

FACT SHEET

Finance Methodology



This fact sheet summarizes a project cost estimating tool that will be developed as a part of the SWSI Update

As Colorado’s Water Plan is implemented, it is critical that the overall cost of proposed projects and methods is understood and presented in a way that enables easy comparison (i.e. “apples to apples”). However, only 16 percent of the projects and methods listed in Basin Implementation Plans included cost estimates.

Previous iterations of SWSI have incorporated costing mechanisms developed for strategy and cost analysis and portfolio comparison. The goal of the finance component of the SWSI Update is to build on previous SWSI cost estimation methodologies and develop an accessible and user-friendly tool for basin roundtables to use in developing high-level cost estimates of projects and methods.

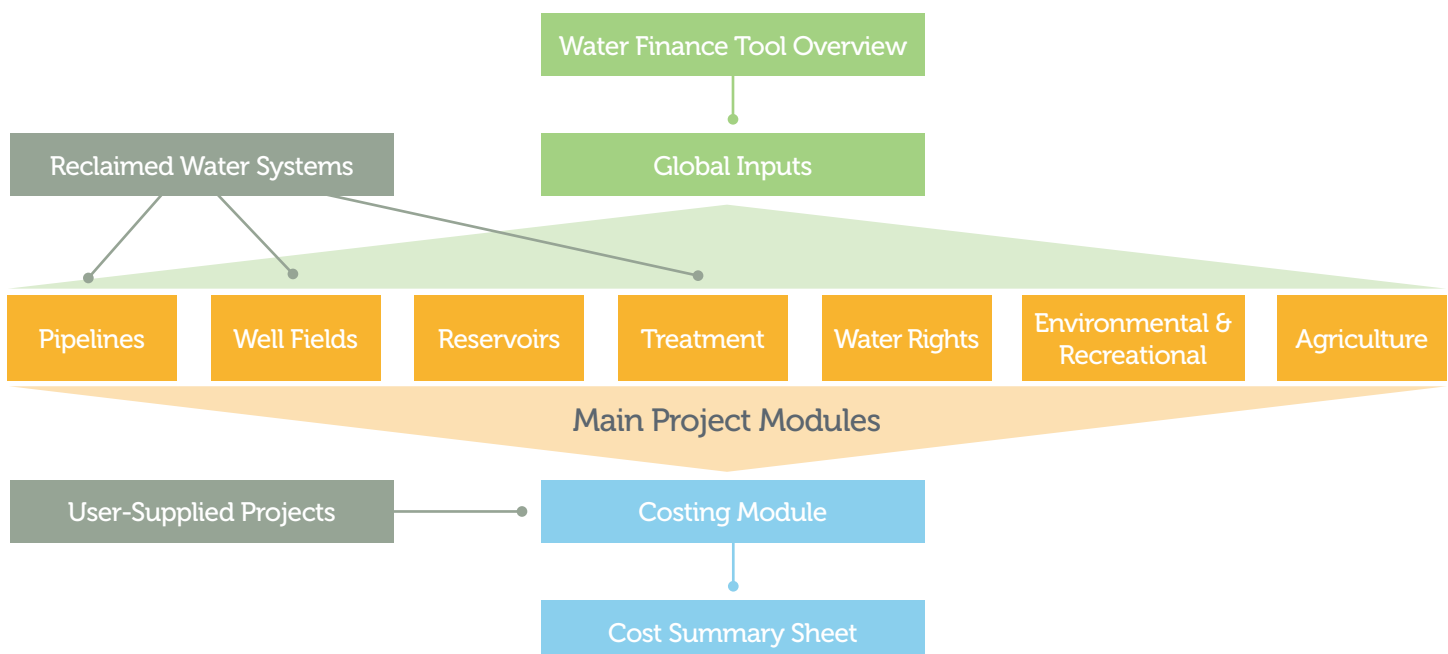
The Finance component of the SWSI Update will focus on the development of a cost estimating tool with two modules:

