

Seawall Inspection Record - RYD_S23

Date	<u>19/08/09</u>	Locality	<u>Meadowbank, River North</u>	Level	<u>0.30m</u>	LGA	<u>Ryde</u>
Time	<u>12:33</u>			Tide	<u>Low</u>		



Co-Ords (MGA)

Start

E 323095
N 6256080

End

E 323007
N 6256101

Seawall Details (Slope, Material, Const. Method, Type):

variable size sandstone block seawall with concrete slab along crest along entire structure and face at western end. Structure is founded on
bedrock and there is rubble material along the toe. Mangroves are present in front of the structure at western end. A public footpath and
cycleway runs along the length of the structure 1-2m from the crest. Structure also supports new solar powered light poles.

Condition Assessment (Slope, Crest, Toe, Backfill):

Grout not present, voids and localised block failures were observed. Concrete capping on crest and
face has cracked and failed.

Excellent
Good
Poor
Failed

X

Assets

Public access is available although no major issues. Structures that seawall supports are sound at present.

Comments:

Photos RYD_S23-01 to RYD_S23-09.

Photo 1

Typical view of structure showing block and concrete
capping failure.



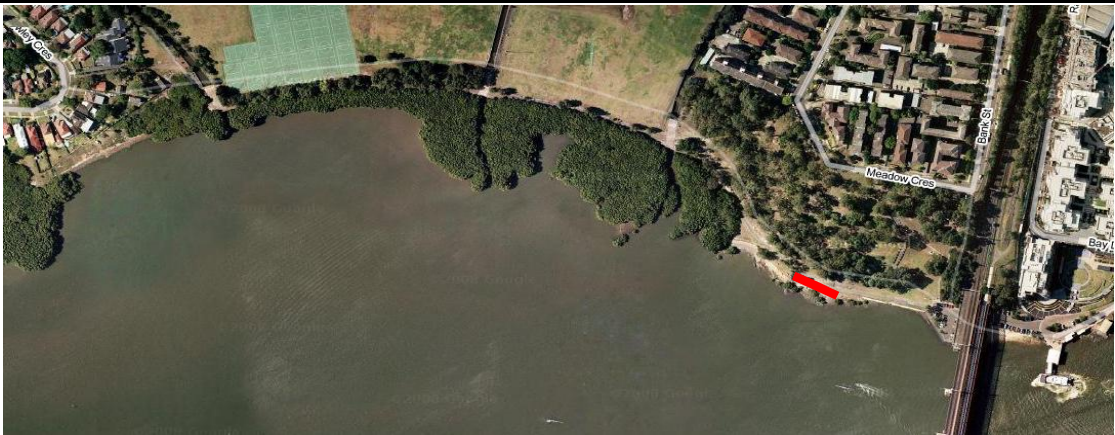
Photo 2

Block failure beneath at toe.



Seawall Inspection Record - RYD_S24

Date 19/08/09 Locality West of Ryde Bridge, River North Level 0.30m
Time 9:21 People Low LGA Ryde



Co-Ords (MGA)

Start
E 323007
N 6256101

End
E 322991
N 6256101

Seawall Details (Slope, Material, Const. Method, Type):
Small section (15m) of small-medium sized sandstone block vertical retaining wall behind rocky outcrops and mangroves. The structures supports a public footpath and cycleway and a new solar powered light pole.

Condition Assessment (Slope, Crest, Toe, Backfill):
Significant slumping, block failures at the crest and weathering of sandstone blocks was observed along the length of the structure. Vegetation is also growing out of the wall.

Excellent ☐
Good ☐
Poor ☐
Failed ☒

Assets
Supports footpath and light pole.

Comments:
Photos RYD_S24-01 to RYD_S24-02.

Photo 1
View of structure.

Photo 2
Block failures and slumping of wall.



Seawall Inspection Record

- RYD_S22

Date	<u>19/08/09</u>	Locality	<u>West of Ryde Bridge, River North</u>	Level	<u>0.30m</u>	LGA	<u>Ryde</u>
Time	<u>12:28</u>			Tide	<u>Low</u>		



Co-Ords (MGA)

Start

E 323125

N 6256044

End

E 323095

N 6256080

Seawall Details (Slope, Material, Const. Method, Type):

Gabion basket revetment west of John Whitton Bridge. Landscaping and a timber lattice fence with concrete slab is present along a section of the crest. Beyond the structure is a public carpark and walkway.

