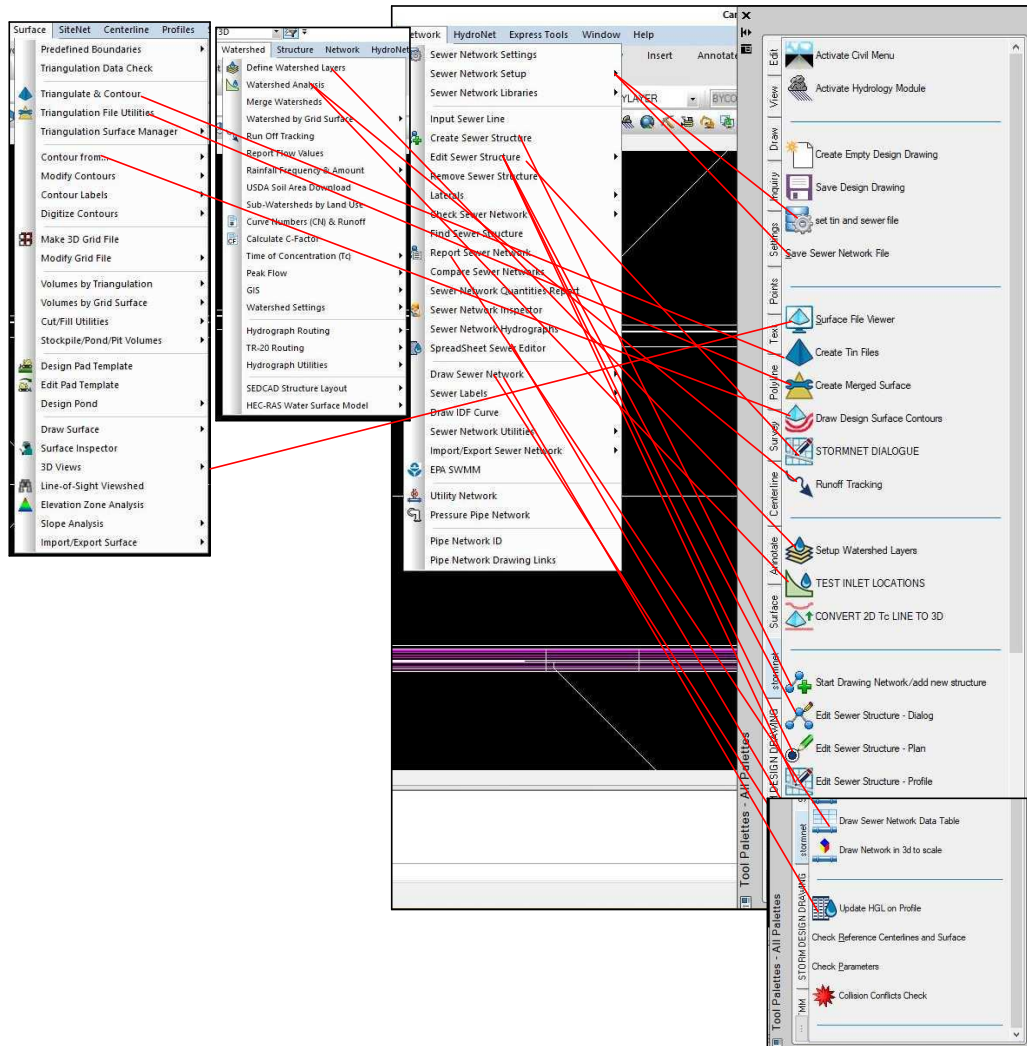


# FEATURES OF HYDROLOGY WEBINAR

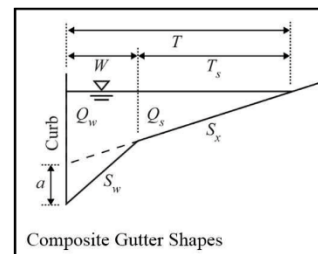
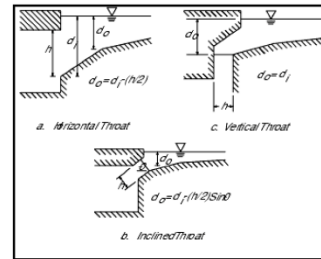
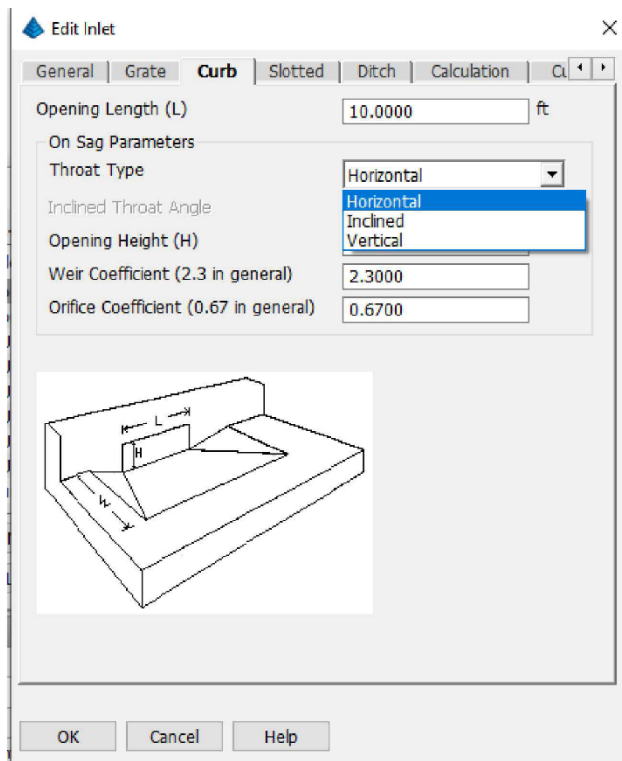
## CUSTOM TOOL PALETTE PROVIDED

