

Ashfield Flats Hydrological Study FAQ's

- 1. Where can I find out more information on the Hydrological Study - the summary report / the technical report.**

Summary report: [Ashfield Flats summary report](#)

Poster: [Ashfield Flats poster](#)

Full study: [Ashfield Flat full study](#)

- 2. When is the community consultation being undertaken?**

Master planning and community consultations will be undertaken at the start of 2022.

- 3. Who are land managers for this site?**

Ashfield Flats is managed by multiple organisations. A large portion of Ashfield Flats is managed by the Dept of Planning Lands & Heritage, with sections under the management of the Town of Bassendean. The Water Corporation manage the drainage reserves that transect the site.

- 4. What are the impacts on public access due to flooding, and the timeframe in which this may occur?**

- a. When is the tipping point for this flooding to occur?**

Flooding of Ashfield Flats already occurs during high tides or larger river flow events. Sea level rise is expected to see the frequency of the wetland flooding events increase in the coming decades. There will be a gradual change in the duration of water held within the wetland with less drying time between floods for the wetland to dry out in summer. This increasing inundation duration will start to alter the ecology of Ashfield Flats within the next 20 years.

- b. Is the current footpath going to be flooded / removed?**

The current alignment of the foot path is already flooded during high tide or high river flow events. The duration of this flooding will increase over time.

The future of the footpath is open for discussion. Any proposal for the relocation of the path should be included in the master planning & consultation process.

- c. Is the current walking bridge going to be flooded / removed / extended?**

The ends of the current walk bridge are already flooded during high tide or high river flow events. The duration of this flooding will increase over time.

The future of the walk bridge is open for discussion. Any proposals regarding the bridge should be included in the master planning & consultation process.

d. Will my house be threatened?

This is outside the scope of this study.

5. What management is being done for the polluted ground water plume?

An initial examination of the ground water plume was undertaken via a bore survey in the 1990's by the then Water and Rivers Commission. Further study of the plumes horizontal and vertical extent is required.

6. Are the heavy metals a risk to people or dogs?

The heavy metals were found accumulating within the sediments of the wetland. The levels of some of these metals exceed the sediment toxicant guidelines values indicating the potential for contamination. Risk is however related to bioavailability and toxicity of contaminants within this type of sediments. Site specific guidelines may have to be developed for the site as it is neither fresh nor marine (estuarine salt marsh) so the binding and release of metals (and associated bioavailability) within these environments is not directly comparable to existing guideline values. Further study to assess this risk is required.

7. Will my dog be able to run free / walk here?

This is outside the scope of this study.

Dogs off lead at Ashfield Flats should be part of the discussion during the master planning process.

8. Will I be able to walk along the foreshore?

Water levels within the river will gradually rise over time with an increasing influence of the tidal and river flooding events across the flats.

The future management of Ashfield Flats is part of the discussion during the master planning process.

9. Is sea level rise / climate change real?

In a local context, sea levels have been rising in the Fremantle tide gauge since available records.

The Intergovernmental Panel on Climate Change (IPCC) places a high level of confidence in projections for continues sea level rise. The IPPC also project, with medium confidence, reduction in the mean rainfall, particularly in the cool season, increased aridity and increased meteorological and ecological droughts. For the hydrological study DBCA accepted the consensus of the international scientific community. The model for Ashfield Flats translates the influence of these regional projections within the local landscape.

The projections for sea level rise and climate change have been reviewed and accepted throughout the international scientific community. The model for Ashfield Flats translates the influence of these global projections within the local landscape.

10. Query about mosquito management?

Ashfield Flats is currently identified and an important area for mosquito management, to reduce the potential for the spread of mosquito borne disease. The current management is a result of the natural occurrence of mosquitos breeding in tidal salt marsh environments. It is likely that mosquito management around Ashfield Flats, will be ongoing.

11. When will the boardwalk be upgraded

This is outside the scope of this study.

The future management of Ashfield Flats is part of the discussion during the master planning process.

12. When will foreshore seating be installed?

This is outside the scope of this study.

The future management of Ashfield Flats is part of the discussion during the master planning process.

13. What is the impact of boat wake on the site?

This is outside the scope of this study.

14. Is the water safe for my dog to enter?

The heavy metals were found accumulating within the sediments of the wetland. The levels of some of these metals exceed the sediment toxicant guidelines values indicating the potential for contamination. Bioavailability and toxicity of contaminants is however, influenced by sediment grain size. Guideline values in this environment have not been established for pet exposure. Further study to assess this risk may be required.

15. When the foreshore vegetation that is recommended is planted, will my river access be cut off?

The hydrological study does not make recommendations in relation to erosion. However, management actions to reduce the potential of future bank erosion and allow room for the river would be considered best management practice.

The design of the future erosion management within Ashfield Flats will be part of the discussion during the master planning process.

16. Should I be worried about the acidified groundwater coming into the area?

Information regarding the safe use of bore water and how to get them tested can be found on the Department of Water and Environmental Regulation (DWER) website:

<https://www.wa.gov.au/service/building-utilities-and-essential-services/water-supply/garden-bores-frequently-asked-questions>

Bore water should never be used for drinking, bathing, filling swimming and paddle pools, food preparation or colling unless it has been professionally tested and, if necessary, treated.

The Department of Health also has useful information here:

https://www.healthywa.wa.gov.au/Articles/A_E/Bore-water

If a resident has had their bore water tested and has concerns about the concentrations of any particular contaminant, they can call the Contaminated Sites Information line 1300 762 982.

17. How can I be involved more?

We encourage people's involvement in the master planning process. To express what they love about this area and to express what they would like to see in the planning for the area, understanding the forecast changes that are likely to occur.

18. Will the water shown in the maps (poster Figure 5) be permanently there or is that only during winter/wet periods?

The figures illustrate the model of the average water level during the successive years for one of the sea level rise scenarios (Scenario RCP8.5). While this is the average water level, the actual water levels will rise and fall with the tide or with river flood events as they do now. It is predicted that the wetland will be permanently inundated by 2090 if sedimentation rates are much slower than the expected rates of sea level rise. The rate of sediment accumulation (accretion) is at present a significant unknown and there is the potential that over time the Flats increases in elevation to keep pace with sea level rise. Increasing aridity and projected further declines in catchment runoff however may mean sediment delivery to the wetland occurs less frequently. More study is required to better estimate changes to the rate of salt marsh sediment accumulation.

19. What is the priority for drainage treatment?

From the river water quality perspective, the Chapman St drain is delivery nutrients and contaminants directly to the river so it would be the highest priority. The Woolcock Court drain is delivering high nutrients and heavy metals into the wetland. The wetland however is currently undertaking much of the work in treating this prior to the water entering the river. The management of the metals in this system would be a management target. The Kitchener St

drain is also delivering nutrients and metals directly to the river, just in lower volumes. The treatment of this is still a management target.

20. Is my bore safe. How do I test my bore?

The DWER webpage has some information available about garden bores and where to have groundwater tested:

<https://www.wa.gov.au/service/building-utilities-and-essential-services/water-supply/garden-bores-frequently-asked-questions>

Department of Health also has some useful information here:

https://www.healthywa.wa.gov.au/Articles/A_E/Bore-water

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