Condition Assessment (Slope, Crest, Toe, Backfill):

The section adjacent to the bridge abutment has failed and all material has been lost from the baskets. The rest of the structure is slumping.

Excellent

Good

Poor

Failed

X

Assets

The structure supports a public carpark and walkway which has been undermined by the failure adjacent to the bridge abutment.

Comments:

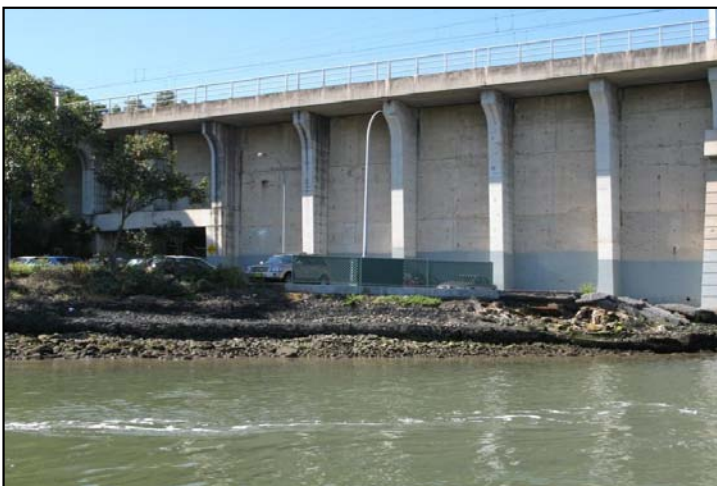
Photos RYD_S22-01 to RYD_S22-05.

Photo 1

View of structure.

Photo 2

Failure of structure adjacent to John Whitton Bridge.



Seawall Inspection Record

- RYD_S03

Date	<u>6/08/09</u>	Locality	<u>Looking Glass Point, River North</u>	Level	<u>0.46m</u>	LGA	<u>Ryde</u>
Time	<u>14:15</u>			Tide	<u>Low</u>		



Co-Ords (MGA)

Start

E 326525

N 6253825

End

E 326507

N 6253834

Seawall Details (Slope, Material, Const. Method, Type):

Medium sized sandstone block grouted vertical seawall founded on bedrock at the end of Wharf Road. The crest is 3m above bedrock and a small grassy strip separates the road and wall.

Condition Assessment (Slope, Crest, Toe, Backfill):

A number of block failures were observed along the length of the wall. Additionally, no grout is present between the blocks, sinkholes are present at the crest and surface weathering of the blocks has taken place.

Excellent

Good

Poor

Failed

X

Assets

General public access is available with no structure/obstruction to define the structure edge. Fishing rod holders have been put into sinkholes by members of the public.

Comments:

Photos RYD_S03-01 to RYD_S03-02.

Photo 1

Typical view of wall.



Photo 2

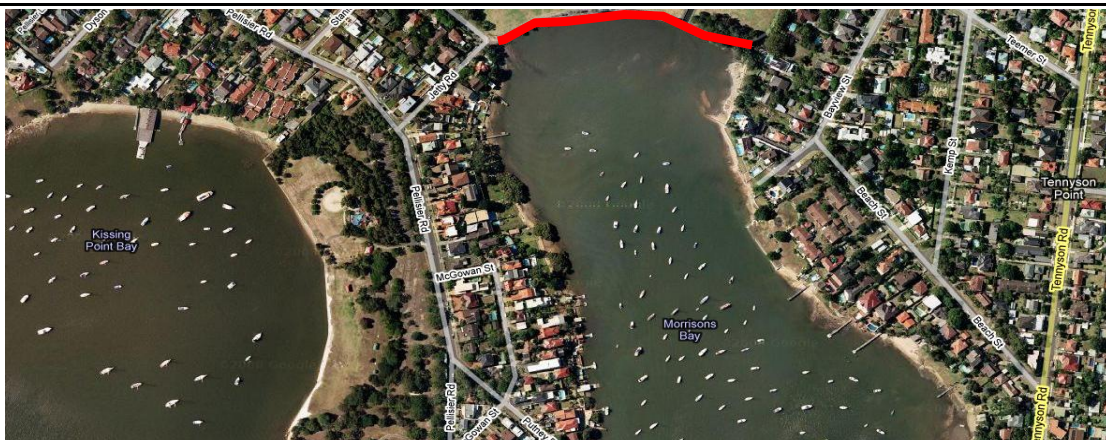
Block failures along wall.



