

Using Senses to Support Trans-boundary  
decision making processes

**“Water Resources Modeling Application”**

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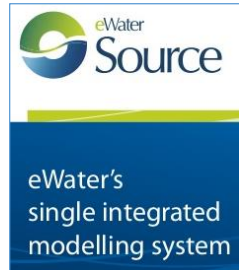
# Water Resources Modeling Tools

## Hydrology model



- Basin Water availability
- Impact of LULC & CC on hydrology

## Basin Simulation model

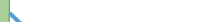
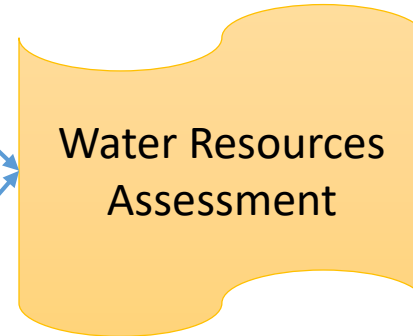


- Basin Sector Water use and allocation
- Impact of proposed development

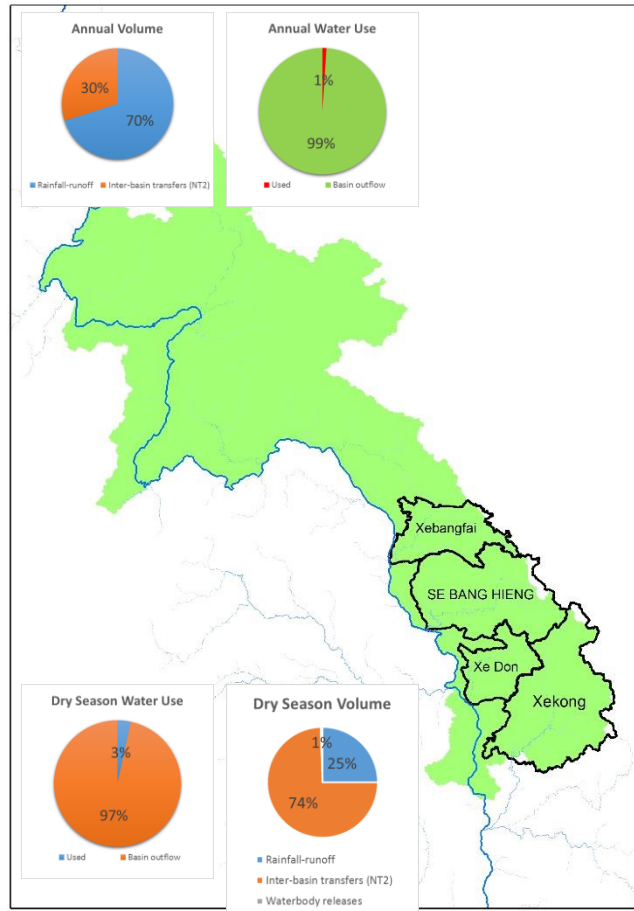
## Hydraulic model



- Flood mapping.
- Flood mitigation options
- Impact of Dev., CC on Q & H



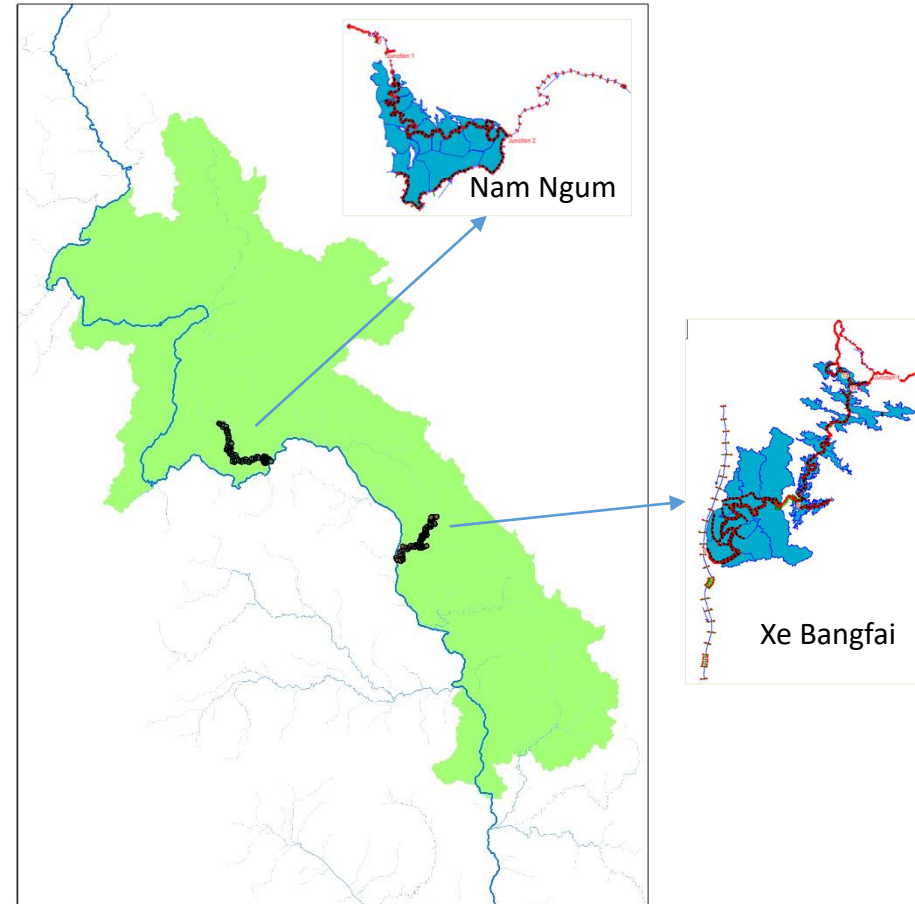
## Hydrology & Basin Simulation Model Application for Water Resources Assessment:



### Limitation of Basin Simulation Model Application:

- Climate Data
- Discharge data for calibration
- Sector Water use data: Hydropower, Irrigation, Industry,...

## Hydraulic Model Application for Flood Assessment



### Limitation of Hydraulic Model Application:

- Topographic and River cross-section data
- Water level for calibration & flooded map for verification

Thank you for your attention