



# Conjunctive Water Management

*In Modeling and in Practice*

**Association of Western State Engineers  
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Department of Natural Resources



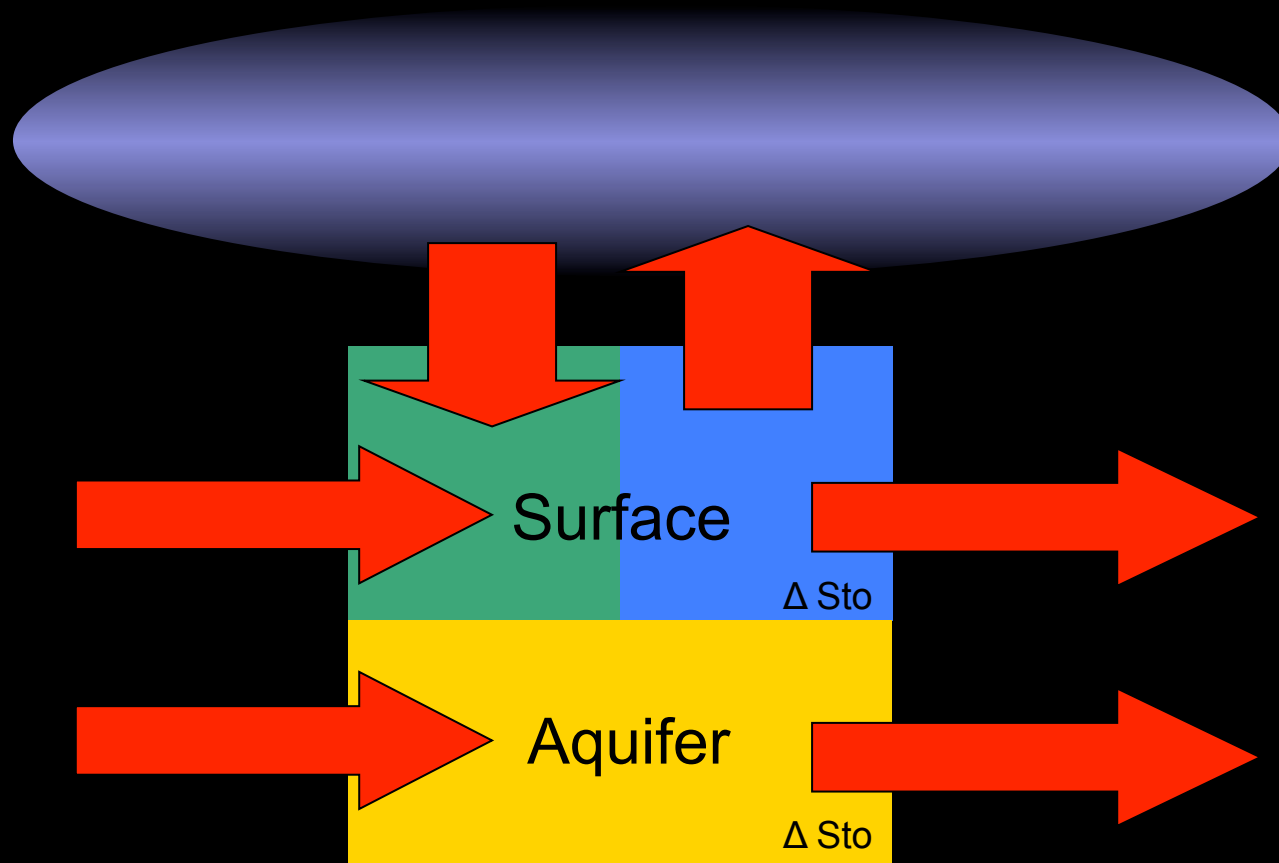
