Calculating Habitat Unit Composition

Habitat Unit composition is composed of 2 methods, Thalweg and Habitat Units. All calculations are based on an assessment of the main channel only.

GIVEN:
Thalweg StationName (e.g. A0,A1,A2,…K0) – *from Thalweg*
HabitatUnitNumber (e.g. 1,2,3,…) – *from Thalweg, and Habitat Unit*
HabitatUnitTypeCode – *from Habitat Unit e.g.*

Habitat Unit TypeCode	Description
FT	Fast Turbulent (riffle, cascade, waterfall)
FN	Fast Non-Turbulent (glide, run)
PS	Scour pool
PD	Dammed pool
PP	Plunge pool
DC	Dry channel

CALCULATE:
Count the **NumberOfHabitatUnitStations** – This is the number of Thalweg Stations for which a habitat unit has been identified.
Count the **NumberOfDryStations** – Number of Thalweg Stations where the Habitat Unit Number refers to a Habitat UnitTypeCode DC.
Count the **NumberOfFTStations -** Number of Thalweg Stations where the Habitat Unit Number refers to a Habitat UnitTypeCode FT.
Count the **NumberOfFNStations -** Number of Thalweg Stations where the Habitat Unit Number refers to a Habitat UnitTypeCode FN.
Count the **NUmberOfPSStations -** Number of Thalweg Stations where the Habitat Unit Number refers to a Habitat UnitTypeCode PS.
Count the **NumberOfPDStations -** Number of Thalweg Stations where the Habitat Unit Number refers to a Habitat UnitTypeCode PD.
Count the **NumberOfPPtations -** Number of Thalweg Stations where the Habitat Unit Number refers to a Habitat UnitTypeCode PP.
Count the **NumberOfWetStations -** Number of Thalweg Stations where the Habitat Unit Number refers to a Habitat UnitTypeCode as *any non-null* except DC.

REPORT:

PercentDry = (NumberOfDryStations/ NumberOfHabitatUnitStations) x 100

PercentWet = (NumberOfWetStations/NumberOfHabitatUnitStations) x 100

PercentFast =[((NumberOfFTStations)+ (NumberOfFNStations))   x 100
NumberOfHabitatUnitStations]

PercentPool= [(NumberOfPSStations)+ (NumberOfPDStations)+ (NumberOfPPStations)]   x 100
NumberOfHabitatUnitStations

PercentPlungePool = (NumberOfPPStations/NumberOfHabitatUnitStations) x100

PercentScourPool = (NumberOfPSStations/NumberOfHabitatUnitStations) x100

PercentDammedPool =(NumberOfPDStations/NumberOfHabitatUnitStations) x100

Metric	SourceFile	Operation
PercentDry	Thalweg, Habitat Unit	Dry Stations/All Stations x 100
PercentWet	Thalweg, Habitat Unit	Wet Stations/All Stations x 100
PercentFast	Thalweg, Habitat Unit	Fast Stations/All Stations x 100
PercentPool	Thalweg, Habitat Unit	Pool Stations/All Stations x 100
PercentPlungePool	Thalweg, Habitat Unit	Plunge Pool Stations/All Stations x 100
PercentScourPool	Thalweg, Habitat Unit	Scour Pool Stations/All Stations x 100
PercentDammedPool	Thalweg, Habitat Unit	Dammed Pool Stations/All Stations x 100