



Water Evaluation And Planning System Training

PASI – La Serena, Chile
June 27, 2013



Exercise – WEAP in One Hour

Let's get started!

Exercise – Scenarios in WEAP

Scenarios

- A systematic way of thinking about the future
- Help us gain a better understanding of the *possible* implications of decisions (or non-decisions) across scales and time
- Help us work with uncertainty
- Support decision-making

Exercise – Scenarios in WEAP

Potential Scenarios

- Current trends
- Increasing population
- Changing irrigation demand
- Change in operations rules
- Change in supply
- Change in infrastructure
- Change in land use
- Change in climate

Exercise – Scenarios in WEAP

Scenario structure in WEAP

- **Current accounts**
 - The state of the system at start of simulation
- **Reference scenario**
 - A simulation of the system without any changes
 - The “no action” scenario
- **“What if?” scenarios**
 - Changes to infrastructure, demand, supply, operating rules

Exercise – Scenarios in WEAP

Switch to WEAP

Exercise – Refining the Supply

- Utilizing return flows
- Reservoirs
- Flow requirements
- Groundwater

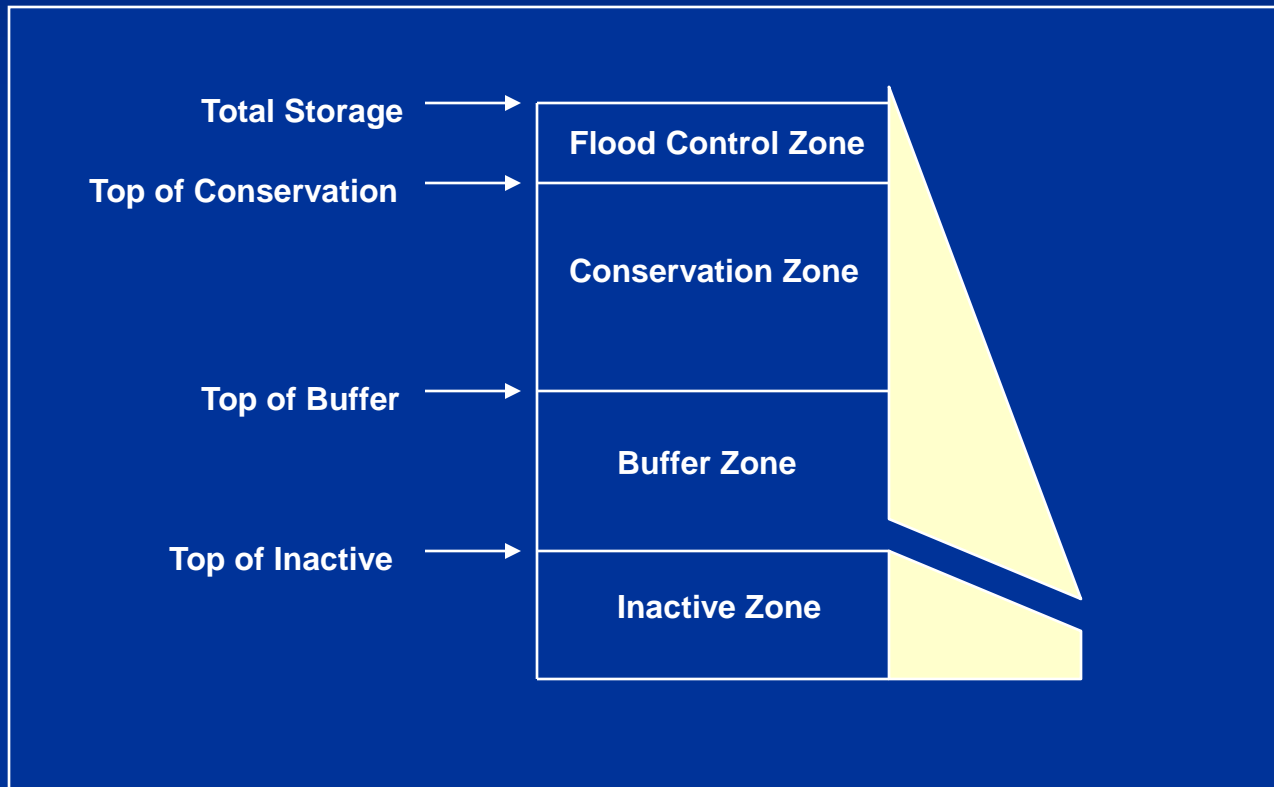
Exercise – Refining the Supply

Switch to WEAP

Exercise – Reservoirs and Power Production

- Modeling Reservoirs
- Adding Hydropower Computation

Reservoir Operations



Hydropower

WEAP21: Weeping River Basin

Area Edit View General Tree Help

Data for: Supply Measures (1999-20) Manage Scenarios... Data Report...

Physical Operation **Hydropower**

Min. Turbine Flow Max. Turbine Flow Tailwater Elevation Plant Factor Generating Efficiency

Hydropower will only be generated for flows between minimum and maximum turbine flow.

Reservoir	Scale	Unit	1998	1999-2008
Central Reservoir		CMS	11.33	11.33

Chart Table Notes

Min. Turbine Flow

CMS

10
8
6
4
2
0

1998 1999 2000 2001 2002 2003 2004 2005 2006

Specify capacities, efficiencies, and other properties of power generation

Area: Weeping River Basin Data View Registered to: Tellus Institute

Exercise – Reservoirs and Power Production

Switch to WEAP