



*Okanagan Basin*  
WATER BOARD

# Water Supply and Demand Update Committee Report

Okanagan Water Stewardship Council  
Denise Neilsen and Brian Guy  
March 8<sup>th</sup>, 2018

# Tasks

- Develop committee of knowledgeable individuals
- Develop Terms of Reference for an updated Water Supply and Demand project
- Contribute to funding application to improve Phase 2 hydrology model

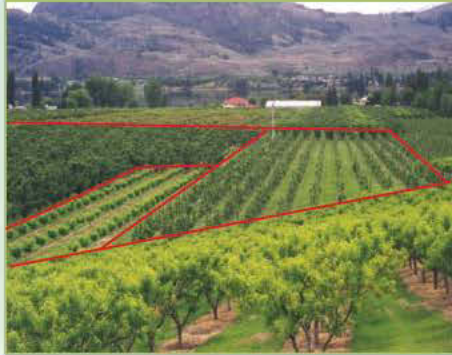
# Thanks to all who participated!

- Bernie Bauer, Lorraine Bennest, Ron Fretwell, Tanis Gieselman, Brian Guy, Nelson Jatel, Drew Lejbak, Denise Neilsen, Craig Nichol, Nargiz Rahimova, Ray Reilly Shawn Reimer, Scott Smith, Skye Thomson, Brian Symonds, Ted van der Gulik, Anna Warwick-Sears, Ryan Whitehouse.

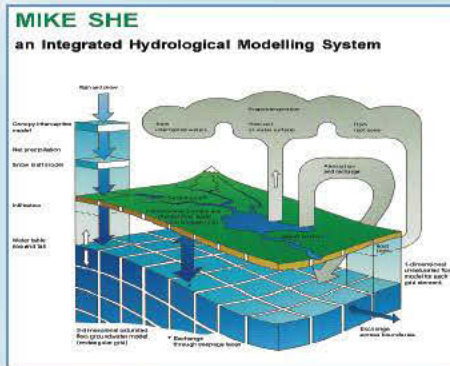
# Process

- Planning Meeting Mar 9<sup>th</sup>, 2017
- Workshop April 18<sup>th</sup>, 2017
  - Aim: to produce background material for updating the 2007-2010 Okanagan Basin Water Supply and Demand Study (Phase 2).

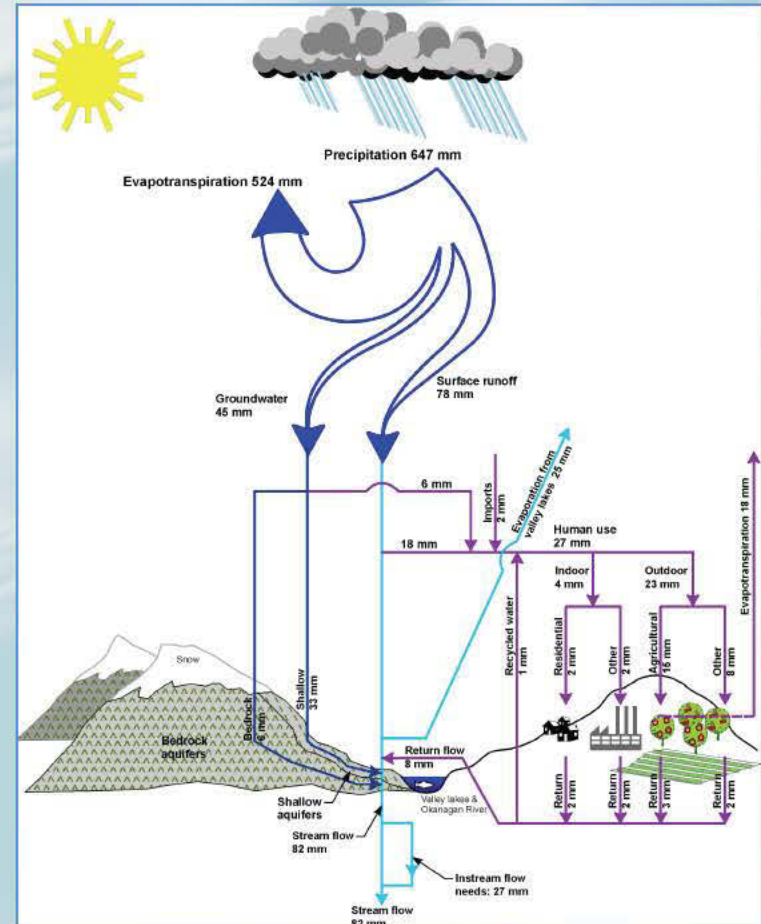
# 2010 study models



## Water Demand Model (OWDM)



## Hydrology Model (OBHM)



## Water accounting model (OBWAM)

# Weaknesses identified

- Groundwater modeling
- EFN
- Tributary hydrology
- Reservoir Operations
- Ease of use (Mike She)
- Lake evaporation
- Urban water use

