

# Stormwater Management Plans

A guide to understanding stormwater in Playford

[playford.sa.gov.au](http://playford.sa.gov.au)

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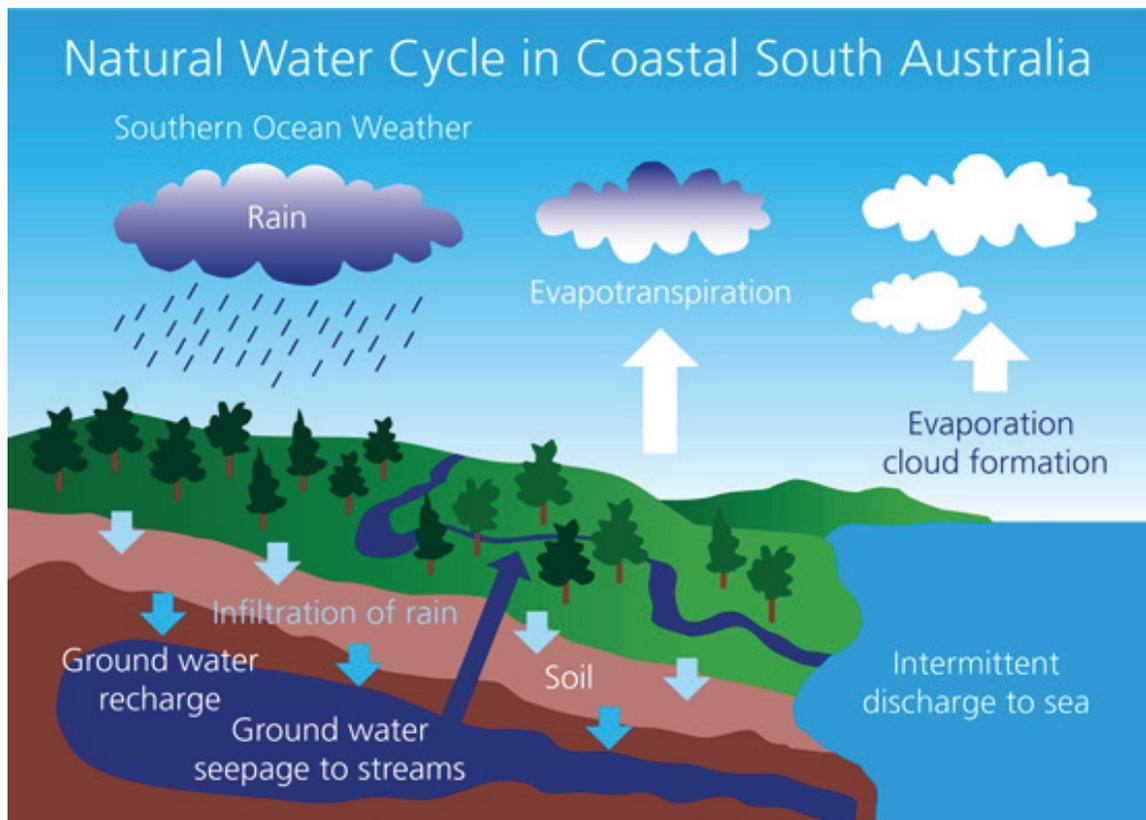
## A guide to understanding stormwater management in Playford

How often do you think about stormwater? While you might know a little bit about it, unless you can't cross the road because of overflowing drains or your house is flooded after a major storm, you probably don't think too much about it.

But if stormwater isn't effectively managed, it can have damaging and lasting impacts on communities, homes, businesses and the natural environment. Like other councils around Australia, the City of Playford uses Stormwater Management Plans to holistically manage stormwater across the city and minimise adverse impacts.

