



Center for Advanced Decision Support for  
Water and Environmental Systems (CADSWES)

UNIVERSITY OF COLORADO **BOULDER**

# RiverWare Interactive Scenario Explorer (RiverWISE)



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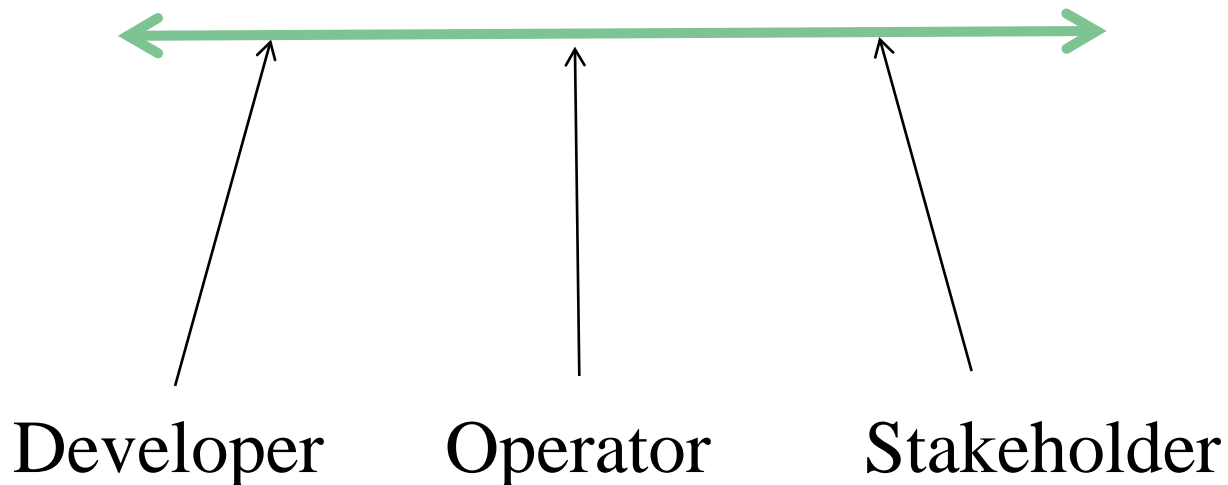
# User Roles

## Developer

- Trained to use RiverWare
- Understands details of model and policy

## Stakeholder

- Little RiverWare experience
- Investigate model layout
- Run scenarios



# RiverWISE Requirements

- Stakeholders want to
  - Investigate a Model
  - Try Scenarios
  - View Results and Tradeoffs
  - Communicate!
- Easy to use
- Low cost



# RiverWISE Executable

- View model layout
- Creates scenarios
- Modify values
- Run simulations
- View results
- Share with others



# Licenses and Installation

- For Stakeholders:
  - Separate installer and executable
  - Download from RiverWare.org (coming soon)
  - Free License required (coming soon)
- For Developers:
  - RiverWISE included in RiverWare installations
  - No additional license required

# Demo: Export to RiverWISE

**Export to RiverWISE**

File

Exporting results from the last run, completed at 2017-Jul-12 10:57:05.

Export File Specification

Folder: R:/doc/onlineHelp/screenshots/RiverWISE

File Name Root: MightyBuffalo

File Name: MightyBuffalo.2018Jan23141713.wise

Model/Run Name: Mighty Buffalo Stakeholder Exploration

Model/Run Description

This is a sample model used for stakeholder exploration of the Mighty Buffalo basin.

Stakeholders can modify various inputs including Inflow above Mighty, diversion schedules, minimum flows, and maximum channel flows.

Baseline Scenario Name: Baseline

Input Slots (Series, scalar, and table slots that will be editable in RiverWISE)

Name
Green Valley Data.Diversion Schedule
Mighty.Inflow
Miller Fishery Data.Min Fish Flow
Border Data.ICD Requirement
City.Max Channel Flow

Settings <<

Result Slots (Series slots that will be viewable in RiverWISE)

Name
Mighty.Inflow
Mighty.Pool Elevation
Mighty.Outflow
Mighty.Unregulated Spill
Buffalo.Pool Elevation

Export    Export & Open In RiverWISE    Close

# Demo: Model and Scenarios

RiverWISE - Mighty Buffalo Stakeholder Exploration

File Help

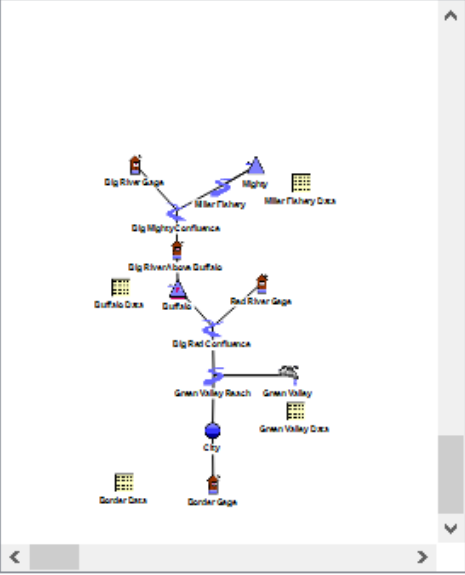
RiverWare Model and Scenarios Edit and Run Scenarios View Results Log

RiverWare Model / Run - Mighty Buffalo Stakeholder Exploration

Original File Name: MightyBuffalo.2018Jan23141812.wise  
Run Range: 1996-Jan-01 24:00 - 1996-Sep-30 24:00

This is a sample model used for stakeholder exploration of the Mighty Buffalo basin.

Stakeholders can modify various inputs including Inflow above Mighty, diversion schedules, minimum flows, and maximum channel flows.



Open in Separate Window

Scenarios

Name	Last Executed	Description
* Baseline	2017-Jul-12 10:57:05	

↑ ↓ - Edit Description...

Create New Scenario

Name:

Base input values on scenario: Baseline ▼

Create

Open WISE File Succeeded at 2018-Jan-23 14:18:27

# Demo: Edit and Run Scenarios

RiverWISE - Mighty Buffalo Stakeholder Exploration

File Help

RiverWare Model and Scenarios Edit and Run Scenarios View Results Log

Scenario: Reduced Inflows

Input Data Sets

Location	Name	Modification From Baseline	Data Type	Minimum	Maximum
Miller Fishery Data	Min Fish Flow	None	Scalar	0.00 cms	200.00 cms
Mighty	Inflow	Edited	Series	0.00 cms	3,500.00 cms
Green Valley Data	Diversion Schedule	None	Table	N/A	N/A
City	Max Channel Flow	None	Scalar	1,200.00 cms	1,500.00 cms
Border Data	ICD Requirement	None	Scalar	350.00 cms	700.00 cms

Edit Mighty - Inflow

Scenarios to Show

- Baseline
- Low Demands
- Reduced Inflows

Show Data Sets As

- Plots
- Tables

	Total cms	Total cms
04-30-1996 Tue	1,181.35	1,181.35
05-01-1996 Wed	1,186.27	1,186.27
05-02-1996 Thu	1,217.54	1,217.54
05-03-1996 Fri	1,549.92	1,400.00
05-04-1996 Sat	1,737.48	1,400.00
05-05-1996 Sun	1,867.46	1,400.00

Run Scenario (Reduced Inflows)

Status: No Run Has Been Initiated



# Demo: View Results