**Relevant to  
licensing process**

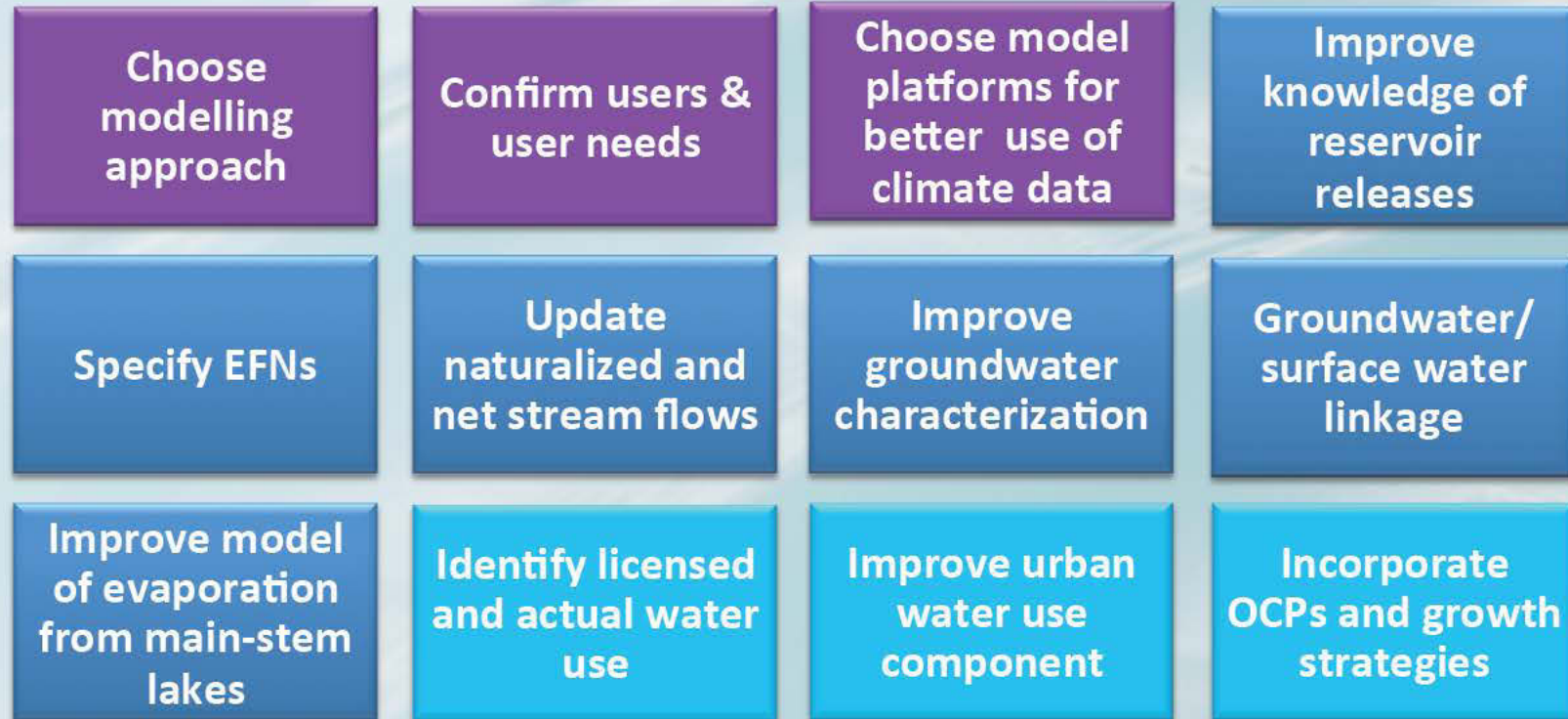
# Outcomes

# Terms of reference for WSD study update

- Review information
- Develop project plan
- Technical studies
- Upgrade models
- Supply/demand linkage model
- Population growth, land use, and climate change scenarios
- Training and outreach



# Technical studies to improve supply and demand models

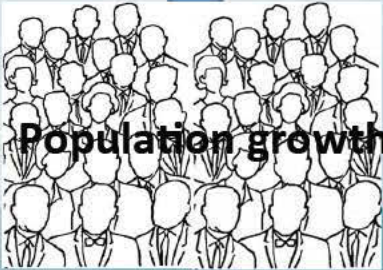
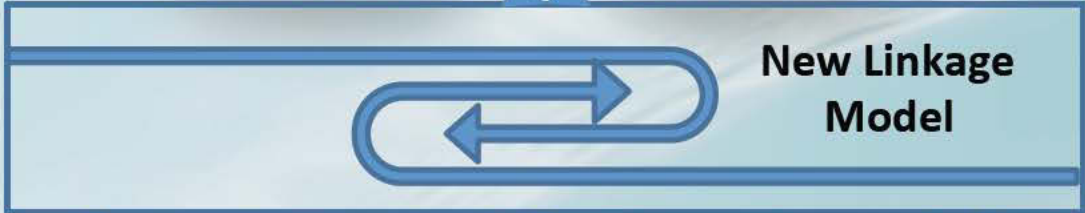


# Outputs



Upgraded Hydrology Model

Upgraded Water Demand Model



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# Funding application for model upgrades

- With the help of the committee, the OBWB prepared and submitted an application to the Federal Gas Tax Fund for funding to modernize and upgrade the Phase 2 hydrology model.

# Recommendations

- Funding for hydrology model upgrade applied for. Funding to complete the full scope of work should be sought in the very near future.
- Technical and scientific work should be undertaken before or contemporaneously with model upgrades.
- The Council should play a role in the WSD Update project

# Funding application for model upgrades

- Project organizational framework
- Steering Committee & Technical Advisory Council
- Determine the needs of model users
- Examine models and select modeling platform
- Complete the model upgrades
- Hold workshops on accessing and using modeling results
- Conduct outreach activities and communicate widely.