orient Road Park has been gradually bought and set aside by Brisbane City Council to primarily preserve a waterway corridor for the Yeronga western catchment (unnamed) creek. Historical uses included agriculture, grazing and some unknown more intensive uses interpreted from historical aerial photography; following which the majority of the lower area was filled in the late 1960's.

The short section of piped culvert of the creek was installed around the same time to provide for more substantial filling of the land behind 167 Hyde Rd. More recently (mid 2009), a concrete path and plantings were installed.



The park appears to provide only for local residents' access as the ends of the path do not connect to any significant corridors for pedestrians nor cyclists, and Council has it zoned "SR1 Sport & Recreation (Local)" – Figure 2, which also shows local waterway corridor and patches of wetlands overlay; although the patches shown on BCC planning are high and dry, and includes a lot of the dry plantings completed in 2009.



Figure 2 - Zoning, water corridor and wetland

See also Appendices A & B for other background information.

## Water Quality

Orient Road Park and the industrial properties to the south east have seen contaminating practices and filling in the past, and there have been no catchment nor treatment provisions made for leachates emanating from the soil and filling. Consequently, leachates migrate via rainwater infiltration to the lowest levels and collect in the creek in both the water and sediments. Concerned resident Peter Poulsen has, at his own expense, taken samples of water and had these tested through recognised laboratories. These results are attached in Appendix C.

For all metals/metalloids tested, the measured levels far exceed ANZECC-ARMCANZ-2000-guidelines-vol1 95% trigger levels – up to 3000 fold for zinc and copper. 95% trigger levels should be considered appropriate for this location according to the guidelines.

BCC has undertaken independent testing (of both water and sediment) – most recently to our knowledge in June 2021. BCC refuses to provide data from their testing, and apart from saying the zinc levels were a ‘bit higher than expected’, and the testing purportedly revealed no levels high enough to cause public concern.

It is worth noting that the substantial storm event of 12 May 2021 immediately preceded BCC testing, and would have substantially diluted or cleaned out most contaminants/toxicants in the water and sediments, whereas the Poulsen testing was carried out in more dormant flow conditions which represent the majority of time that conditions are experienced in the creek.

It is not known what other testing BCC has undertaken in the past, or what testing regime is in place for this and similar creeks within BCC jurisdiction; nor what are council's intentions for improving water quality for this creek/environment.

## Proposed actions

### *Testing to be regular and publically available*

It is inappropriate for a private citizen to have to carry out testing, and BCC should establish a testing regime that is both timely and transparent to the residents most affected by the contamination or the threat of effects. It would be beneficial for YDRA to set up a joint group with council for establishing testing schedules, trigger levels and monitoring, and to develop a plan to manage the contamination.

### *BCC policy for improvement*

It would be appropriate for BCC to advise its intentions on current and future initiatives and policy for improving the quality of the water in the creek through Orient Road Park.

### *Piping can minimise leachates entering the creek and river*

Irrespective of the regime of testing, it is clear that the creek water and sediments are collecting leachates from contaminants from past (and present?) operations and filling. As these contaminants will periodically flood into the Brisbane River, there is substantial benefit achievable in piping the creek through the park, which would provide the following benefits:

1. Negligible leachates will enter the pipe system as they will be largely excluded (through the use of water-tight joints), and time and natural pollutant breakdown can occur in the fill, without affecting the waterways
2. The risk of any person/child falling into polluted water will be eliminated
3. More usable area would be available for the park
4. Maintenance of creek edges and council's weekly spraying for mosquitos would be eliminated

The pipe would need to be sized only for low flows, and be installed with minimal cover, and with inlet/surcharge structures provided upstream and downstream for excess/flood flows (similar to the Hyde Rd park drain & floodway between Fairfield Rd and the outlet behind The Village retirement residences).

An off-line wetland could be included as mooted in the council drainage report of 1999/2000, provided it was designed appropriately to exclude leachates.

## Orient Road Park maintenance

BCC has advised Peter Poulsen by phone that Orient Road Park is a corridor and not a 'park' per se, and as such does not warrant park infrastructure nor regular maintenance similar to a formal 'park'. Accordingly council has no intention to add playground equipment, and that the required maintenance is more sporadic compared to (say) Brisbane Corso Park.

This is a safety concern when grass levels get high and can conceal snakes or other safety hazards for people in the park – especially risks to young children. The creek is a habitat for snakes, and when unmown, the distinction between creek habitat and personnel corridor is largely lost.