Seawall Inspection Record

- RYD_S06

Date	<u>31/08/09</u>	Locality	<u>Morrison Bay, River North</u>	Level	<u>0.74m</u>	LGA	<u>Ryde</u>
Time	<u>10:02</u>			Tide	<u>Low-Mid</u>		



Co-Ords (MGA)

Start

E 325439

N 6255085

End

E 325168

N 6255093

Seawall Details (Slope, Material, Const. Method, Type):

The structure consist of a medium grouted sandstone block sloping wall with two rows of vertical blocks at crest and one set of sandstone sea stairs mid-way along the wall. Three large concrete storm water pipes are located along the wall and a canal opening is present at the eastern end. A mud terrace with vegetation and rubble is located in front of the wall at low tide.

Condition Assessment (Slope, Crest, Toe, Backfill):

Severe weathering, slumping and loss of grout from between sandstone blocks was observed. A number of sinkholes are present behind the crest indicating a loss of fine material.

Excellent

Good

Poor

Failed

X

Assets

General public access is available with no barrier to define the wall edge. The slope is mossy and would be slippery. The structure does not support any other infrastructure.

Comments:

Caps are missing from storm water outlets. Photos RYD_S06-01 to RYD_S06-22.

Photo 1

Typical view of seawall.



Photo 2

Weathering of sandstone blocks at crest and sinkhole behind wall.



Seawall Inspection Record - RYD_S11

Date	<u>18/08/09</u>	Locality	<u>Beneath Ryde Bridge</u>	Level	<u>0.76</u>	LGA	<u>Ryde</u>
Time	<u>14:00</u>			Tide	<u>Low-Mid</u>		



Co-Ords (MGA)

Start

E 323707

N 6255931

End

E 323635

N 6255963

Seawall Details (Slope, Material, Const. Method, Type):

Large sandstone block grouted seawall with a new layer of medium sized blocks along the crest. New medium sized blocks have been installed at discrete locations. A new recreation area has been constructed beyond the crest as has a new public wharf which the structure supports. The structure continues into the mangroves at the northern extent, is founded on bedrock and the crest was 1.5 above the WL.

Condition Assessment (Slope, Crest, Toe, Backfill):

Single block failures were observed along the older, lower section of the wall. The lower section is also slumping and grout material is missing from between the blocks. The newer blocks that form the crest are in excellent condition.

Excellent

Good

Poor

Failed

X

Assets:

Timber bollards along the crest define the structure edge. Blocks failures are present beneath the connection of the public wharf.

Comments:

Photos RYD_S11-01 to RYD_S11-10.

Photo 1

Typical section of wall showing older blocks along toe and newer blocks at crest.

Photo 2

Block failures beneath the connection of the public wharf.



Facility Inspection Record

- RYD_F08

Date 31/08/09 Locality Morrison Bay Level 0.74m LGA Ryde
Time 10:02 Tide Low-Mid



Co-Ords (MGA)

Start

E 325168

N 6255093

Facility Details (Usage, Material, Const. Method, Type):

Ad-hoc boat ramp constructed from building waste and concrete. A number of dinghies are also stored informally in the adjacent public reserve.

Condition Assessment:

The boat ramp is not constructed to typical engineering standards. The toe has been undermined and the sides of the ramp are failing with aggregate material strewn along adjacent sandy shoreline. There is no formal structure for dingy storage.

Excellent

Good

Poor

Failed

<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>
<input checked="" type="checkbox"/>

Assets:

Dinghies are launched via the ad-hoc boat ramp which is failing.