# Overview

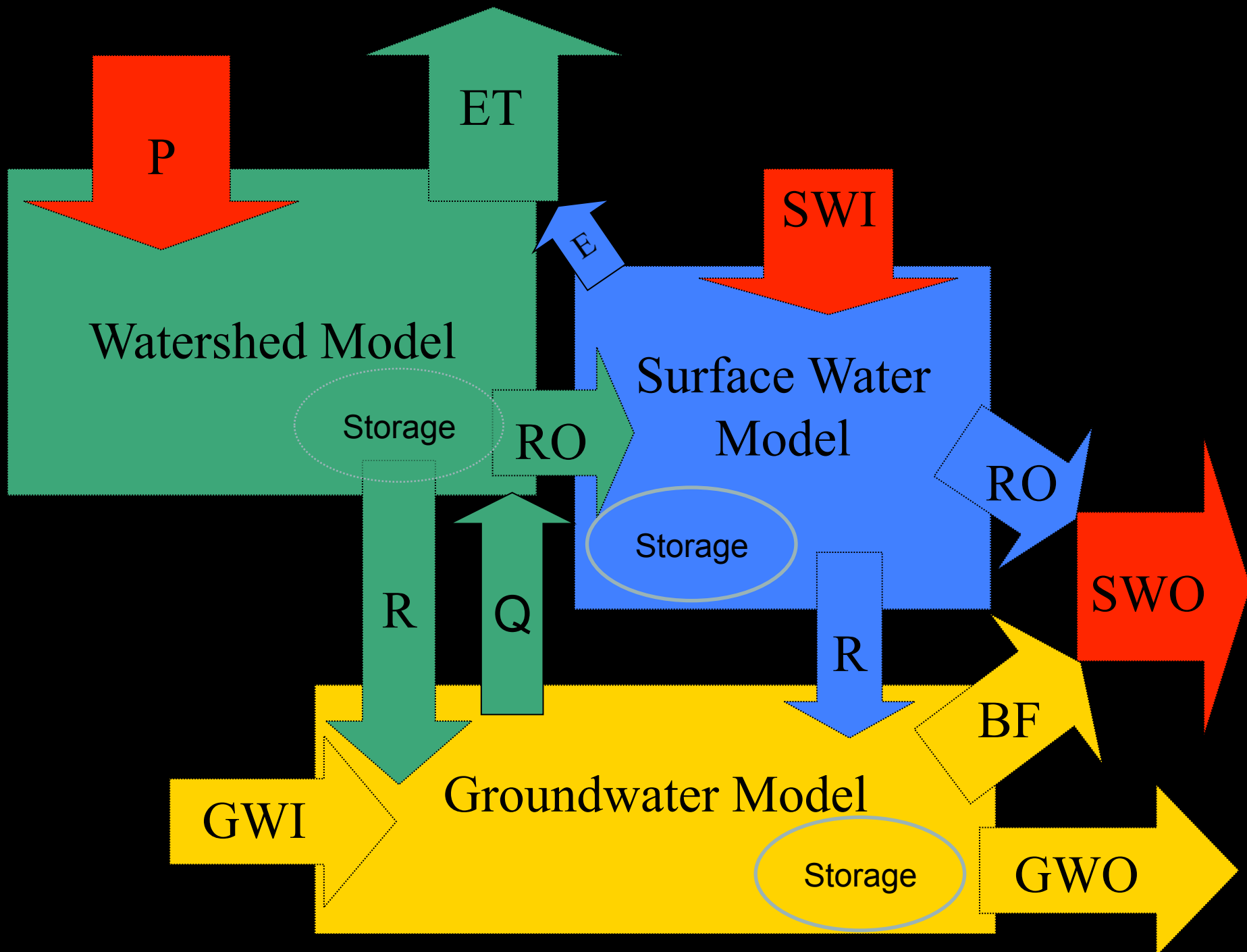
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- CWM in Modeling
  - Modeling for the purpose of CWM
- CWM in Practice
  - Management controls: Allocation, Acres, Appropriation
  - Unappropriated flows
- Conclusions