Tool Palettes can be used to arrange commands in a vertical list in the order they are needed for Stormwater Design. Tool Palettes will be provided and demonstrated during the Webinar to help flatten the learning curve.



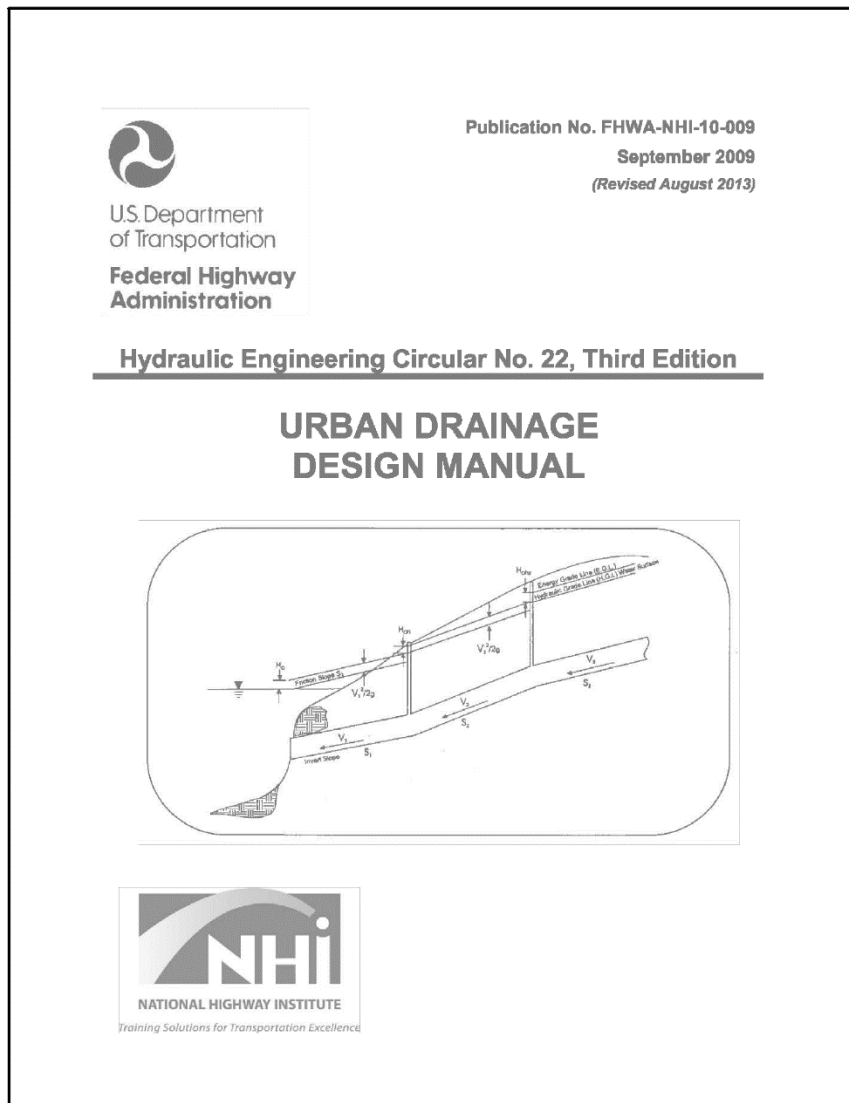
# SETUP OF STRUCTURE LIBRARIES

Detailed instruction will be provided demonstrating how to setup inlet, storm structure and pipe definitions so that they represent the actual structure used. For example, Spread and Bypass will be modeled using a very accurate model of the inlet selected instead of using default inlet definitions.