Comments:

Photos RYD_F08-01 to RYD_F08-04.

Photo 1

View of ad-hoc boat ramp and informal dingy storage.



Photo 2

Undermining at the toe and failure along the side of the ad-hoc boat ramp.



Facility Inspection Record

- RYD_F05

Date	<u>6/08/09</u>	Locality	<u>Tennyson Point</u>	Level	<u>0.77m</u>	LGA	<u>Ryde</u>
Time	<u>15:04</u>			Tide	<u>Low-Mid</u>		



Co-Ords (MGA)

Start

E 325661
N 6254305

Facility Details (Usage, Material, Const. Method, Type):

Concrete stairs from Tennyson Rd. providing access to rocky foreshore. Older sandstone blocks are present beneath the concrete stairs.

Condition Assessment:

The concrete stairs are in a poor conditions with cracks present and undermining at the lowest point.

Excellent
Good
Poor
Failed

X

Assets:

The rocky foreshore, accessible via the stairs, is steep and mossy with deep water in front. Members of the public were fishing from the rocks and climbing along the shoreline during the inspection.

Comments:

Photos RYD_F05-01 to RYD_F05-02.

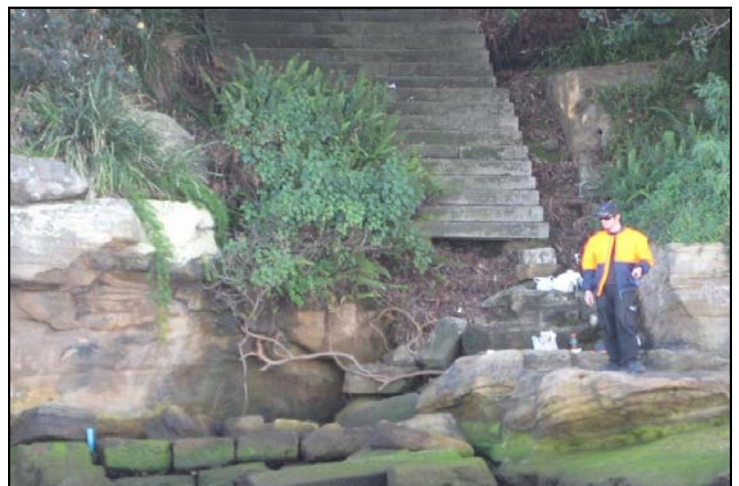
Photo 1

Concrete stairs and rocky shoreline with members of the public fishing and climbing on rocks.



Photo 2

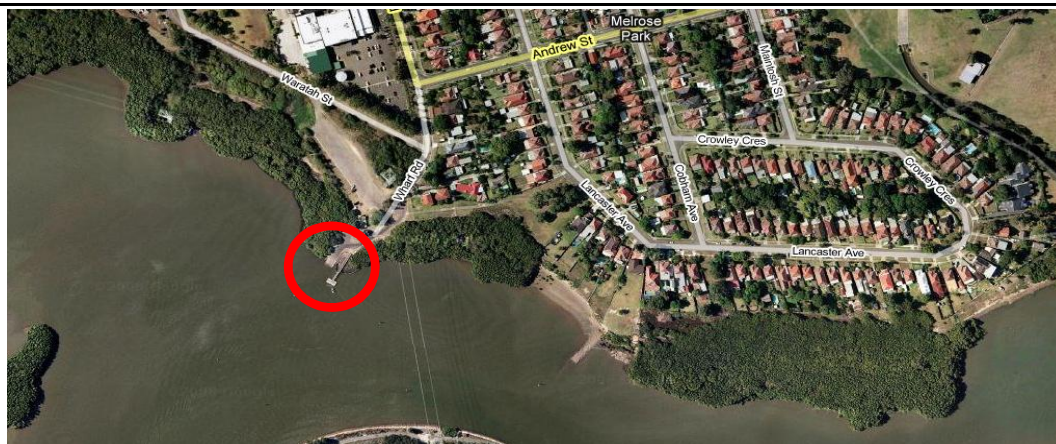
Undermining of concrete stairs.