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Source: epa.sa.gov.au

## What is stormwater?

Stormwater is rainwater that runs off land and moves away from the area where it originally falls

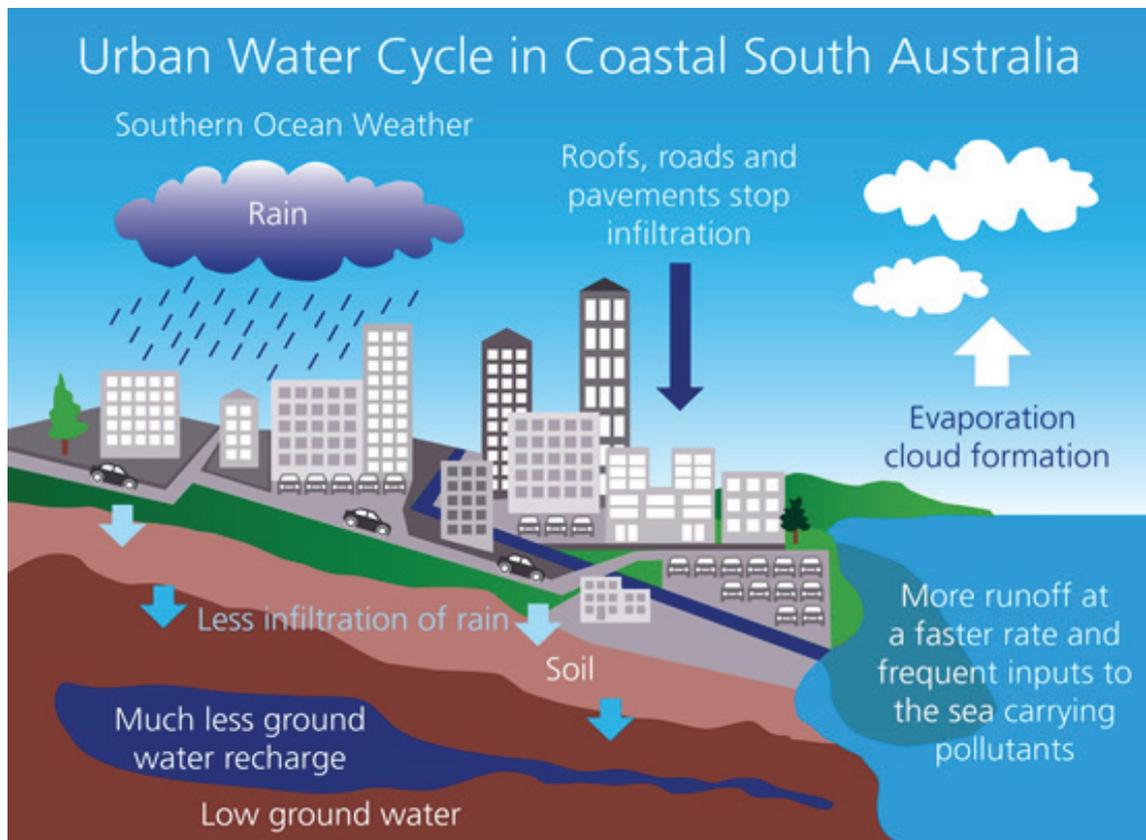
In urban or built-up areas, it runs off surfaces like roofs, roads and footpaths where it can't soak into the ground. It is carried away through drains and pipes to natural waterways like creeks and rivers, usually ending up in the ocean.

In rural or farming areas where there is less developed land (like paddocks and open spaces), rainfall drains into the soil, refills groundwater supplies or slowly runs off to creeks, rivers or the ocean.

Most people will only notice when stormwater isn't managed well... when floodwater inundates homes or businesses or crops are lost due to poor drainage

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Source: epa.sa.gov.au

## We need to manage stormwater

Stormwater needs to be managed in both urban and rural areas because large rain events can cause flooding leading to damaged homes, businesses, farming land and the environment around us.

While managing stormwater won't completely remove risks from flooding, it can provide an acceptable level of protection.

Stormwater management can also:

Improve water quality in environment

Maximise opportunity to reuse stormwater

Generally protects the environment

The City of Playford uses Stormwater Management Plans (SMPs) to holistically manage stormwater runoff across the city and minimise its adverse impacts.

