

Swanpool bathing water summary

June 2023

Swanpool bathing water deteriorated from Excellent to Good under the UK Bathing Water Regulations in 2022.

UK environmental legislation requires us to work towards preventing deteriorations in bathing water quality.

Environment Agency investigations (2022-23)

- Investigative sampling of Swanpool Stream
- Desk study of existing data and information
- Catchment walkover to identify possible sources of bacteria



Swanpool bathing water



Swanpool stream at beach, end of culvert

Our findings

- The deterioration in 2022 occurred due to five elevated Intestinal Enterococci results in Swanpool bathing water in 2021 and four in 2022. Prior to 2021, Swanpool only had the occasional elevated result in the bathing water.
- Due to the previous excellent bathing water quality at Swanpool, the outflow from Swan Pool to the beach had not been monitored for bacteria since 2009, when the water quality was found to be good.
- Monitoring of the outflow from Swan Pool to Swanpool beach was added to the bathing water sampling in August 2022. During August to September, the outflow was sampled six times, with one significantly elevated result, which did not coincide with an elevated result at the bathing water.
- There are 3 water company assets in the Swanpool catchment – Queen Mary Gardens Sewage Pumping Station (SPS); Swanpool Sewage Pumping Station (SPS); and Swanvale Sewage Pumping Station (SPS). South West Water (SWW) Event Duration Monitoring (EDM) returns are made for all three of these annually. During 2022 bathing season, there were no overflows from Swanpool SPS, one spill from Swanvale SPS, and 32 spills from Queen Mary Gardens SPS with a total duration of 13.37 hrs (100% operational). One spill from Queen Mary Gardens SPS occurred within 24 hrs of a slightly elevated result in the bathing water.

- A catchment walkover in April 2023 identified a number of outfalls that could be potential sources of bacterial contamination to Swanpool Stream.
- Ongoing EA investigations will include harmonised bathing water and investigative stream monitoring, with Microbial Source Tracking (MST), which allows us to determine possible sources of bacteria (e.g., human, ruminant, dog, bird). If necessary and where possible, samples will be taken from the outfalls identified during the catchment walkover, to narrow down further source(s) of contamination.
- Swanpool has a very urban catchment, with a long history of misconnections to Swanpool Stream. Tregonnigie woods area has received a high number of pollution reports relating to misconnections from SWW surface water outfalls. There are at least 5/6 surface water drains that take catchment runoff from Tregonnigie Ind Est, a housing estate (Longfields) and private housing. There are several local groups that report misconnections to SWW and the EA, and are active at trying to improve water quality in the Swanpool and wider Falmouth catchment area (Friends of Tregonnigie Woods, Prislow Woods Community Group, Swanpool Forum). The SWW Misconnections Team are responsive to any pollution reports within the catchment. There is an ongoing Yellow Fish campaign to reduce misuse of the surface water drains, started in 2020, that has focussed on the Tregonnigie Ind Est but have plans to expand throughout the catchment. This campaign is led by Falmouth Green Corridor Forum (all conservations groups, town council, ward council), the chair of the forum is the deputy mayor.
- In summary, Swanpool has an excellent bathing water compliance history, the deterioration to good following 2022 bathing season reflects an increase in elevated samples during 2021 and 2022. The reason for deterioration is not yet clear but there are several potential sources of pollution that may have contributed. These include misconnections to Swanpool Stream, particularly in the Tregonnigie Woods area, occasional issues with surcharging manholes, sewage spills from combined sewer overflow outfalls and possible influence from algal build ups in Swan Pool discharging to the bathing water.

Our recommendations (in order of importance)

- Continue investigative monitoring of the outflow from Swan Pool, including MST, during the bathing season 2023.
- Add investigative monitoring, including MST, on Swanpool Stream upstream of Swan Pool and at the culvert outfall on the beach at Swanpool, to be sampled at accessible tides (mid to low water), to establish if there is a source of pollution within the culvert between Swan Pool and the outfall at the beach.
- If investigative sampling of Swanpool Stream upstream Swan Pool show high bacterial levels, the EA Analysis and Reporting Team to revisit the surface water outfalls identified during catchment walkover, recording, and sampling any outfalls as necessary. Inform SWW Misconnection team of any pollution found.
- Request overflow data for SWW assets when elevated bathing water and stream results occur in 2023.
- **More information is available from EA Environmental Monitoring (Cornwall).**

