Riprap Sizing using HEC-RAS Version 6.1 - *Wednesday 13th October 2021*

	Question	Answer(s)
1	Which method is the riprap calculator in HECRAS based on?	At the moment, it's the USACE 1994 method based on Maynord's equation; the Maricopa County method is being added
2	Does the HECRAS6.1 Riprap calculator work with metric units and are the conversions of factors etc. sound?	It does support metric units and the conversions are sound! We tested it quite a bit with some metric datasets
3	If we run unsteady flow, how could we convert then to steady flow to yse this riprap cal.	I am not 100% sure how to convert from unsteady to steady flow, but support for unsteady flow is already done and will be supported in ras 6.2
4	Are the sizing approaches in the riprap calculator (and other approaches) for any movement of stone, or complete damage?	
5	In Hec RAS model simulation, the flow regime is to be Subcritical or Mixed flow?	
6	How Can selecte the riprap calculator work during the rainfall and land slide time	
7	What scour equations are optional in the RAS model for linking with riprap sizing?	
8	In the case of Culver Riprap sizing, where should the cross-sections be selected for using this HEC-RAS tool?	
9	does the calculator works with hecras 2d?	No, because all of the equations were designed with the intent to be used with 1D cross sections and so there's really no application to 2D. We've thought about some possibilities to figure out how to fit the 1D equations with 2D simulations, but thinking about it is as far as we've gotten on it so far, unfortunately.
10	For longer streams, can you use in HECRAS 2D shear stress to size riprap that vary based on location and curvatures?	
11	normally we use th D50 for riprap sizing which is larger than D30, why do we use the D30 here?	
12	The chute program seems to identify much larger rock than the Catchments and Creeks method. Do you know why and when each method is most accurate?	
13	Well, Now can I apply this to fix a non-stable meandered channel having severe scouring (/deposition) problem over a long reach of meandering !!!!!	Well, Now can I apply this to fix a non-stable meandered channel having severe scouring (/deposition) problem over a long reach of meandering !!!!!
14	can you specify any bed and bank material information which feeds into the scour calculations when estimating scour depth? i.e. if you know that the material is highly errosive.	
15	What is the limit of channl slope is calculator can apply	
16	When specifying riprap, is there any consideration of soil conditions/type it will sit?	
17	Without much background knowledge of riprap, whats the risk to use this riprap calculator?	