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## SMPs – our tool to manage stormwater

Stormwater Management Plans are strategic planning documents that:

**Map rainfall and its flow across the land** - Where and how rainfall occurs across Playford, where it flows and where excess water will cause flooding

**Plan to limit flooding** - Based on mapping, plan ways to limit or mitigate damage from floods by controlling the movement of water with infrastructure like detention basins, weirs, dams, open channels and land management.

**Each SMP has its own objectives and strategies that:**

Inform land use planning

Minimise flooding impacts

Protect and enhance ecosystems

Take advantage of opportunities for reuse, recreation and amenity

Minimise costs

The intention of a catchment-scale SMP is to develop, implement and fund a coordinated approach to stormwater management across an entire water catchment.

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## Five catchments, five SMPs

A catchment is a specific area of land where rainfall collects and drains away through natural (creeks or rivers) or artificial (pipes or channels) methods and into a larger creek system

There are five different catchments in Playford and because they all have different land types and rainfall, each needs its own SMP

These catchments also run through neighbouring council areas so we work closely with other local governments to develop the SMPs

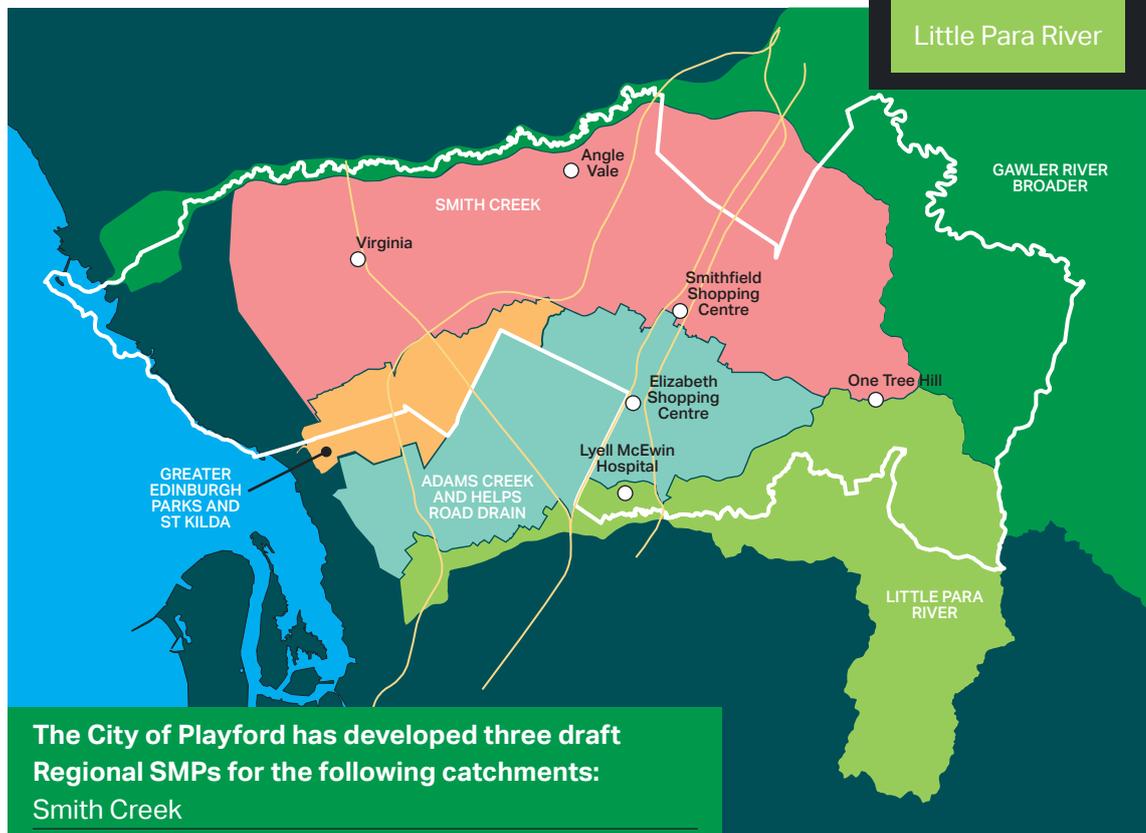
Adams Creek and Helps Road Drain

Greater Edinburgh Parks and St Kilda

Smith Creek

Gawler River

Little Para River



**The City of Playford has developed three draft Regional SMPs for the following catchments:**

Smith Creek

Adams Creek and Helps Road Drain

Greater Edinburgh Parks and St Kilda

An SMP for the Gawler River catchment is currently being developed in conjunction with the Gawler River Flood Management Authority. A floodplain study has been undertaken for the Little Para River catchment.

# Adams Creek

## Stormwater Management Plan Snapshot

### Catchment characteristics

The Adams Creek catchment commences in the City of Playford and moves downstream to the City of Salisbury. It is a mixture of dense urban, defence, agriculture and horticulture land. Adams Creek catchment originates in the Hills Face Zone, passing under the Elizabeth CBD through a set of large underground culverts. Downstream, the Helps Road Drain has significantly altered the water course to assist stormwater to pass through defence and RAAF land.

### Plan objectives

- Provide greater protection from flooding
- Improve water quality and increase reuse of stormwater
- Use stormwater measures to also provide opportunities for recreation, lift city appearance and protect the environment
- Ensure existing stormwater infrastructure is fit for purpose

### Key projects

The key projects identified within the Adams Creek & Helps Road Drain Catchment SMP include basins located within reserves and a channel upgrade. Identified considerations include:

