

FACT SHEET

# Environmental and Recreational Methodology



This fact sheet summarizes methodologies that will be implemented during the SWSI Update for the Environmental and Recreational component

The Environmental and Recreational component of the SWSI Update will focus on the development of two tools:

1. Environmental and Recreational Database Update
2. Environmental and Recreational Flow Tool

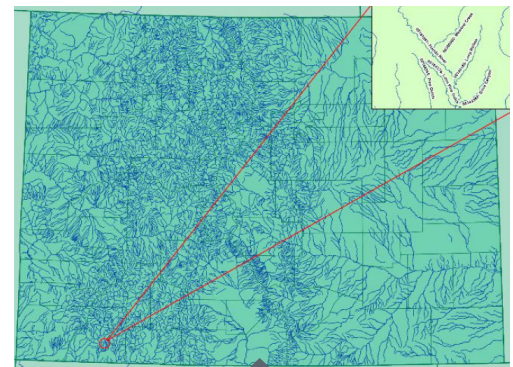
## Environmental and Recreational Database Update

During the SWSI 2010 process, basin roundtables identified projects and methods required to meet the nonconsumptive needs identified as part of their Needs Assessment and focus area development process. In 2010, CWCB developed a survey to collect information on existing or planned nonconsumptive projects, methods and studies. In addition, CWCB facilitated numerous meetings to gather additional data from stakeholders.

A database was developed in 2010, known as the “Nonconsumptive Needs Database” to help manage the nonconsumptive data received by basin roundtables and other stakeholders. The database included information related to nonconsumptive attributes, projects, and protections.

A significant focus of the SWSI Update will be enhancing the Nonconsumptive Needs Database (note that it is being renamed the “Environmental and Recreational database” in the SWSI Update). The update of the Environmental and Recreational database (E&Rdb) will include the following improvements:

Overall Goal	Action and Results
Enhanced Technical Foundation	Data loading processes will be consistent and streamlined to add efficiency and improve data quality.
	The Source Water Route Framework will be implemented as a common spatial unit to provide statewide consistency.
Engaging and Meaningful User Experience	Excel-based templates for data entry will be developed, which will improve uniformity of data and add efficiency.
	Standard reports will be developed to enhance consistency of data retrieval.
	An on-line mapping tool will be developed to increase ease of use and enable visualization of database content.
	User feedback will be collected to identify improvements.
Integration into Colorado Water Planning Processes	Database content will be improved and expanded to include project identification, project descriptions, dates, etc. making it more useful and meaningful for planning purposes.



The updated database will use the Source Water Route Framework as a common spatial unit for statewide consistency

# Environmental and Recreational Flow Tool

The SWSI Update will include the development of an Environmental and Recreational Flow Tool designed to assess flow conditions in each basin. The Flow Tool will serve as a resource to help basin roundtables refine, categorize, and prioritize their current portfolio of environmental and recreational projects and methods to better understand flow needs based on scenario planning modeling and outcomes.

The Flow Tool will be linked to the E&Rdb and will use streamflow output from the hydrologic models used to evaluate water supplies under each planning scenario. The Flow Tool will help users answer questions such as:

## Projects and Methods

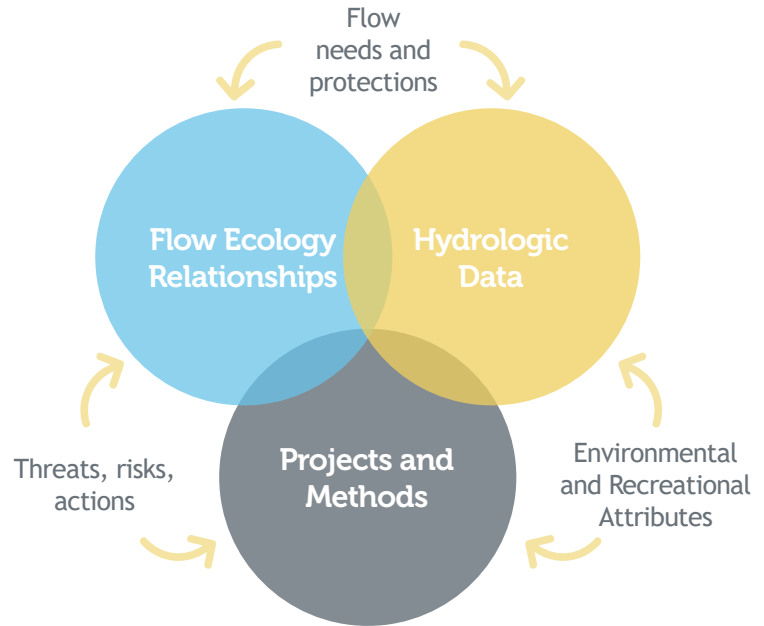
- Are there projects in indicator reaches?
- Have actions been identified to meet E&R needs in a particular segment?
- Is additional study in a segment warranted?
- What projects and methods could be implemented?

## Hydrologic Data

- What are the current conditions?
- What hydrologic conditions could we see under a particular planning scenario?

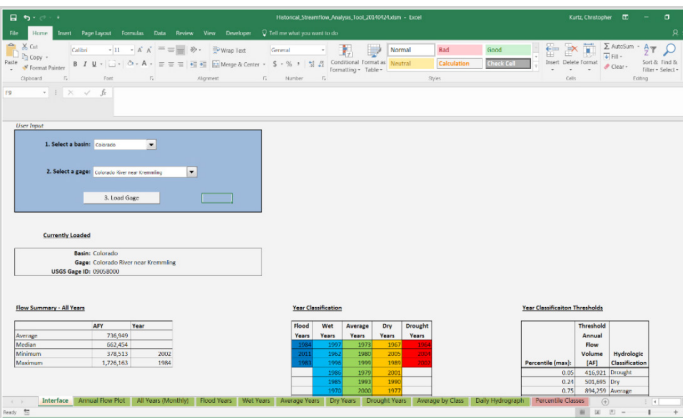
## Flow Ecology Relationships

- What E&R attributes are present?
- What are their flow needs?
- What are flow needs not being met?

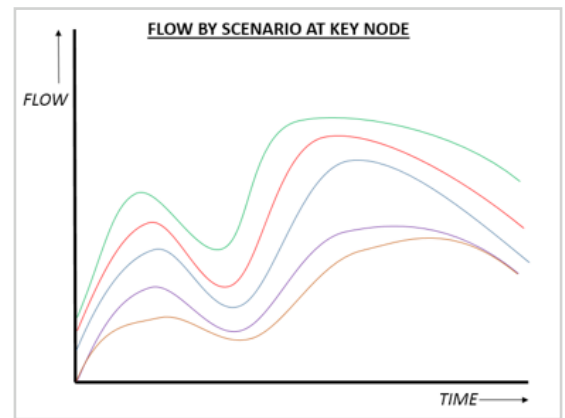


Conceptual framework for the Flow Tool

The interface for the Flow Tool will likely be similar to that of the Historical Streamflow Analysis Tool (HSAT). The HSAT was made available for use in Basin Implementation Plan development. It included dropdown menus, and the output included automatically-generated tables and plots.



HSAT interface



Conceptual plot showing time series of flows from Flow Tool

## FOR MORE INFORMATION

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<http://cwcb.state.co.us/water-management/water-supply-planning/Pages/SWSIUpdate.aspx>



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