

**Detailed View of NHN Completeness Levels**  
(Applicable per NHN class or attribute)

Class	Attribute	NHN-CL1	NHN-CL2	NHN-CL3	NHN-CL4	*Notes
		Hydro Network	Waterbody Definition	Data Continuity	Toponymy Upgrade	
Bank		M	M	M	M	
	Water Definition	O	M*	M*	M*	*The attribute value must not be <i>Unknown</i>
	Permanency	O	O	O	O	
	Shoreline Water Level	O	O	O	O	
	Isolated	M	M	M	M	
Delimiter		M	M	M	M	
	Delimiter Type	M	M	M	M	
Network Linear Flow (NLF)		M	M	M*	M*	*NLF continuity is validated
	Flow Direction	O	O	M*	M	*For <i>Primary NLF</i> and <i>Observed NLF</i>
	Level Priority	O	O	M*	M*	*The attribute value must not be <i>Unknown</i>
	Network Flow Type	M*	M*	M*	M*	*The attribute value must not be <i>Unknown</i> or <i>None</i>
	Isolated	M	M	M	M	
Hydro Junction		M	M	M	M	
	Junction Type	M	M	M	M	
Littoral		O	M	M	M	
	Shoreline Water Level	O	O	O	O	
Hydrographic Obstacle Entity		O	O	M*	M*	*NHN Data is CL3 or CL4 even if not present provided deviations are published
	Obstacle Type	O	O	O	O	
Island		M*	M*	M	M	*Some Islands may be missing
	Coastal Island	O	M	M	M	
	Sand Island	O	O	O	O	
Manmade Hydrographic Entity		M*	M*	M*	M*	*At the least <i>Dams</i> and <i>Dikes/Levees</i> must be present
	Manmade Status	O	O	O	O	
	Manmade Type	M*	M*	M*	M*	*At the least <i>Dams</i> and <i>Dikes/Levees</i> types must be known
Single Line Watercourse		M	M	M	M	
	Water Definition	O	M*	M*	M*	*The attribute value must not be <i>Unknown</i>
	Isolated	M	M	M	M	
	Permanency	O	O	O	O	
Waterbody		M	M	M	M	
	Water Definition	O	M*	M*	M*	*The attribute value must not be <i>Unknown</i>
	Isolated	M	M	M	M	
	Permanency	O	O	O	O	
Named Feature		M*	M*	M*	M	*The toponymic source must be non-official
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*	*At the least those generated from the intersection of a manmade and a network linear elements must be present
	Intersection with the network	M	M	M	M	
	Projection on the network	O	O	O	O	
Manmade Point Event		M*	M*	M*	M*	*At the least those generated from the intersection of a manmade and a network linear elements must be present
	Intersection with the network	M	M	M	M	
	Projection on the network	O	O	O	O	
Obstacle Line Event		M*	M*	M*	M*	*At the least those generated from the intersection of an obstacle and a network linear elements must be present
	Intersection with the network	M	M	M	M	
	Projection on the network	O	O	O	O	
Obstacle Point Event		M*	M*	M*	M*	*At the least those generated from the intersection of an obstacle and a network linear elements must be present
	Intersection with the network	M	M	M	M	
	Projection on the network	O	O	O	O	
NHN Work Unit Limit		M	M	M	M	
carrying toponyms attributs	Attributs associated to toponyms (geographical names)	O <sup>1</sup>	O <sup>1</sup>	M <sup>2</sup>	M <sup>2</sup>	<sup>1</sup> The toponymic source may be non-official <sup>2</sup> Once in attribute on hydrographic elements, corresponding <i>Named Features</i> are deleted
carrying foreign key attributs	Foreign NID key attributs*	M	M	M	M	*Links to other elements (e.g. "Waterbody_NID", "Island_NID", "From/To_Junction" attributs)

Legend:  
**O** = Optional: The feature may be missing or the attribute value may be *Unknown*  
**M** = Mandatory: The feature must be present or the attribute value must not be *Unknown*