- Promotion Drive Flood detention dam
- Grenadier Road drain upgrade
- Main North Road detention basins
- Water sensitive urban design
- Revegetation of watercourses
- Adams Creek Outlet pipe upgrade

Identified projects are conceptual only, requiring further planning, investigations, feasibility and design considerations. Each project must further be considered against other Council plans, objectives and priorities.

### Community benefits

- Reduce safety risks and provide better access to public and private properties during storm events
- Improve the appearance of the city with new or renewed waterways
- Opportunity for recreational use of stormwater management assets

# Greater Edinburgh Parks and St Kilda

## Stormwater Management Plan Snapshot

### Catchment characteristics

The majority of this catchment is flat and a sparsely developed area. There are two discharge locations to the Gulf St Vincent. The 30 Year Plan for Greater Adelaide identifies Greater Edinburgh Parks (GEP) as future industrial land, however major drainage infrastructure is required to achieve that vision.

### Plan objectives

Manage flooding up to a 1 in 100 year ARI storm event

Improve water quality and reuse of stormwater

Use stormwater measures to also provide opportunities for recreation, lift city appearance and protect the environment

Ensure the condition of existing stormwater infrastructure is suitable for future land use as identified in the 30 Year Plan for Greater Adelaide

### Key projects

The key projects identified in the SMP are a series of basins and open channels to drain industrial land through to the Gulf St Vincent. Most of this proposed infrastructure is located on private land. As this infrastructure is required to facilitate development, Council will work with developers to engage with the relevant landholders prior to planning any works.

St Kilda precinct trunk drain

Greyhound precinct drainage

Greyhound and NEXY South Wetlands

Gross pollutant traps

Water sensitive urban design

### Community benefits

Implementing the projects recommended in this SMP is key to unlocking the economic and employment benefits of developing the GEP for industrial growth.

# Smith Creek Catchment

## Stormwater Management Plan Snapshot

### Catchment characteristics

The Smith Creek catchment is the largest catchment within Playford and consists of a mixture of urban and rural land use. The catchment is made up of a steep section to the east, where Smith Creek originates near One Tree Hill, but is predominantly a wide, flat floodplain. The steep sections are highly responsive to storms which then leads to flooding across the floodplain. The existing stormwater channels through the floodplain have low capacity, and during high flow events the creek overflows, flooding large areas of rural land and residential land. Urbanisation of the floodplain is expected to continue, leading to an increased need to manage stormwater in this catchment.