Facility Inspection Record

- RYD_F16

Date	<u>19/08/09</u>	Locality	<u>West Ryde Wharf</u>	Level	<u>1.13m</u>	LGA	<u>Ryde</u>
Time	<u>15:30</u>			Tide	<u>Mid</u>		



Co-Ords (MGA)

Start

E	<u>321652</u>
N	<u>6256243</u>

Facility Details (Usage, Material, Const. Method, Type):

The facility consists of a timber jetty with timber safety rail supported by a medium sandstone block wall on the land, a steel gangway with timber slats and rails and a concrete floating pontoon with fenders and steel cleats for temporary vessel mooring. A part from the landward side of the jetty, the facility is supported by timber piles. The structure complements the adj. boat ramp, RYD_F17, and is well utilised.

Condition Assessment:

The timber slats on the jetty are loose and deteriorating as is the timber rail. The timber slats on the gangway are also loose and deteriorating. The edges of the concrete that makes up the floating pontoon are severely corroded with reinforcement visible.

Excellent	<input type="checkbox"/>
Good	<input type="checkbox"/>
Poor	<input checked="" type="checkbox"/>
Failed	<input type="checkbox"/>

Assets:

Timber safety rails are loose and deteriorating. The structure is exposed to ferry wash making berthing and mooring difficult.

Comments:

The structure is situated atop old timber piles and beams which may have formed an old wharf. A sign in the adjacent car park indicated that the whole facility is to be replaced in 2010. Photos of the facility, RYD_F16-01 to RYD_F16-10.

Photo 1

View of structure.



Photo 2

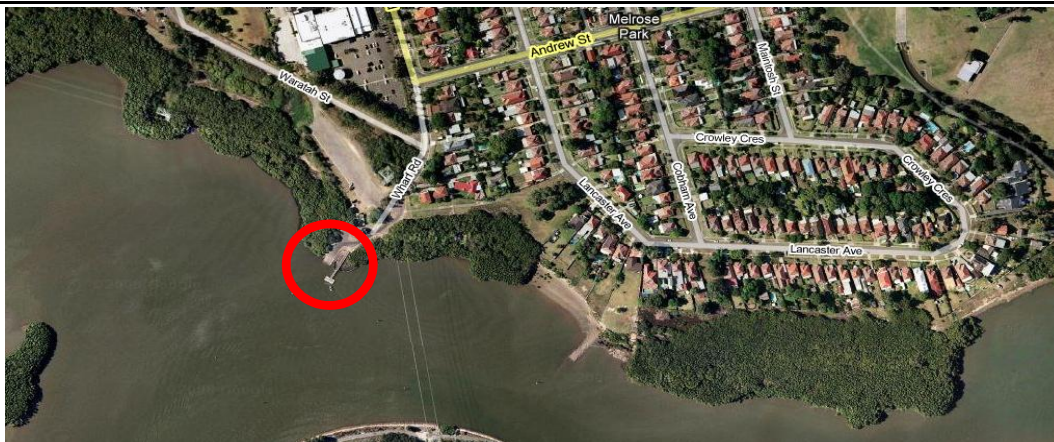
Corrosion of concrete which forms floating pontoon.



Facility Inspection Record

- RYD_F17

Date	<u>19/08/09</u>	Locality	<u>West Ryde Boat Ramp</u>	Level	<u>1.13m</u>	LGA	<u>Ryde</u>
Time	<u>15:20</u>			Tide	<u>Mid</u>		



Co-Ords (MGA)

Start

E 321652

N 6256267

Facility Details (Usage, Material, Const. Method, Type):

Concrete single lane boat ramp with diagonal grooves to aid grip. Concrete has been poured along the eastern side of the ramp. Parking is available beyond the ramp and the facility is well utilised and supported by the adjacent wharf and floating pontoon (RYD_F16).

Condition Assessment:

The concrete ramp is cracking and aggregate is exposed. The western side of the structure has been undermined.

Excellent

Good

Poor

Failed

X

Assets:

Members of the public commented that the toe of the structure finished abruptly and cars often get stuck.

There is also a number of sandstone boulders present in the water beyond the structure and the area is exposed to vessel wash making launching and retrieval difficult.

