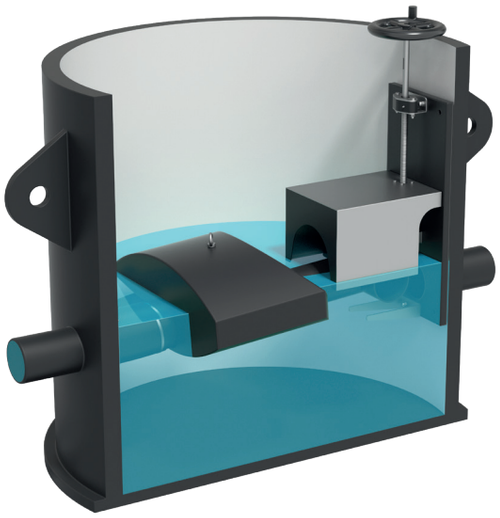
WAREG®



WAREG® FLOW REGULATOR

We can all see it, feel it, experience it – the climate changes are affecting us all. Regardless of where we reside, more frequent and higher levels of precipitation is something we have to get used to. And handle. With heavy rains and storms causing severe problems in urban areas, we at Wapro, have taken on the commitment to protect individuals as well as communities from sewage and stormwater flooding.

We know that stormwater runoff in intensive storms can cause flooding. By utilizing effective flow regulation we know that flooding can be minimized and even mitigated. Our team of engineers had one thought in mind whilst designing the new WaReg 3.0. Creating the perfect flow regulator for real-life situations.

THE BENEFITS OF WAREG®

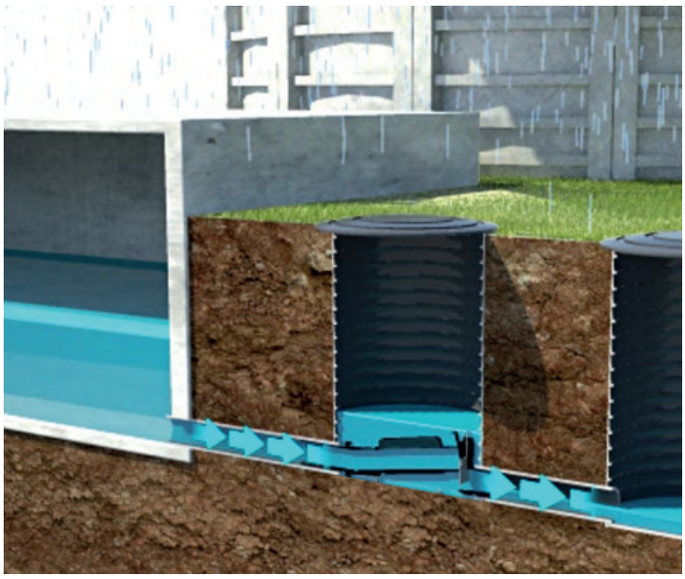
- Autonomous - flow is regulated by the WaReg
- Easy to install, even in existing systems
- Open flow area which reduces blockages
- Uncomplicated, easy maintenance
- Precise flow rate through gravity fed systems
- Reduced upstream storage requirements
- No head required for regulation
- Total project space and cost savings

APPLICATIONS - SURFACE WATER

By utilizing the retained water levels, we are able to ensure a constant flow rate through the WaReg Flow Regulator. Using this method of regulation we **eliminate the need for a head** of water, thereby reducing the requirements for civil construction. WaReg therefore reduces the overall cost of a flood mitigation project.

We know most municipalities are dealing with reduced maintenance budgets. This increases the need for products with lower maintenance requirements. Building this into our design we have constructed the WaReg with a constant open outflow area reducing blockages.

WaReg operates as a standard inspection chamber during normal levels of flow. When a rain events occurs the WaReg automatically begins to regulate the flow, right from the first drop. WaReg doesn't require a certain velocity to regulate - WaReg protects instantly.