### Plan objectives

Provide greater protection from flooding

Improve water quality and reuse of stormwater

Use stormwater measures to also provide opportunities for recreation, lift city appearance and protect the environment

Ensure existing stormwater infrastructure is fit for purpose

### Key Projects

The key projects identified in the SMP include detention basins east of Main North Road and widening of the Smith Creek through rural areas. Identified considerations include:

Smith Creek channel upgrade

Angle Vale Road drain

McEvoy Road drainage

Park Road drain

Smith Creek rehabilitation

Smith Creek linkages

Water sensitive urban design

Identified projects are conceptual only, requiring further planning, investigations, feasibility and design considerations. Each project must further be considered against other Council plans, objectives and priorities.

### Community Benefit

Improved protection from flooding

Improved safety and accessibility to public and private properties during storm events

Lift city appearance with new or renewed infrastructure

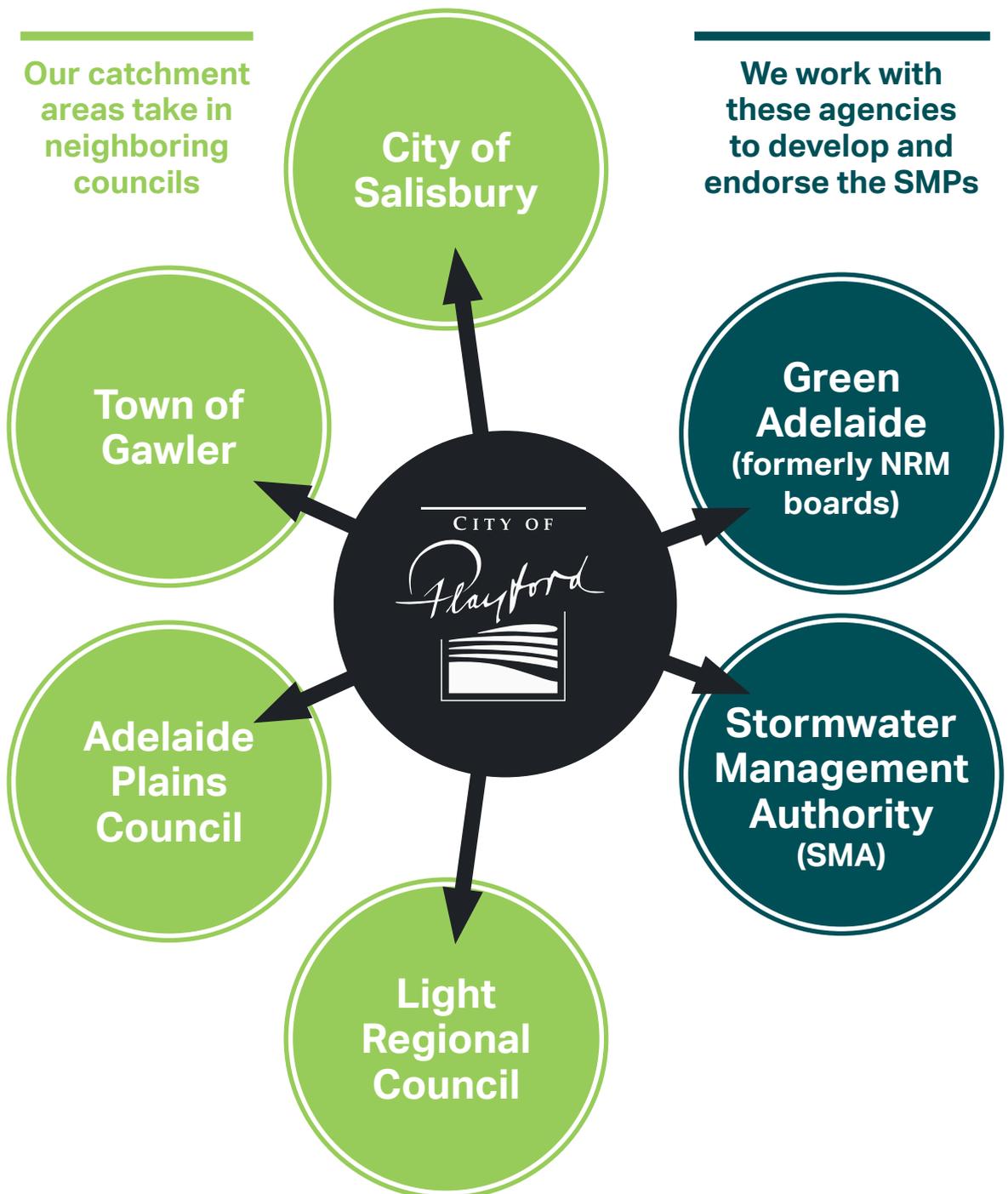
Opportunities for recreational use of stormwater management assets