Comments:

A sign in the adjacent car park indicated that the whole facility is to be replaced in 2010.

Photos of the facility, RYD_F17-01 to RYD_F17-03.

Photo 1

View of boat ramp.

Photo 2

Undermining of structure on the western side.



Facility Inspection Record

- RYD_F03

Date	<u>6/08/09</u>	Locality	<u>Meriton St, Gladesville</u>	Level	<u>0.46</u>	LGA	<u>Ryde</u>
Time	<u>14:22</u>			Tide	<u>Low</u>		



Co-Ords (MGA)

Start

E 326288

N 6254155

Facility Details (Usage, Material, Const. Method, Type):

water is via rocky shoreline.

Condition Assessment:

No formal facility. Steel safety rail associated with Sydney Water pumping station is showing signs of corrosion and the concrete slab it sits upon has been undermined.

Excellent

Good

Poor

Failed

X

Assets:

No formal access to water, dinghies must be launched via mossy bedrock.

Comments:

Photos RYD_F03-01 to RYD_F03-02.

Photo 1

Informal dinghy storage at Sydney Water pumping station.

Photo 2

Dinghy tethered to steel safety rail.



Facility Inspection Record

- RYD_F07

Date	<u>6/08/09</u>	Locality	<u>Morrisons Bay, eastern shore</u>	Level	<u>0.77m</u>	LGA	<u>Ryde</u>
Time	<u>15:20</u>			Tide	<u>Low</u>		



Co-Ords (MGA)

Start

E 325450

N 6254926

Facility Details (Usage, Material, Const. Method, Type):

Informal dinghy storage within public reserve with dinghies tethered to private timber paling fence and trees. Ad-hoc groynes with timber poles to mark their ends have been constructed with small sandstone rocks to define the launch area. A timber ramp and rubber tires have also been placed at the shore for launching and berthing.

Condition Assessment:

Non-engineered structures.

Excellent

Good

Poor

Failed

<input type="checkbox"/>
<input type="checkbox"/>
<input type="checkbox"/>
<input checked="" type="checkbox"/>

Assets:

Dinghies are launched via sandy shoreline in front of storage area.

Comments:

Photos RYD_F07-01 to RYD_F07-02.

Photo 1

View of informal dinghy storage facility and ad-hoc structures along shoreline.



Photo 2

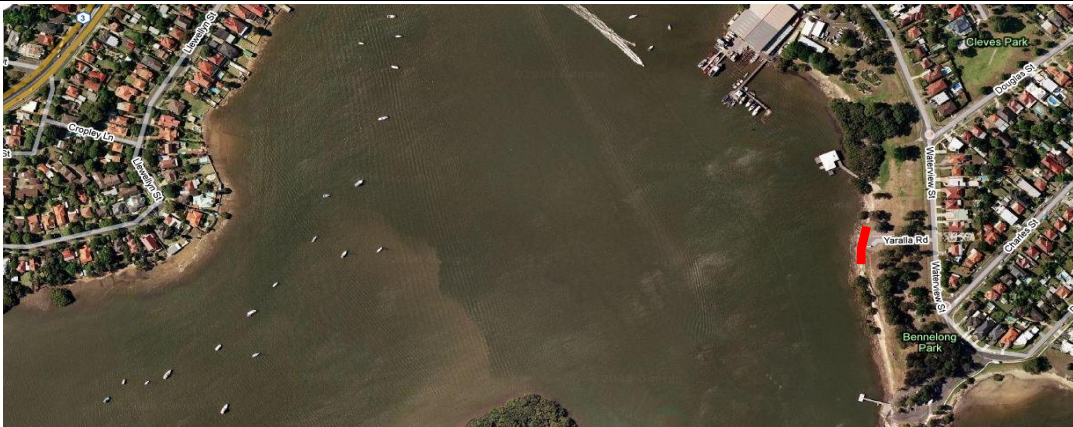
Dinghies tethered to trees and timber fence.



