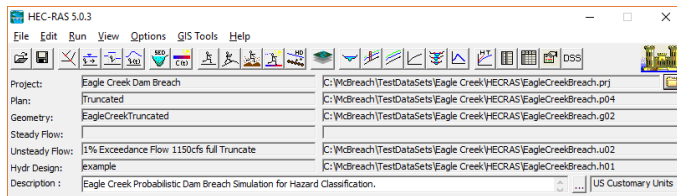


The HECRASController – A Powerful Feature of HEC-RAS Exposed



```
'Instantiate a new HECRASController
Dim RC As New HECRASController

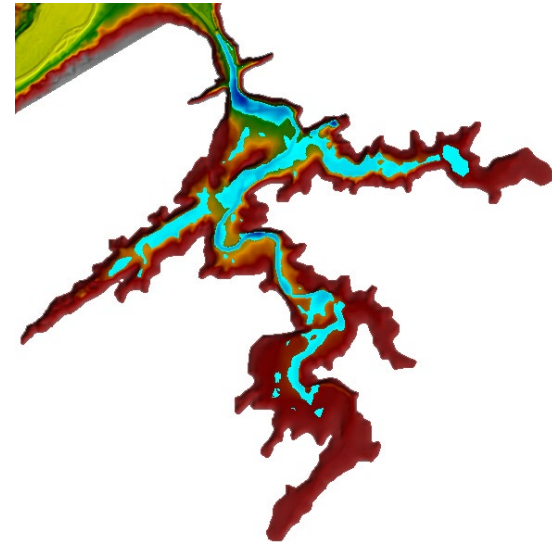
'Open the Project
Dim strFilename As String
Sheets("RASProjects").Select
strFilename = Range("C4").Value
RC.Project_Open (strFilename) 'First open the RAS project

'Compute the current plan.
Dim lngMessages As Long
Dim strMessages() As String
Dim blnDidItCompute As Boolean
Dim blnBlockingMode As Boolean

blnBlockingMode = False
blnDidItCompute = RC.Compute_CurrentPlan(lngMessages, _
    strMessages(), blnBlockingMode)

'Continue to loop, checking to see if HEC-RAS has finished
' computing. When done, exit the do-loop.
Dim blnDidItComplete As Boolean
Do
    blnDidItComplete = RC.Compute_Complete()
    If blnDidItComplete = False Then
        Application.StatusBar = "Still working..."
    Else
        Application.StatusBar = "Finished!"
    End If
Loop Until blnDidItComplete = True

'Close HEC-RAS
RC.QuitRAS
```



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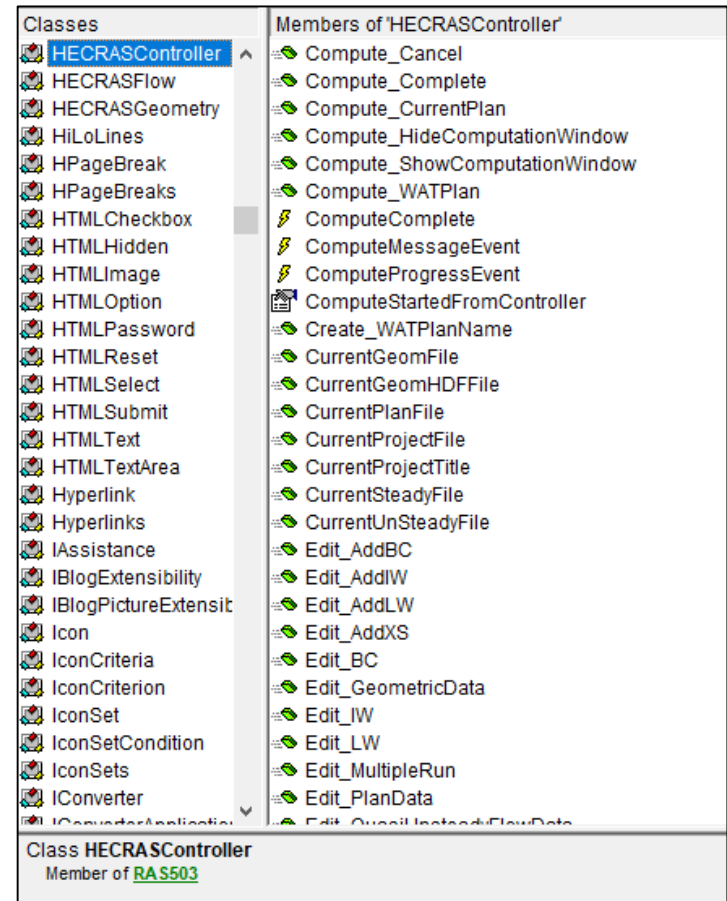
What is the HECRASController

- **HEC-RAS Application Programming Interface (API)**

- **Collection of Programming Classes**
- **Subroutines and Functions**
- **Control the Function of HEC-RAS**
- **Set Input Data**
- **Retrieve Output Data**

- **Can be Accessed by many different Programming Languages**

- **Visual Basic for Applications (VBA-in Excel)**
- **VB.net (Visual Studio)**
- **Python**
- **R**
- **Matlab**
- **Others...**



What is the HECRASController

- **Applications**
 - **Automated Control of HEC-RAS for batch mode running**
 - **Real-time automated simulations with logic support**
 - **Probabilistic Analysis using Monte Carlo**
 - **Optimization**
 - **Automated Data Processing**