



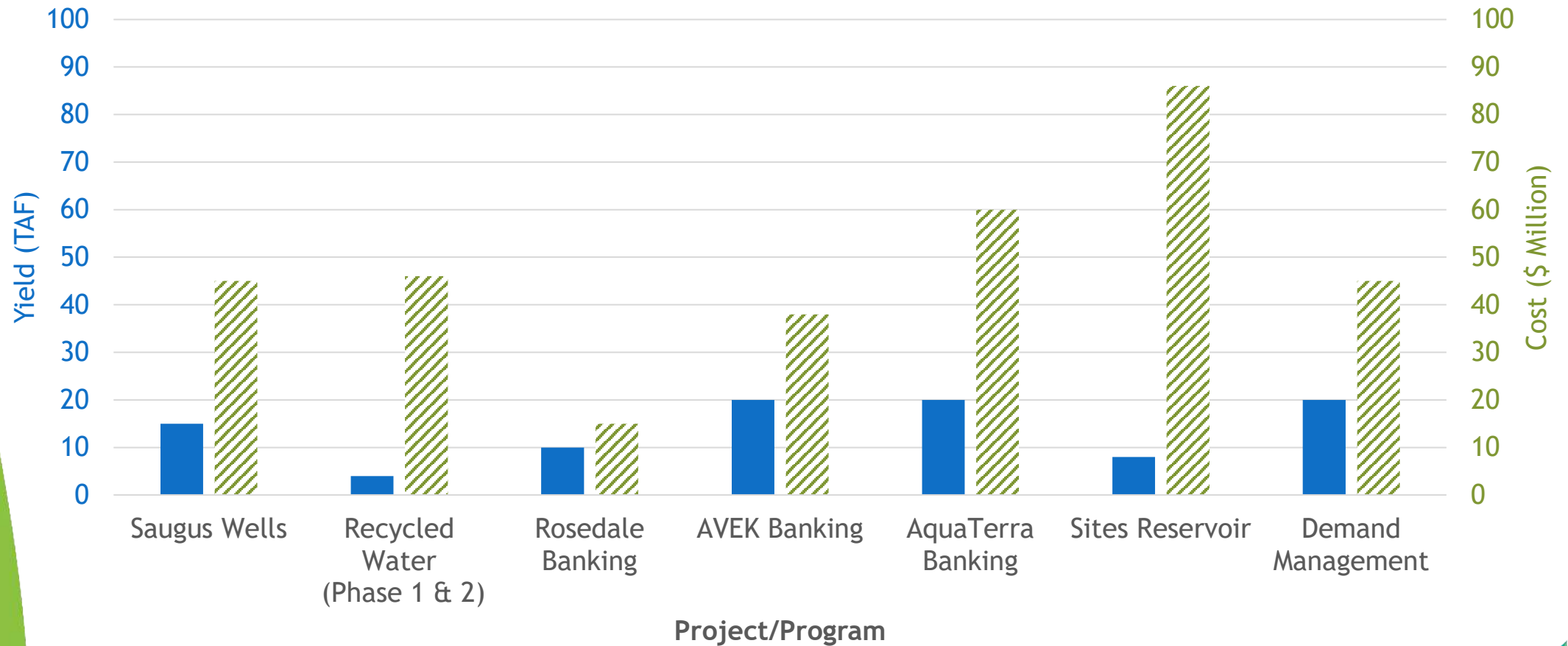
SCV
WATER

INTEGRATED WATER RESOURCE MODEL

Water Resources and Watershed Committee
April 14, 2021
Item No. 3

Planned and Potential Resiliency Program

Program Yield and Costs



Water Resources Integration

Description	Cost (1,000)	FY 21/22	FY 22/23	FY 23/24
Resource Mgmt. Modeling Development				
- Portfolio Module	260			
- Economic Analysis Module	40			
Alternative Analysis/Prioritization	40			
Total	340	260	80	



