HydroXC-compliant Data Exchange Interface for NWS OHD Applications FLDWAV and FLDVIEW

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This document illustrates a design for implementing a data exchange interface between two NWS OHD applications using the HydroXC 2.0 draft schema. It includes a digram of the proposed XML structure to be used for communication between the applications, as well as example fragments of a hypothetical data exchange XML document.
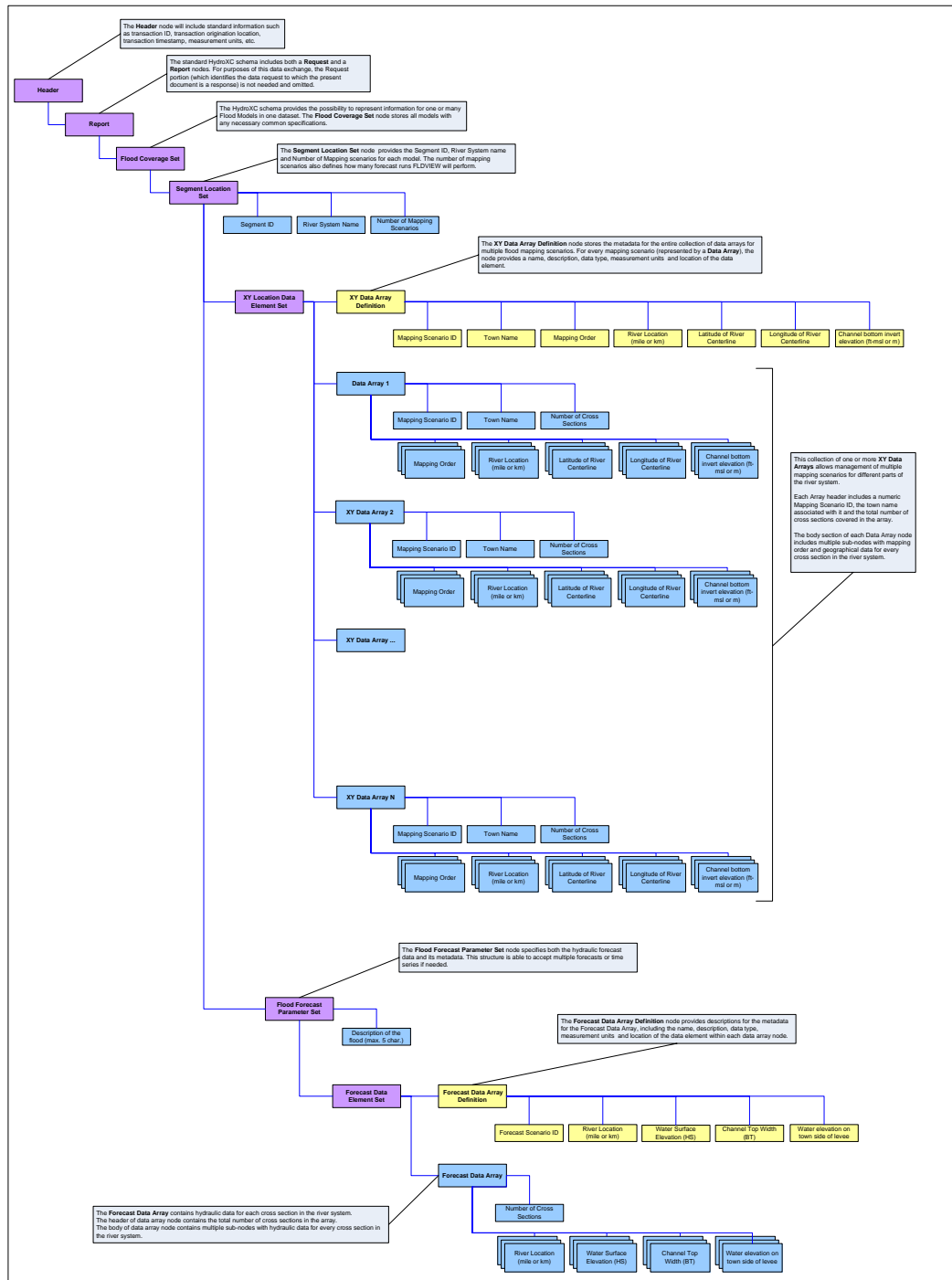
The two applications, FLDWAV and FLDVIEW currently exchange information via a number of text files containing data in a comma-separated, proprietary format. The objective of this design is to replace the various comma-separated files with one HydroXC 2.0 draft compliant XML document which should be both **more stable** (only one file as opposed to many), and **clearer** (HydroXC schema-based documents are self-documenting). With this design, human readers and other, potentially non-OHD application will be able to consume the data more accurately and quickly.

In addition to reducing the number of files and making the data more readable, the HydroXC XML format will also enable applications to encapsulate standard metadata and specification data within each forecast data file. Further, the single XML structure can easily be stored in a database for retention and further processing.
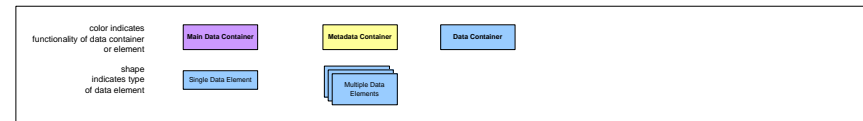
The National Weather Service currently uses FLDWAV and FLDVIEW to generate flood forecast data and to produce maps of the forecasted floods.

Data Set Schema For FLDWAV – FLDVIEW Data Interface

Legend

Example XML Fragments