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## Who manages the management plans?

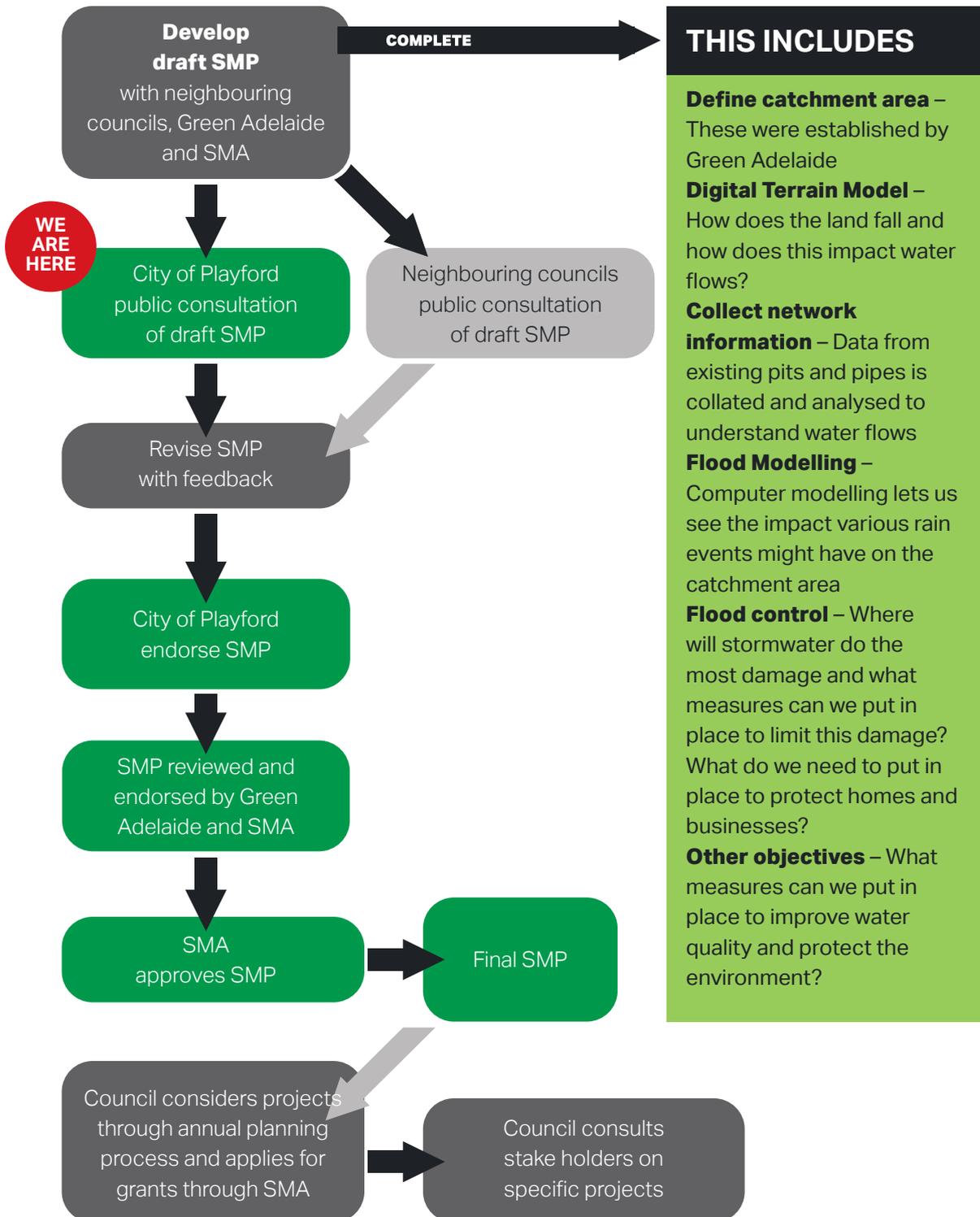


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## Developing an SMP



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## It's a plan – not a schedule of works

SMPs provide a framework to for the long-term, holistic management of stormwater on a regional scale. While they might recommend the construction of a new detention basin or drain in certain locations across the city, it doesn't give the green light for projects to commence.

From being flagged in an SMP to seeing real work on the ground, a project must first be considered in Council's four-year delivery plan, before being funded through an annual budget process. When this happens, Council will talk to landowners, neighbours and the broader community about what it might look like and how the infrastructure will impact them.

All projects proposed in the SMPs will require detailed planning and design, including appropriate engagement with any impacted landowners, neighbours and the broader community. Projects identified are conceptual only.

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## Stormwater Management Plans do...

Provide a strategy for managing the quantity and quality of stormwater across the city

Identify a long-term program of flood mitigation projects such as detention basins, dams, swales, drains, pipes, culverts, creek rehabilitation and new wetlands

Provide a priority listing of work

Get reviewed every ten years

Address flood mitigation on a regional scale

## Stormwater Management Plans do not...

Give the green light for Council to build new stormwater infrastructure. Each project is subject to consideration under Council's four-year delivery plan and annual budget cycles

Outline when infrastructure will be built

Provide a way to fund the projects – the cost is often too large for Council to fund on its own