# CWM in Modeling

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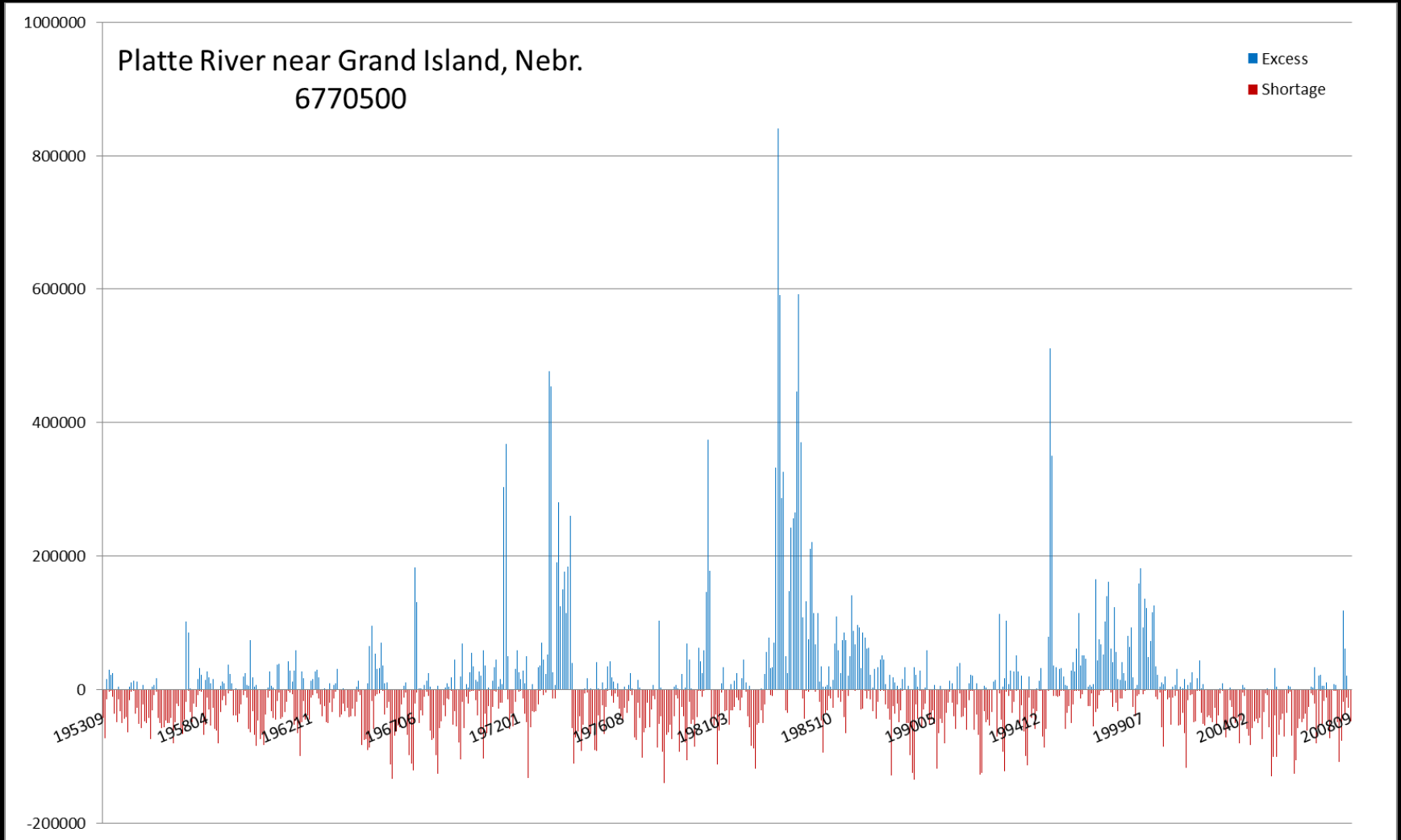