Very recent tree trimming has been undertaken:

1. Behind the industrial building of 185 Hyde Rd because of the fire risk to the building
2. Along the path lower branches were trimmed so that miscreants could not easily hide

Peter Poulsen recently wrote to the Lord Mayor offering to mow and maintain the park at his own cost, and the council mowers arrived a couple of days later. More recently, the creek edges have been slashed, and the park neighbour, Peter Forrest, has risen to the challenge and slashed a lot of his property adjacent to the park.

A review of Yeronga's parks shows that Orient Road Park is classified as a 'Corridor' park; sub-classification 'Access/ Recreation Corridor'. It is noted that both Ron Goeldner Park and Paringa Place Park are classified the same, but both the maintenance and provisions of infrastructure in these exceed those of Orient Road Park.

### Proposed Actions

The Yeronga District Residents Association has a committee investigating residents' rights and obligations on all of the parks in Yeronga district, especially those with leases or dedicated uses such as soccer, cricket, rowing, etc and where fences are erected.

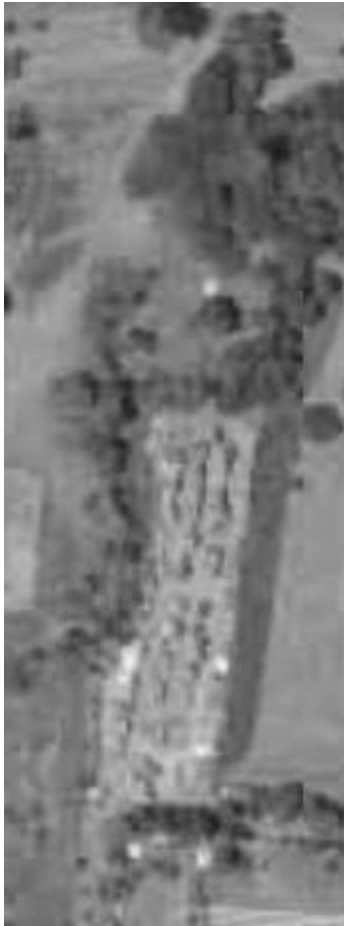
It is proposed that this committee expands their enquiries to include the status of, and warrants for infrastructure such seats and playgrounds, and the appropriateness of current maintenance regimes.

Coupled with initiatives above such as piping of the creek through the park, Orient Road Park could be optimised for its value to the community, and could become a valuable park rather than just a corridor. Accordingly, YDRA could canvass community opinion on the potential of park for more general use to support approaches to council for improvements.

### Drainage constriction caused by illegal filling and drainage at 133 Hyde Rd exacerbates flooding

The western catchment creek passing through the Orient Road Park was filled where it passes through 133 Hyde Rd downstream of the horse paddocks, and the creek was piped – sometime between April 2002 and September 2003. Figures 3 & 4 are aerial photos showing the conditions before and after the illegal filling and drainage.





Brisbane City Council (BCC) has no record of any application nor records of design nor construction for these works, and they investigated the issue in 2006. BCC opted to not act (for reasons not provided) against the landowner at the time, and BCC is now time-barred to take further action on the issue. It is noted that even though BCC investigated and were aware of the pipes, they have not been included on council's drainage database or mapping overlays.

The pipes used in the construction are 2 x 1200mm diameter using re-used steel pile casings, and therefore have limited longevity in the conditions. Just downstream of the filling, the culverts under Brisbane Corso are 2 x 1800mm dia, and thus the construction now constricts the flow by more than 65%. Additionally, the filling of the creek/floodplain has reduced the flood storage by an estimated 1.7 megalitres.

Consequently flooding upstream will now be greater in depth, frequency and duration (ie smaller, more frequent events that may have passed without flooding properties will now cause flooding, and more severe events will cause deeper and more prolonged flooding).

Properties affected are those in the inundation area of the western creek catchment up to a level when the river/creek breaks its banks over Brisbane Corso, and riverine flooding ensues or the excess floodwater overtops the Corso. The minimum number of properties affected (78) are shown in Figure 5. Flood modelling may show this number is understated.



Figure 5 - Affected properties due to illegal filling & drainage (BCC flood mapping)

The inlet to the installed pipes is above the invert of the creek (Figure 6), and exacerbates both ponding in the creek upstream and increased flood levels caused by the small pipe sizes. This has caused ponding and subsequent weed growth, and stagnating water with consequent safety concerns. Excavation/deepening of the creek upstream of the pipes was carried out around June 2005.