Address issues of small, local flooding events like water pooling on a road. The plans deal with the impacts from large rain events where significant damage is predicted

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## How do I give my feedback?

[playford.engagementhub.com.au](https://playford.engagementhub.com.au)

You can access the Stormwater Management Plans (SMPs), the Stormwater Summary Document and provide feedback via an online survey.

### Drop-in Sessions

You are invited to attend a drop-in session with Council's Urban Infrastructure Planner. The sessions have been designed for you to be able to view the plans, ask questions and provide feedback:

#### Virginia Horticulture Centre

Old Port Wakefield Rd & Gawler Road, Virginia

Tuesday 19 April, 2022

3-5pm

#### Playford Civic Centre Library

Playford Boulevard, Elizabeth

Thursday 21 April

4.30-6.30pm

Bookings are not required, however if you need assistance to take part in this consultation (e.g. translation services) please contact [publicconsultation@playford.sa.gov.au](mailto:publicconsultation@playford.sa.gov.au) or phone 8256 0333

### Hard copies via Council Customer Service Points

You can view hard copies of the Stormwater Management Plans and snapshot document and obtain a hardcopy of the survey form at Council's customer service points including:

Playford Civic Centre

Stretton Centre

Virginia Hort Centre

Marni Waeindi

### Post, drop off or email

Feedback, including hardcopy survey forms and any other comments can be returned to Council via:

**Post:** Attn: Stormwater Management Plans, 12 Bishopstone Road, Davoren Park SA 5113

**Drop off:** Playford Civic Centre or Stretton Centre customer service desks

**Email:** [publicconsultation@playford.sa.gov.au](mailto:publicconsultation@playford.sa.gov.au)

**All feedback needs to be received by 5pm, Monday 09 May 2022**