**BIOGEST®- Flood protection**

ALPHEUS-Flow regulator for flood protection retention basin

**Bidingen – Flood detention basin „Indianer“**

Protection of the 100 year flood event for the villages „Ob“ and “Bidingen”

Target for throttle device:

The "natural pass through of the water way = ecological passage" must be guaranteed.

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<th><strong>Throttle outlet at flood protection basin “HWS Indianer”</strong></th>
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| **Commissioning:**          | 06 / 2013 |
| **Retention volume:**       | 385,000 m³ with 110 m wide dam |
| **Throttle device:**        | ALPHEUS-Flow regulator 2x AH 1000 + 2x AH 800 incl. Int-FS |
| **Flow capacity (Q_{ab}):** | from 14,5 m³/s to 2 x 1,500 l/s + 2 x 845 l/s = about 4,7 m³/s |
| **Head of water:**          | 7.23 m |
| **Emergency bypass facility** | Sluice gate, BIOGEST® FS 1000x1000 |
| **Operator:**               | Water utility flood protection Gennach-Hühnerbach |
| **Authorizing authority:**  | Water management authority Kempten |
| **Consultant:**             | Mooser Ingenieure GmbH & Co. KG |

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BIOGEST®- Flood protection

ALPHEUS-Flow regulator for flood protection retention basin particularly suitable for the ecological passage

Affalterbach HRB Apfelbach

- Commissioning: 04 / 2005
- Throttle device: ALPHEUS-Flow limiter AS 850 x 850
- Flow capacity (Q_{ab}): 1.900 l/s
- Head of water: 7.5 m
- Emergency bypass facility: Sluice gate, BIOGEST® FS 800
- Operator: Municipal administration of Affalterbach
- Consultant: Ing.-Büro Frank in 71522 Backnang

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ALPHEUS Flow limiter

The "natural pass through of the water way = ecological passage" must be guaranteed

Dillishausen HRB 33

East elevation

- **Commissioning:** 06 / 2010
- **Throttle device:** ALPHEUS-Flow limiter AS 800 x 800 zzgl. INT-FS 800x800
- **Flow capacity (Q_{ab}):** 850 l/s
- **Head of water:** 4.56 m
- **Emergency bypass facility:** Sluice gate, BIOGEST® FS 800 x 800
- **Operator:** Water utility flood protection Gennach-Hühnerbach
- **Consultant:** Ing.-Büro Kolb + Mooser in 87600 Kaufbeuren

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ALPHEUS-Flow regulator for flood protection retention basin particularly suitable for the natural expansion

Thalhofen – Flood detention bassin HRB 9

Requirement of authority and therefore target for the throttle device: The natural continuity of the water must be guaranteed even in systems of flood rentention.

- Commissioning: 09 / 2010
- Throttle device: ALPHEUS-Flow limiter 4x AS1000 zzgl. INT-FS 1000
- Flow capacity (Q_{ab}): 4 x 2.220 l/s = rd. 8,8 m³/s
- Head of water: 4,17 m
- Emergency bypass facility: Sluice gate, BIOGEST® FS 1000
- Operator: Water utility flood protection Gennach-Hühnerbach
- Approval authority: Water management authority Kempten
- Consultant: Mooser Ingenieure GmbH & Co. KG

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EGAR-Flow control for flood protection retention basin

Morbach – Flood detention bassin „Schmausemühle“
Flood protection for downstream residents at receiving streams Morbach, bellow the Mill.

Throttle structure

The total installation with throttle structure for the throttle unit fits very harmoniously into the landscape and is a popular recreation destination.

- Commissioning: 09 / 2007
- Retention volume: 10,000 m³
- Throttle device: EGAR-Flow control DN 800
- Flow capacity (Q\text{ab}): 760 l/s
- Head of water: 4,5 m
- Head of water / Authorizing authority: Community Morbach / SGD Nord in Trier
- Consultant: Jakobs-Fuchs Architektur- und Ingenieurbüro, Morbach

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