



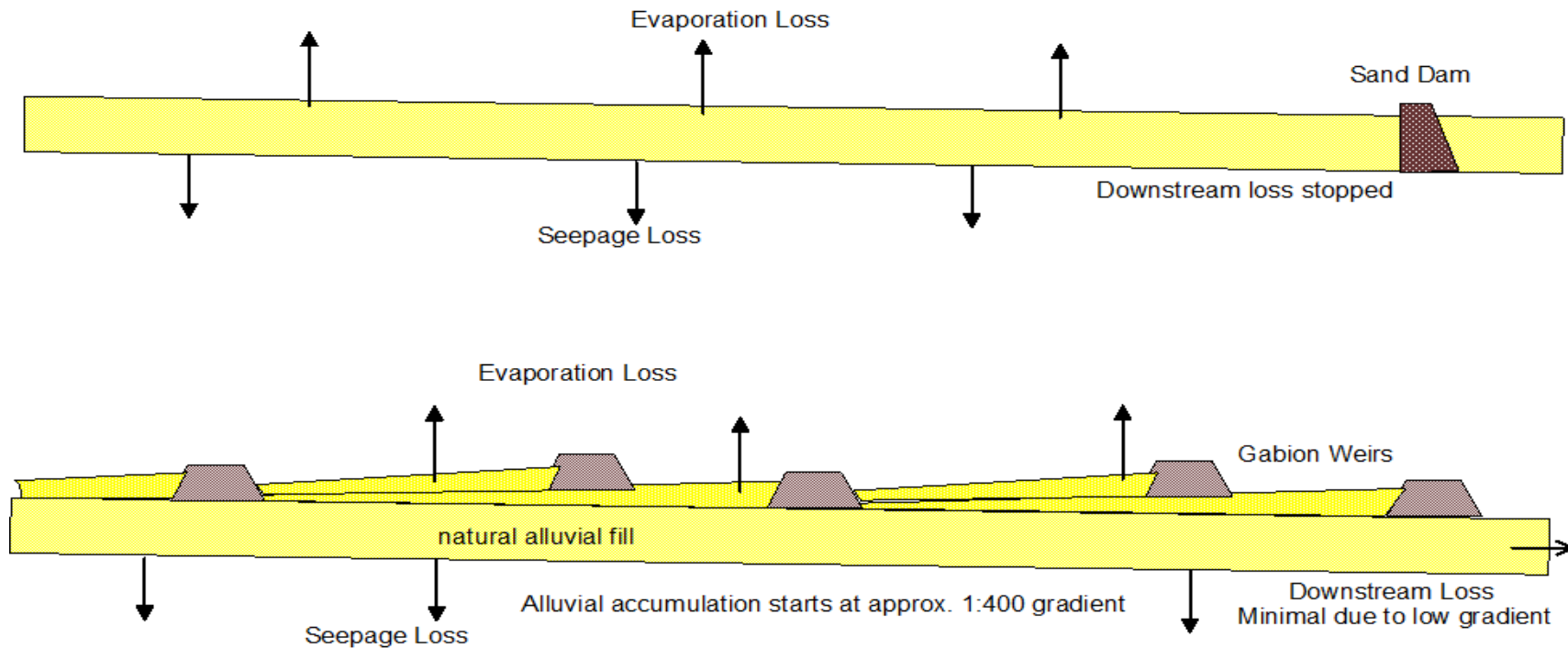
Gabion Weirs

An alternate to sand dams

Richard Owen

Long Section – Gabion Weirs

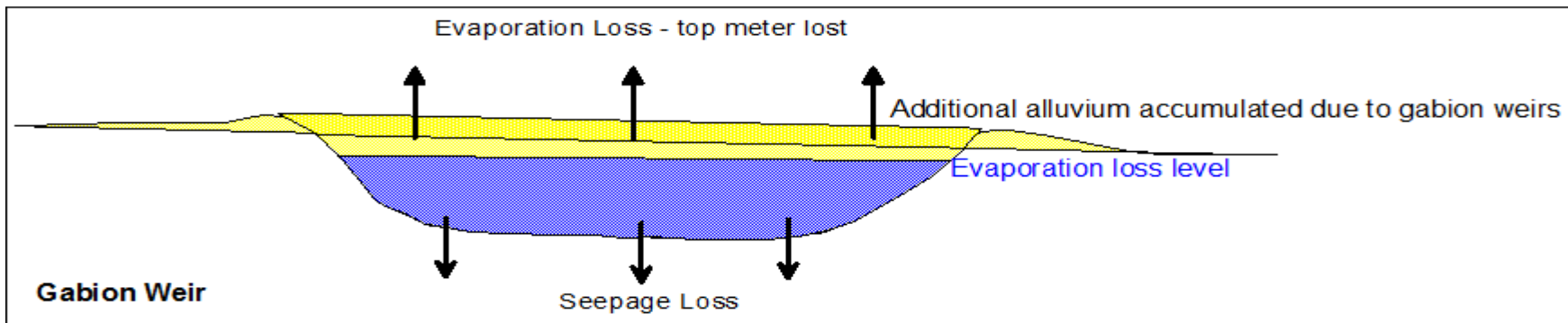
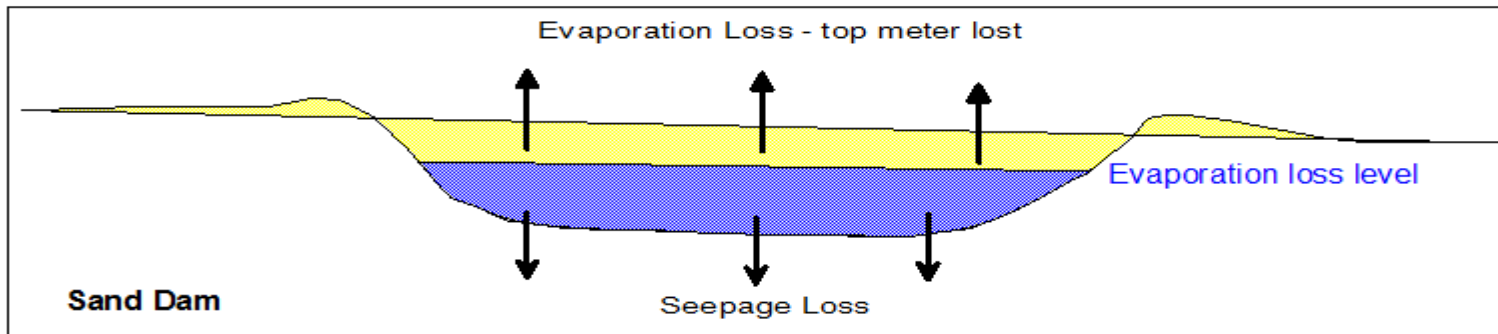
Gabion Weirs
An alternative conventional to sand dams



Gabion weirs - easier to construct and cheaper
Gabion weirs - increase thickness of alluvial fill - reduce % loss to evaporation
Sand dams - reduce downstream loss - but this is minor compared to evaporation loss
Appropriate where alluvial fill is thin ~ 2 - 3m