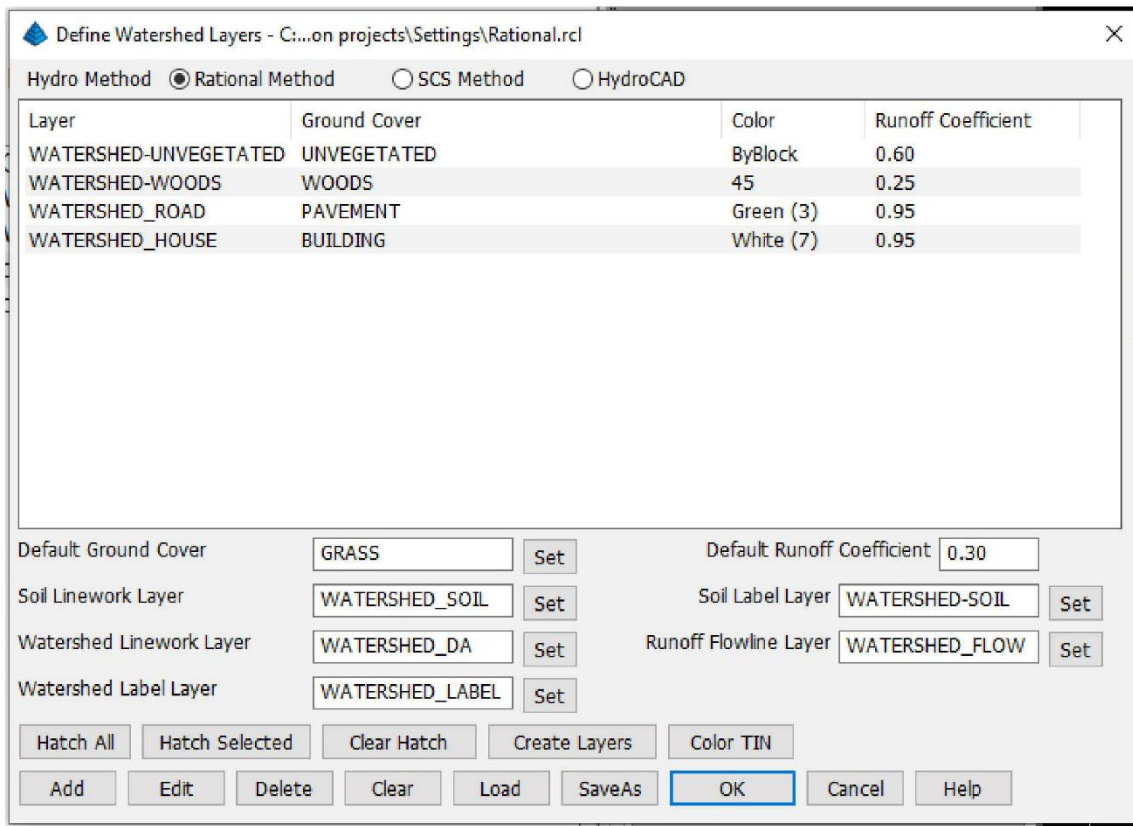
# STORMWATER THEORY

In addition to understanding how to setup stormwater systems with Carlson, Reference Materials used in developing Carlson Hydrology will be covered to provide technical documentation implemented into Carlson Hydrology.



## DYNAMIC CALCULATIONS

Carlson Hydrology's strongest feature is its ability to change calculation parameters such as average Curve Number by reading the current design drawing. Changes to impervious area, pond volumes and pipe slope/size will automatically get incorporated into Calculations making project revisions faster and more accurately.



# COMPLEX DETENTION MODELS

Detention calculations presented will include complex models with multiple watersheds and ponds. Outlet structures will include multiple control structures such

Multiple Outlet Design:

| Outlet Name | Invert Elev | Outlet Type | Used in Design |
|-------------|-------------|-------------|----------------|
| 1 ORIFICE1  | 0.000       | Orifice     | Yes            |
| 2 ORIFICE2  | 4.000       | Orifice     | Yes            |
| 3 DP        | 8.000       | Drop Pipe   | Yes            |

Check Discharge  
 Water Elev: 0.000 ft  
 Tailwater Elev: 0.000 ft  
 ORIFICE1 Discharge: 0.00 cfs  
 Total Discharge: 0.00 cfs

Report Setup Report Stage-Discharge Result Draw  
 Load SaveAs Export Pre-Carbon2022 OK Cancel Help

Subcatchment

Edit: Hydrograph

| Time (hr) | Flow (cfs) |
|-----------|------------|
| 10.00     | 0.19       |
| 10.10     | 0.19       |
| 10.20     | 0.21       |
| 10.30     | 0.22       |
| 10.40     | 0.23       |
| 10.50     | 0.24       |
| 10.60     | 0.26       |
| 10.70     | 0.27       |
| 10.80     | 0.29       |

Runoff Hydrograph  
 Peak Discharge: 5.68 cfs  
 Time to Peak: 12.00 hr

Update Report Report Input Save Hydrograph OK Cancel Help