Melbourne's Drainage System: How It Works

Melbourne Water's drainage system is designed to manage rainwater and reduce the risk of flooding in urban areas. It collects rainwater from streets, directing it through a network of drains, creeks, and rivers before it eventually reaches the bay. While the system efficiently handles most storms, extreme rainfall can sometimes overwhelm this system leading to flooding.

The journey of stormwater



1: Collecting rainwater – house gutters & street drains

Rainwater first enters house gutters and downpipes, flowing into residential drains. It then moves into local street drains, maintained by councils to ensure smooth water flow.



2: Directing Water – council drains

Street drains channel stormwater into larger council drains along roads and footpaths, guiding excess water safely away from properties.



3: Managing Flow – Melbourne Water's Regional Drains

Council drains connect to Melbourne Water's regional drainage network, which helps manage larger water flow and prevent flooding in localised developed areas.



4: Natural filtration – creeks, rivers, and wetlands

Stormwater is directed into local rivers, creeks and wetlands, where these natural vegetated systems help to slowdown and filter out pollutants before the water continues its journey.



5: Reaching the bay – Port Phillip & Western Port

Finally, the filtered stormwater flows into Port Phillip or Western Port Bay, supporting marine life and local ecosystems. Some stormwater also reaches the bay through piped beach outlets.

How we maintain and upgrade the drainage system

- **Maintain:** Regular inspections keep drains in good shape.
- **Manage:** Rubbish and debris are removed from catchments grates and pits to keep water flowing.
- **Operate:** Manage: Rubbish and debris are removed from catchments grates and pits to keep water flowing.
- **Upgrade:** Infrastructure is upgraded, and new flood solutions are introduced to reduce flood risk as Melbourne grows.

Why flooding can still happen

- **Extreme weather:** Our drainage system can handle most common rain events, but intense rainfall can sometimes exceed the capacity of the drainage system, leading to flooding
- **Urban growth:** Extreme weather: Our drainage system can handle most common rain events, but intense rainfall can sometimes exceed the capacity of the drainage system, leading to flooding.
- **Clogged drains:** Rubbish and debris in drains can block water flow, causing local flooding in your area.



How you can help with drainage in your area

- Keep gutters and drains clear of debris to avoid blockages.
- Report blocked street drains to your local council or Melbourne Water for fast action.
- Consider plants and garden features that can absorb water to help protect your home.

Do you want to learn more?

Take a look at our other learning resources for you:



Understanding your community flood risk



Types of floods



Impact of flooding