Although the property ownership of 133 Hyde Rd has changed since it was filled, responsibility for any consequences of the filling and drainage – illegal or not – appears to rest with the landowner; and given that BCC opted to not pursue the matter when it discovered the issue, there is strong argument that council would also be partly liable for any damages.

## Proposed actions

### *Council Planning and Compliance*

The reason for the illegal filling and drainage was to extend the area of land at 133 Hyde Rd for storage of timber by the then owner, Moxom, by some 4,400 square metres. At the time of the completion of the works, the land added for storage (and including the land under storage further south) was zoned Sport and Recreation (S&R) – see Figure 2. Although timber storage was allowed under an earlier approval (1957) prior to the S&R zoning, filling and drainage of the watercourse required the approval of BCC, and such was not obtained.

It is clear that the illegal works were undertaken to profit from added capacity/turnover for the timber merchant.

The property is now under new ownership, and applications have been lodged over time to redevelop the land in the component of the land zoned 'Low Intensity Industrial', however, these applications have been careful to completely ignore (and not bring attention to) the uses in the S&R component of the land.

The current owner is now profiting from the S&R land from uses other than the storage of timber, and such uses are illegal. This illegal usage has been brought to BCC's attention, and their compliance team has initiated action.

There could be town planning approval options available to the landowner to retain the existing uses provided works are undertaken to remedy past and current unacceptable practices, and the community does not object.

### *Affected Property Owner Actions*

Affected property owners (Fig 5) could be contacted to advise the increased risk of flooding, and potential actions by them could include:

- A group petition to BCC to seek remedy because of council's inaction when it knew of the problem
- Group action against the property owner of 133 Hyde Rd for its neglect to ensure that improvements were approved prior to purchase
- A class action from the affected owners against both council and the property owner of 133 Hyde Rd for compensation should flooding occur and damage affected properties. Compensation can include increased insurance premiums that may result in the increased risk of flooding

Note that compensation can only be sought if damages occur, but prevention is by far preferred, and pressure should continue to be brought against BCC and the property owner of 133 Hyde Rd because of the increased risk of flooding imposed on the affected properties by the illegal filling and drainage.

**APPENDIX A – Other useful information (ex BCC data sources at 27/09/2021)**



*Drainage entering and inside Orient Road Park (note pipes in 133 Hyde not shown)*

*2002 contours 133 Hyde*

*2019 contours 133 Hyde*





*Yeronga west trunk drainage*

**APPENDIX B – Historic aerial photos**



1960

1969





**APPENDIX C – Water Quality testing**

Reference	Description	Analyte Description	Units	Method	PQL	level of protection of species		Sample 0			Sample 1		
						95%trigger	80%trigger	11/04/2021	times @ 95%	times @ 80%	Orient Road Pond 9/09/2021 10:00	times @ 95%	times @ 80%
21/07445	Orient Road Pond	Arsenic as As	mg/L	5.304		0.024	0.36	0.195	8	0.54	<0.50		
21/07445	Orient Road Pond	Cadmium as Cd	mg/L	5.304		0.0002	0.0008	0.012	60	15	<0.050		
21/07445	Orient Road Pond	Chromium as Cr	mg/L	5.304		0.001	0.04	0.47	470	12	0.7	700	18
21/07445	Orient Road Pond	Copper as Cu	mg/L	5.304		0.0014	0.0025				3.2	2,286	1,280
21/07445	Orient Road Pond	Nickel as Ni	mg/L	5.304		0.011	0.017	0.399	36	23	0.8	73	47
21/07445	Orient Road Pond	Lead as Pb	mg/L	5.304		0.0034	0.0094	2.93	862	312	2.4	706	255
21/07445	Orient Road Pond	Zinc as Zn	mg/L	5.304		0.008	0.031				24	3,000	774
21/07445	Orient Road Pond	Mercury as Hg	µg/L	5.303	0.01	0.6	5.4				2	3	0.37

**Notes:**

1. Trigger levels in grey shading relate to the level of protection of aquatic species – eg 95% of species can survive sustained contaminant/toxicant trigger levels (Australian and New Zealand Guidelines for Fresh and Marine Water Quality, 2000 [ANZECC-ARMCANZ-2000-guidelines-vol1]). 95% trigger levels may be used for highly disturbed ecosystems, however 90% and 80% trigger levels can be used as intermediate targets for water quality improvement strategies
2. ‘times @ 95%’ and ‘times @ 80%’ columns show the extent to which the test results exceed the respective trigger levels – eg Chromium levels for the Sample 0 tests are 470 times the 95% trigger levels, and 12 times the 80% trigger levels
3. Metals and metalloids with no values shown in Sample 0 were not tested