ACE
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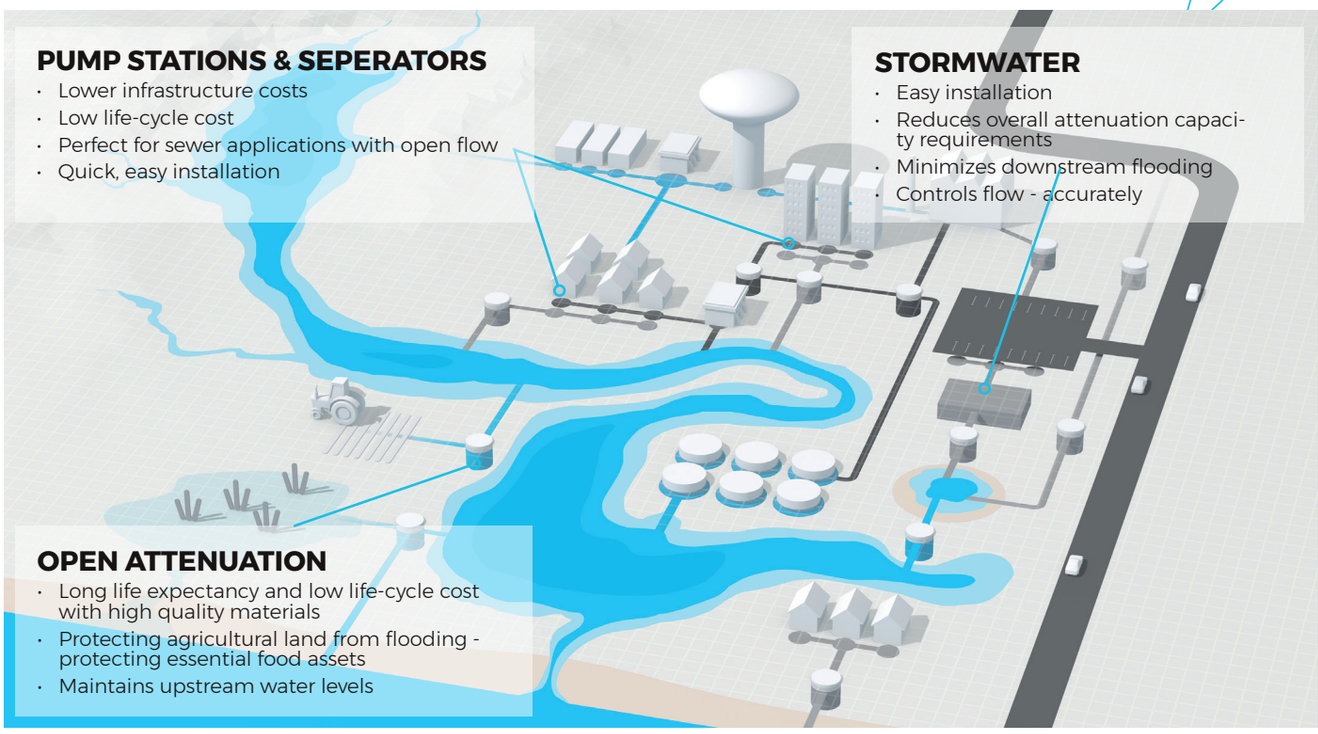
WAPRO®

PROTECTING PEOPLE TODAY, AND IN THE FUTURE

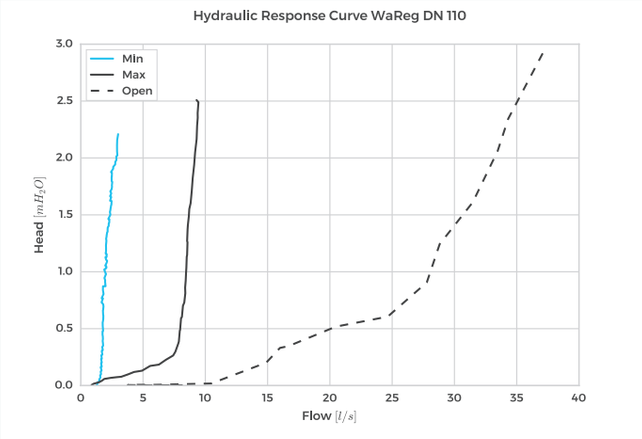
Post installation adjustments ensure that WaReg is future proof. We don't know what the future holds, but the potential for increased hard surface areas, and increased precipitation are fairly safe bets. We at Wapro strive to ensure your investment will protect future generations.



HYDRAULIC RESPONSE CURVE

When designed WaReg 3.0, we at Wapro focused on building a solution which eliminated the common problems associated with the products currently used for flow regulation. One such problem is the hydraulic response curve. In vortex chambers this curve exhibits an 's-bend'.

The WaReg, due to not requiring a head of water to regulate, is able to reach maximum flow earlier, which means that more water can be effectively released reducing the requirements for attenuation upstream. Reaching maximum flow quickly also dramatically reduces the risk of upstream flooding.



AVAILABLE MODELS

WaReg suits most applications and it is available from DN75 - DN400 for flow from 2 l/sec to 200 l/sec. WaReg models up to DN250 are tested for flow by us at Wapro to insure the correct flow rate is set before delivery. The flow rate can be adjusted post-installation within a certain range.

*Modeled test flow **L-shaped chamber

Model	Flow rate [l/s]	DN [mm]	Chamber [mm]
WR75-3.0	2-5	75	Ø 1000
WR110-3.0	4-13	110	Ø 1000
WR160-3.0	13-22	160	Ø 1000
WR200-3.0	22-45	200	Ø 1200
WR250-3.0	35-70	250	Ø 1400
WR315-3.0	55-110*	315	Ø 1800
WR400-3.0**	90-200*	400	Ø 1400

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