Introduction to culverts

Steven Wade, HR Wallingford
Main features of a culvert
Step 0:

Don’t use a culvert!
Would you culvert this stream?
Or this one?
Step 1:
Make it big enough!
$Q + 20\%$?
Six steps to good culvert design
Six steps to good culvert design

Step 2: No trash screen, unless essential
Step 3:
Set invert low, but not too low
Six steps to good culvert design
Step 4:

No bends, steps, or changes of cross section
Step 5:

Design for low flows, as well as high flows
Six steps to good culvert design

Step 6: Consider:

> Materials
> Construction method
> Operation
> Maintenance
> Environment
> Wildlife
> Safety
> Cost
Any questions?

HR Wallingford
Howbery Park, Wallingford, Oxfordshire OX10 8BA, United Kingdom

tel +44 (0)1491 835381   fax +44 (0)1491 832233   email info@hrwallingford.com