Natural Shoreline Inspection Record

- RYD_NS07

Date	<u>18/08/09</u>	Locality	<u>Kissing Point Park, Putney</u>	Level	<u>0.76m</u>	LGA	<u>Ryde</u>
Time	<u>13:36</u>			Tide	<u>Low-Mid</u>		



Co-Ords (MGA)

Start

E 324277

N 6255207

End

E 324277

N 6255232

Details (Vegetation, Slope, Toe):

Rocky shoreline with public park. The section encompasses Yaralla Road which terminates directly above the rocky shoreline and a 300mm diameter storm water outlet.

Condition Assessment:

A large, approx. 500mm erosion scarp is present for 50m encompassing the end of Yaralla Road. The section is fenced off from the public and council workers were on site during the inspection and were placing large sandstone boulders along the scarp which don't appear to be designed to typical engineering detail with no filter layer observed.

Excellent

Good

Poor

Failed

<input type="checkbox"/>
<input type="checkbox"/>
<input checked="" type="checkbox"/>
<input type="checkbox"/>

Assets:

Foreshore supports the end of Yarralla Road and a storm water outlet which may be threatened if erosion was to continue. Public access is currently restricted by a temporary fence.

Comments:

Photos RYD_NS07-01 to RYD_NS07-05.

Photo 1

View of erosion scarp behind rocky shoreline.



Photo 2

Large sandstone blocks placed along erosion scarp encompassing a new storm water culvert.



Natural Shoreline Inspection Record

- RYD_NS13

Date	19/08/09	Locality	Meadowbank, adjacent to rail bridge	Level	0.30m	LGA	Ryde
Time	12:42			Tide	Low		



Co-Ords (MGA)

Start

E 322991

N 6256101

End

E 322906

N 6256156

Details (Vegetation, Slope, Toe):

Rocky/sandy shoreline with grassy bank. Concrete building waste has been placed along toe of grassy bank. Public footpath and cycleway is located 1-2m from bank edge.

Condition Assessment:

Large erosion scarp (300-500mm) is present at edge of grassy bank indicating exposure and sensitivity to passing vessel wash. Concrete building waste has not been placed to typical engineering standards.

Excellent

Good

Poor

Failed

X

Assets:

Foreshore supports public footpath and cycleway which will become threatened if erosion is left unabated.

Comments:

Photos RYD_NS13-01 to RYD_NS13-02.

Photo 1

View of foreshore.

Photo 2

Erosion scarp with concrete building waste.



Natural Shoreline Inspection Record

- RYD_NS11

Date	<u>20/08/09</u>	Locality	<u>Settlers Park, Putney</u>	Level	<u>0.55</u>	LGA	<u>Ryde</u>
Time	<u>12:30</u>			Tide	<u>Low-Mid</u>		



Co-Ords (MGA)

Start

E 323627

N 6255959

End

E 323486

N 6256200

Details (Vegetation, Slope, Toe):

Muddy foreshore vegetated with mangroves extending from north west from Ryde Wharf (RYD_F15).

Condition Assessment:

Erosion observed with no fine material present between pneumatophores due to exposure to vessel wash. One mangrove has collapsed.

Excellent

Good

Poor

Failed

X

Assets:

No issues at present, however, shoreline will continue to erode into the future.

Comments:

Photos RYD_NS11-01 to RYD_NS11-02.

Photo 1

Mangroves adjacent to Seawall RYD_NS11.



Photo 2

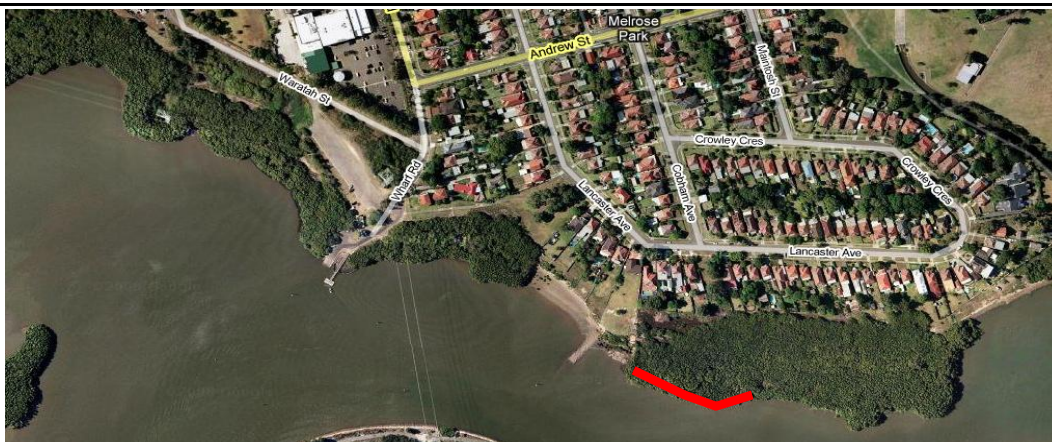
Collapsed mangrove.