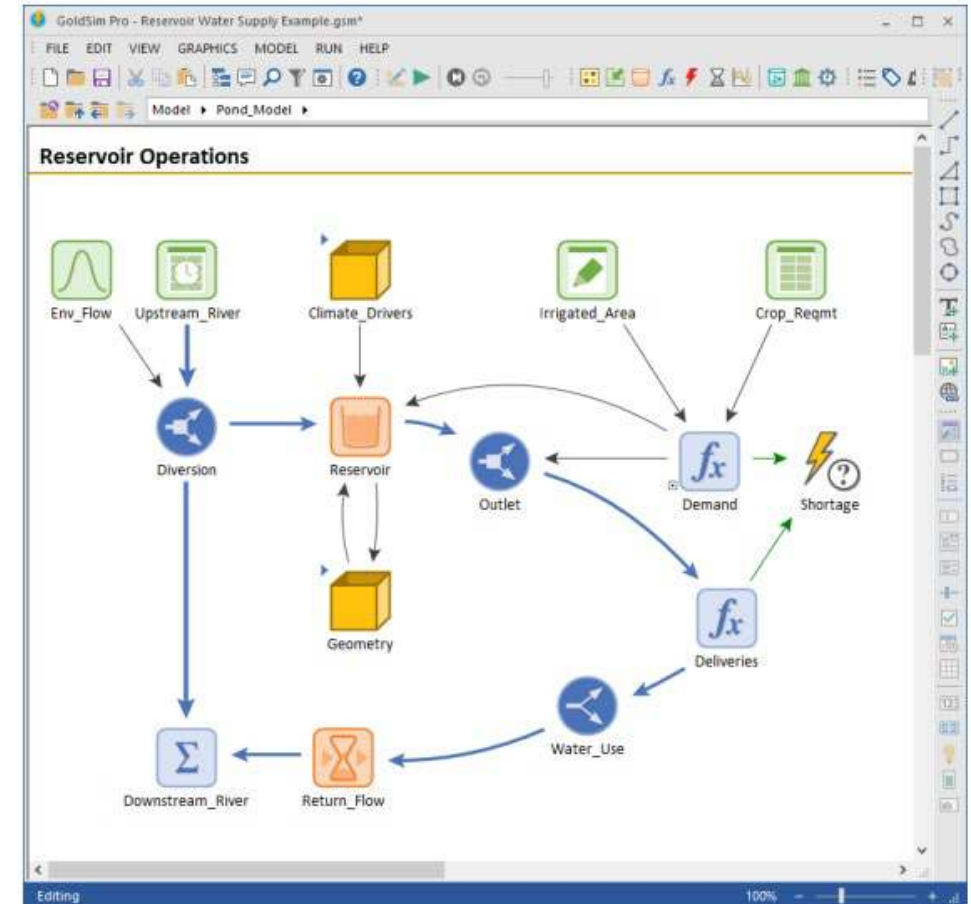
Water Resources Integration/Analysis

- A strong decision-making framework is needed to evaluate future investments in reliability.
- GoldSim is ideal for a high-level systems approach to water resources modeling and management.
- It is a visually enhanced, dynamic simulation framework that can be used for modeling complex systems in engineering and water resources management.
- It allows for clearly presenting results to diverse audiences, managing large input and output datasets, and clearly documenting model logic.



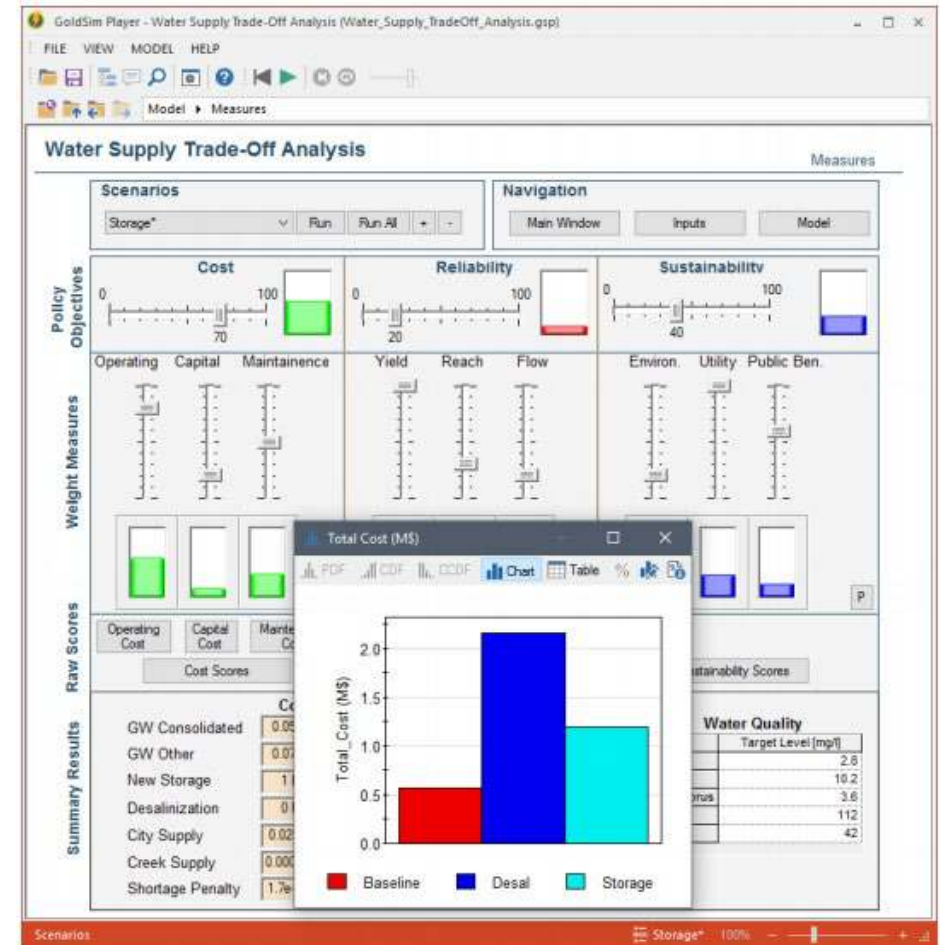
Water Resources Integration/Analysis

- “Visual Spreadsheet”
- High-level elements automatically connected in an influence diagram
- Intuitive
- Transparent model logic
- Easy to document and maintain



Water Resources Integration/Analysis

- Integrates seamlessly with Excel and databases.
- Can develop custom interfaces or dashboards.
- Can be used as an interactive tool to ask “what if” questions about key assumptions and processes and respond to questions asked by stakeholders.
- Can be seamlessly modified to allow for adaptive management.



GoldSim Demo



Recommendation

The Board authorize entering into a contract with Geosyntec to develop a water resource integration model using the GoldSim platform.