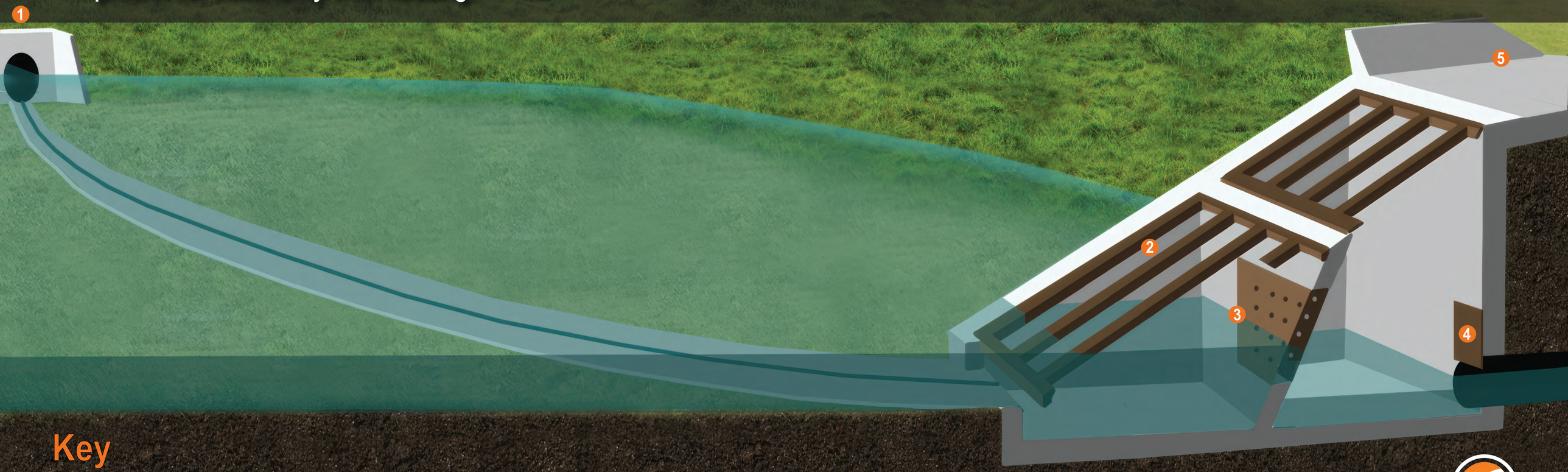
Stormwater Control Measures:

Extended Detention Basin

Water that runs off the urban land surface during rain storms (stormwater runoff) is typically collected in storm drains and eventually ends up in nearby lakes, rivers and streams (receiving waters). Left uncontrolled, stormwater runoff can cause flooding, stream erosion and pollution in our local water bodies.

An Extended Detention Basin (EDB) detains and slowly releases this stormwater runoff in a controlled manner. Detention Ponds, as they are sometimes called, are designed to slowly release stormwater over a 2 to 3 day period to allow pollutants to settle out on the bottom of the pond. Often these features are also designed to reduce peak stormwater runoff rates by providing storage during large storm events to protect our community from flooding.



Key

1. Stormwater from the surrounding area flows into the pond from underground pipes or across the ground surface.
2. Stormwater then reaches the outlet structure where a screen/trash grate collects larger pollutants in the water to be removed at a later date.
3. Behind the trash grate is an orifice plate with holes of different sizes and at different elevations. These holes control the rate at which Stormwater leaves the pond and slows down the water enough for pollutants to settle out and be left behind. While not shown in this illustration, a well screen or smaller bar grate is often installed in front of the orifice holes to collect even smaller particles.
4. The pipe leaving the outlet structure connects the pond to the overall stormwater sewer system or an approved drainageway. This pipe often has a restrictor plate which is a flood mitigation element designed to slow down flows and avoid over pressurization of the pipe.
5. Finally, in the event the pond fills up entirely, a spillway will allow stormwater to leave in a controlled manner during flood conditions.

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To learn more about the process, please scan the QR code.