Gabion Weirs – Cross Section

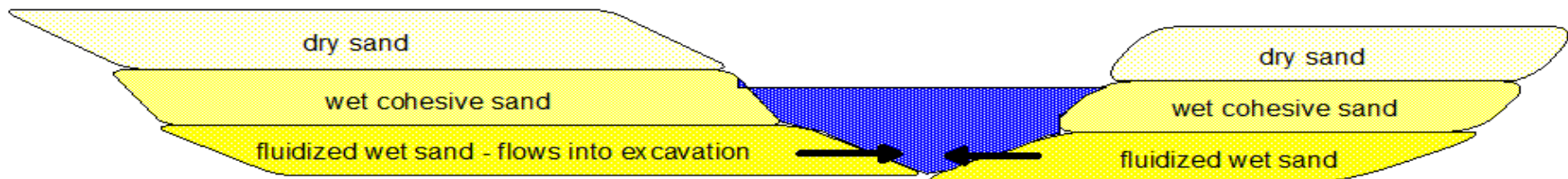
Gabion Weirs & Sand Dams



Gabion weirs preserve a higher saturated percentage of the alluvial fill
Easier and cheaper to construct
Appropriate where alluvial fill is thin

Gabion Weirs – Construction Issues

Sand Dam Construction - excavate saturated sand to bedrock foundations
Problems: Dewatering excavation; fluidized sand flowing into excavation



Gabion Weir:
Construction: diamond mesh laid on sand bed, filled with rocks and tied