1. Projects Module
2. Costing Module

The Projects Module

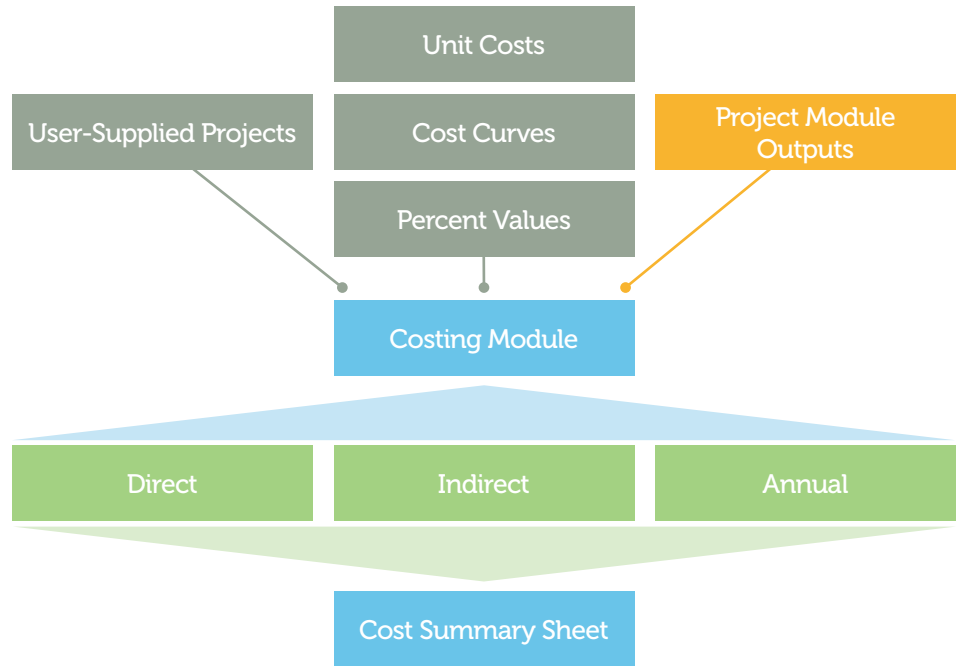
The Projects Module represents either an entire water project or a component of a large-scale, complex project. It includes an overview of the tool and allows the user to modify global inputs such as project yield, peaking factors, cost indices, and life cycle and annual costs.

The types of projects proposed in Basin Implementation Plans will be pre-loaded into the Projects Model, and the user will be able to customize the parameters associated with their project to reflect specific design and physical characteristics. The output from the Projects Module becomes input to the Costing Module



The Costing Module

The Costing Module will bring together information supplied or calculated from the Projects Module to develop planning-level cost estimates. The costs will be broken down into direct, indirect, and annual costs. Each of these costs will be developed based on output from the Projects Module and applying unit costs or cost curves where available. Unit costs or cost curves will be adjustable to account for current market conditions using readily available indices. Other costs will be based on industry standard or researched percent values of a direct cost. Values can be adjusted by the user as needed.



Output

The Costing Module will provide a final cost sheet that includes a summary outline of all the project costs by type along with present-worth calculations and a normalized cost that can be used for project comparison:

[Basin] [Project Name] [Year Prices] [Cost Estimator] [Date]	
Direct Costs	
Item	Cost
[Any of the items listed in Table 3-X]	\$
[Any of the items listed in Table 3-X]	\$
[Any of the items listed in Table 3-X]	\$
Direct Costs Subtotal	\$
Indirect Costs	
Engineering Services	\$
Surveying	\$
Legal Service	\$
Financing and Bond Assistance	\$
Environmental and Cultural Studies	\$
Land Acquisition	\$
Contingency	\$
Total Project Cost	\$
Annual Cost	
Standard or Special Project Debt Service	\$/yr
Operations and Maintenance	\$/yr
Pumping Energy Costs	\$/yr
Water Supply Payment	\$/yr
Total Annual Cost	\$/yr
Future Worth	\$
Normalized Cost	
Project Cost Divided by Factor	\$/AFY

FOR MORE INFORMATION

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



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