Natural Shoreline Inspection Record

- RYD_NS14

Date	<u>20/08/09</u>	Locality	<u>Korpie Reserve, Melrose Park</u>	Level	<u>0.55m</u>	LGA	<u>Ryde</u>
Time	<u>12:50</u>			Tide	<u>Low-Mid</u>		



Co-Ords (MGA)

Start

E 322039

N 6256215

End

E 321951

N 6256205

Details (Vegetation, Slope, Toe):

Muddy/Sandy shoreline vegetated with mangroves.

Condition Assessment:

Erosion observed with undermining and loss of fine material from pneumatophores due to exposure to vessel wash.

Some trees are collapsing into water.

Excellent

Good

Poor

Failed

X

Assets:

No public access, no structures along shore.

Comments:

Photos RYD_NS14-01 to RYD_NS14-11.

Photo 1

Loss of fine material from pneumatophores.



Photo 2

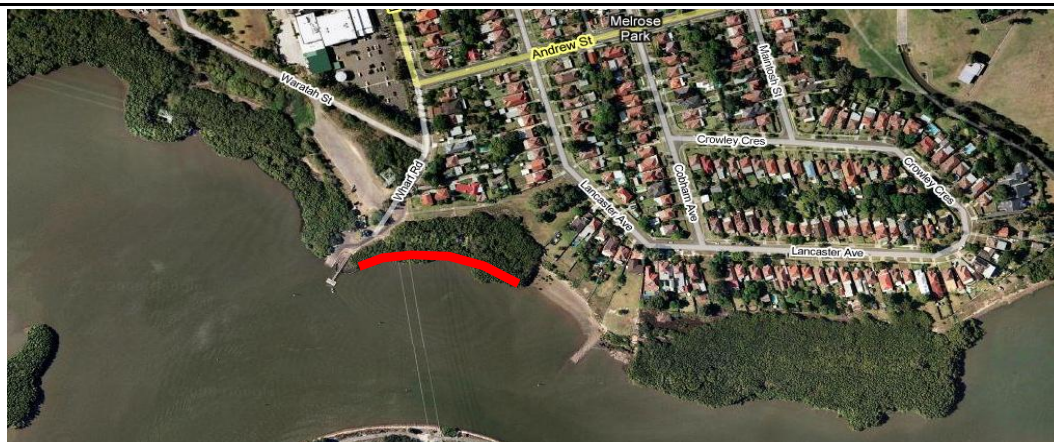
Undermining and collapsing of mangroves.



Natural Shoreline Inspection Record

- RYD_NS15

Date	<u>20/08/09</u>	Locality	<u>East of West Ryde Wharf</u>	Level	<u>0.24m</u>	LGA	<u>Ryde</u>
Time	<u>13:43</u>			Tide	<u>Low</u>		



Co-Ords (MGA)

Start

E 321766
N 6256273

End

E 321677
N 6256261

Details (Vegetation, Slope, Toe):

Muddy/sandy shoreline vegetated with mangroves.

Condition Assessment:

Erosion observed with undermining and loss of fine material from pneumatophores due to exposure to vessel wash.

Some trees are collapsing into water.

Excellent

Good

Poor

Failed

X

Assets:

No public access, no structures along shore.

Comments:

Photos of foreshore RYD_NS15-01 to RYD_NS15-06.

Photo 1

Loss of fine material from pneumatophores.

Photo 2

Mangroves collapsing due to undermining.

