

Detailed View of NHN Completeness Levels

Legend :

O = Optional; Feature may or may not be present; Attribute may or may not be set to "Unknown"
M = Mandatory; Feature must be present; Attribute can not be set to "Unknown"

M* = Mandatory. If not provided, data could still be NHN-CL4, provided that NHN data deviations be published in the dataset metadata and/or on the GeoBase Web portal under NHN data.

M** = Mandatory for some Delimiters, namely: At boundary; Between permanent and intermittent Waterbodies.

Class	Attribute	NHN-CL1	NHN-CL2	NHN-CL3	NHN-CL4
		Network	Waterbody Definition	Data Continuity	Toponymy Upgrade
Bank		M	M	M	M
	Water Definition	O	M	M	M
	Permanency	O	O	O	O
	Shoreline Water Level	O	O	O	O
Isolated		M	M	M	M
		M	M	M	M
Delimiter		M**	M	M	M
	Delimiter Type	M	M	M	M
Network Linear Flow		M	M	M Continuous	M
	Flow Direction	O	O	M	M
	Level Priority	O	O	M	M
	Network Flow Type	M	M	M	M
	Isolated	M	M	M	M
Hydrographic Obstacle Entity		O	O	O	M*
	Obstacle Type	O	O	O	O
Manmade Hydrographic Entity		M	M	M	M
	Manmade Status	O	O	O	O
	Manmade Type	O	O	O	O
Named Feature	M (Nonofficial source allowed)	M (Nonofficial source allowed)	M (Nonofficial source allowed)	M (Official source only)	
NHN Work Unit Limit	M	M	M	M	
Island		O	O	O	M
	Coastal Island	O	M	M	M
	Sand Island	O	O	O	O
Hydro Junction		M	M	M	M
	Junction Type	M	M	M	M
Littoral		O	M	M	M
	Shoreline Water Level	O	O	O	O
Single Line Watercourse		M	M	M	M
	Water Definition	O	M	M	M
	Isolated	M	M	M	M
	Permanency	O	O	O	O
Waterbody		M	M	M	M
	Water Definition	O	M	M	M
	Isolated	M	M	M	M
	Permanency	O	O	O	O
External Geometry Event	O	O	O	O	
External Line Event	O	O	O	O	
External Point Event	O	O	O	O	
Flow Property Event	M	M	M	M	
Manmade Line Event		M	M	M	M
	Intersection with the network	M	M	M	M
	Projection on the network	O	O	O	M*
Manmade Point Event		M	M	M	M
	Intersection with the network	M	M	M	M
	Projection on the network	O	O	O	M*
Obstacle Line Event		M	M	M	M
	Intersection with the network	M	M	M	M
	Projection on the network	O	O	O	M*
Obstacle Point Event		M	M	M	M
	Intersection with the network	M	M	M	M
	Projection on the network	O	O	O	M*

All	Toponymy in attribute. Applicable to all classes with name attributes. Once in attribute, delete corresponding Named Feature.	O (Nonofficial source allowed)	O (Nonofficial source allowed)	M (Nonofficial source allowed)	M (Official source only)
All	Foreign NID keys, link to other features. e.g. "Waterbody_NID", "Island_NID", "From/To_Junction" attributes.	M	M	M	M