

**Advantages and Disadvantages of Water Quality Data Submission Tools**

<b>Tool</b>	<b>Definition</b>	<b>Advantages</b>	<b>Disadvantages</b>	<b>Advice</b>
<b>STORET Data template</b>	An Excel file formatted to provide the parameters and metadata necessary for STORET compatibility	Free, appropriate for electronic data submission requirements of 106 Guidance	Training necessary  Somewhat difficult to manage over time and with large data sets	Tribes are encouraged to use the template as a first tool to submit data electronically to EPA.  <a href="http://www.epa.gov/storet/wqx/index.html">http://www.epa.gov/storet/wqx/index.html</a>
<b>WQX Web</b>	WQX Submission Tool is a site which allow users to upload data and configure formatting for transmission to the STORET warehouse	Free, relatively simple internet application to upload data into the STORET Warehouse  Data analysis easier through STORET	Requires manual operation to submit data, some configuration required	WebSIM is now defunct, so it is encouraged that you fully transition to WQXWeb (similar interface and function as WebSIM but with more capabilities for data exchange).
<b>Network Node</b>	A web server that facilitates the interface between database systems and the Exchange Network	Seamless exchange of data between groups regardless of hardware, operating system, or programming environment  Fully-automated	Costly, usually only feasible under Exchange Network grants  Technical expertise and network server required	Tribes with Exchange Network grants are encouraged to build a node that can both request data from and publish data to the Central Data Exchange and EPA's data warehouse (STORET).
<b>Network Node Client</b>	Software on a web server that facilitates the interface between database systems and the Exchange Network	Seamless publishing of data to the STORET Warehouse  Cheaper than a network node	Requires manual operation to submit data  Cannot respond to data queries from other nodes, and therefore cannot interact with the Exchange Network  Technical expertise and network server required	A network node client has the capability to publish data through another organization's established node. This requires a working partnership with another organization to successfully transmit data to the STORET warehouse.