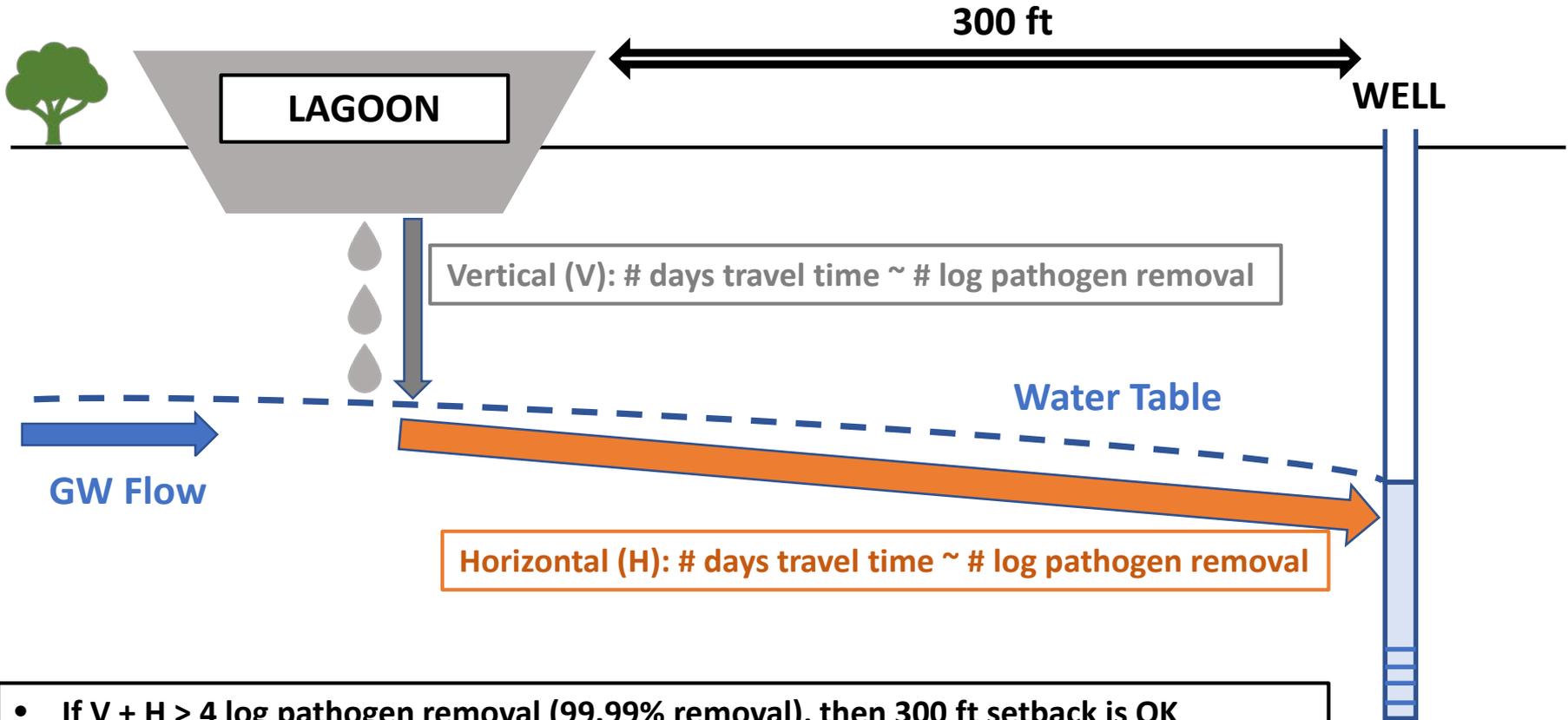
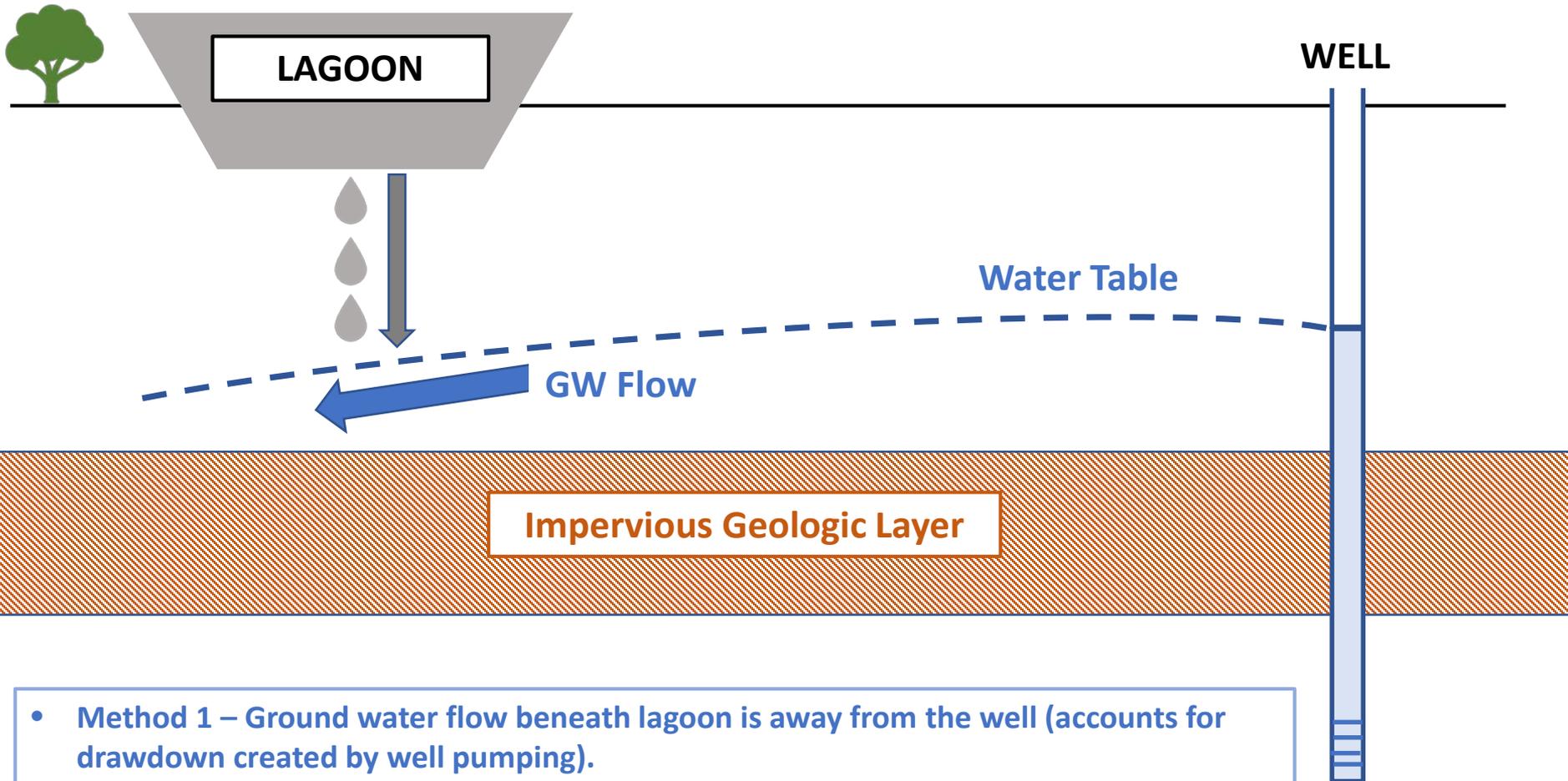


# PATHOGEN REMOVAL EXAMPLE



- If  $V + H > 4$  log pathogen removal (99.99% removal), then 300 ft setback is OK
- IF  $V + H < 4$  log pathogen removal, then setback should be increased until pathogen removal exceeds 4 logs (up to maximum setback of 1,000 ft)
- Well can be closer than 300 ft if  $V + H > 4$  log pathogen removal at the shorter distance, but no less than minimum setback of 100 feet.

# HYDRAULICALLY DISCONNECTED



- Method 1 – Ground water flow beneath lagoon is away from the well (accounts for drawdown created by well pumping).

- Method 2 – Well intake depth is separated from lagoon discharge by impervious geologic layer (e.g. glacial till, clay, unfractured bedrock). Doesn't matter which direction groundwater is flowing.