implicitne

$$\frac{h_{i,t}-h_{i,t-1}}{\triangle t} = es_{i,t} + \sum_{j}^{inflows} q(h_{j,t})^{in}_{j,t} - q(h_{i,t})^{out}_{i,t} - inf_{i,t}$$

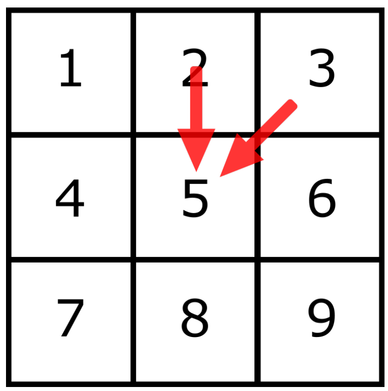
$$\frac{h_{i,t}}{\triangle t} - es_{i,t} - \sum_{j}^{inflows} q(h_{j,t})^{in}_{j,t} + q(h_{i,t})^{out}_{i,t} + inf_{i,t} = \frac{h_{i,t-1}}{\triangle t}$$

$$\frac{h_{i,t}}{\triangle t} - es_{i,t} - \sum_{j}^{inflows} ah^{b}_{j,t} + ah^{b}_{i,t} + inf_{i,t} = \frac{h_{i,t-1}}{\triangle t}$$

$$h_{i,t} + ah^{b}_{i,t}\triangle t - \sum_{j}^{inflows} ah^{b}_{j,t}\triangle t = h_{i,t-1} + es_{i,t}\triangle t - inf_{i,t}\triangle t$$

$$h_{i,t} + ah_{i,t}h^{b-1}_{i,t}\triangle t - \sum_{j}^{inflows} ah_{j,t}h^{b-1}_{j,t}\triangle t = h_{i,t-1} + es_{i,t}\triangle t - inf_{i,t}\triangle t$$

$$(1 + ah^{b-1}_{i,t}\triangle t)h_{i,t} - \sum_{j}^{inflows} (ah^{b-1}_{j,t}\triangle t)h_{j,t} = h_{i,t-1} + es_{i,t}\triangle t - inf_{i,t}\triangle t$$



$$row: 5 \begin{pmatrix} \vdots & \vdots & & & & & \\ 0 & -ah^{b-1}_{2,t}\triangle t & -ah^{b-1}_{3,t}\triangle t & 0 & ah^{b-1}_{5,t}\triangle t & 0 & \cdots \\ \vdots & \vdots & & & & & \end{pmatrix} \begin{pmatrix} \vdots \\ h_{2,t} \\ h_{3,t} \\ h_{4,t} \\ h_{5,t} \\ \vdots \end{pmatrix} = \begin{pmatrix} \vdots \\ h_{2,t-1} + es_{2,t}\triangle t - inf_{2,t}\triangle t \\ h_{3,t-1} + es_{3,t}\triangle t - inf_{3,t}\triangle t \\ h_{4,t-1} + es_{4,t}\triangle t - inf_{4,t}\triangle t \\ h_{5,t-1} + es_{5,t}\triangle t - inf_{5,t}\triangle t \\ \vdots \end{pmatrix}$$