# CWM in Practice

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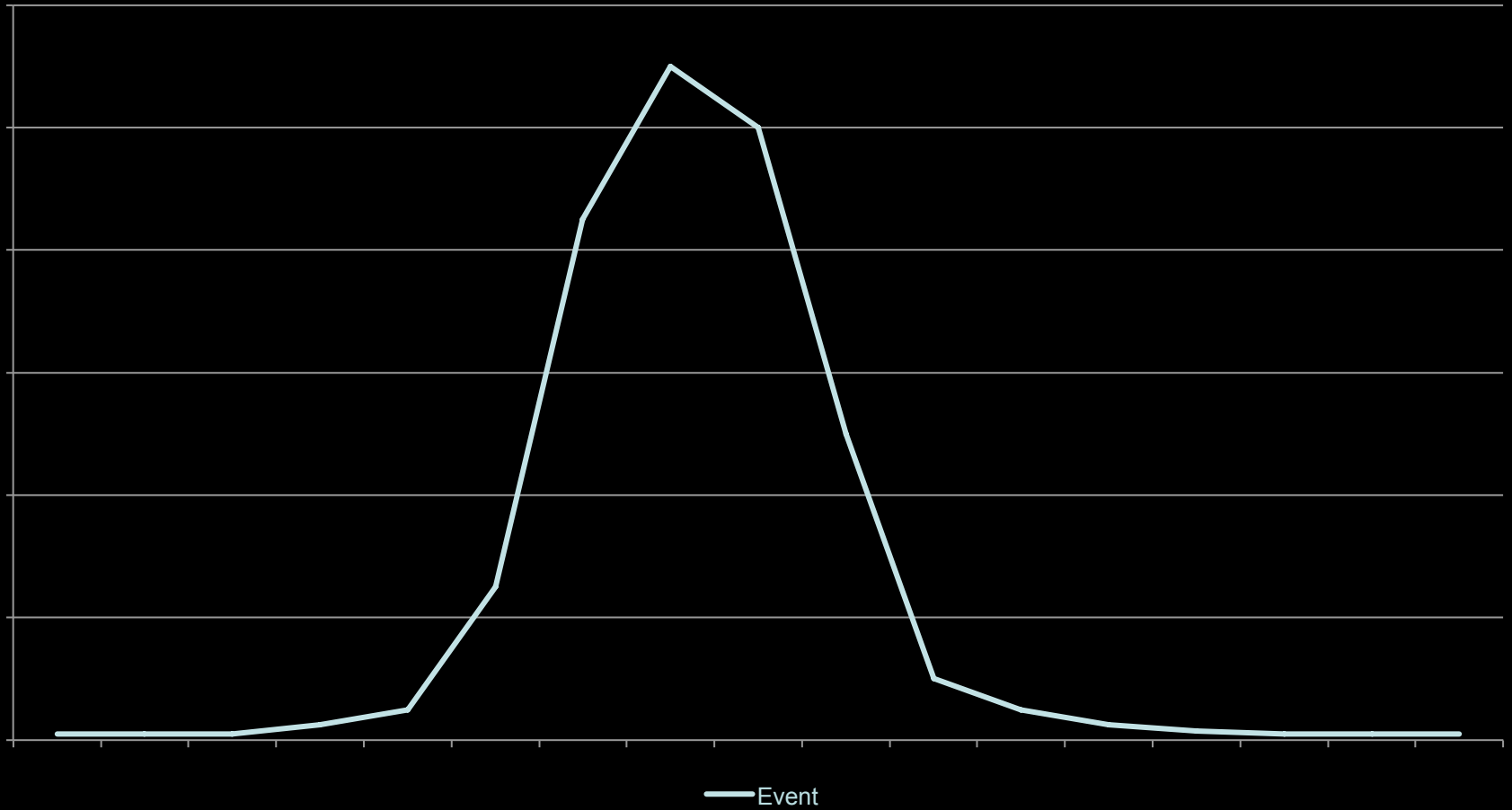
- Unappropriated Flows

# Unappropriated Flows



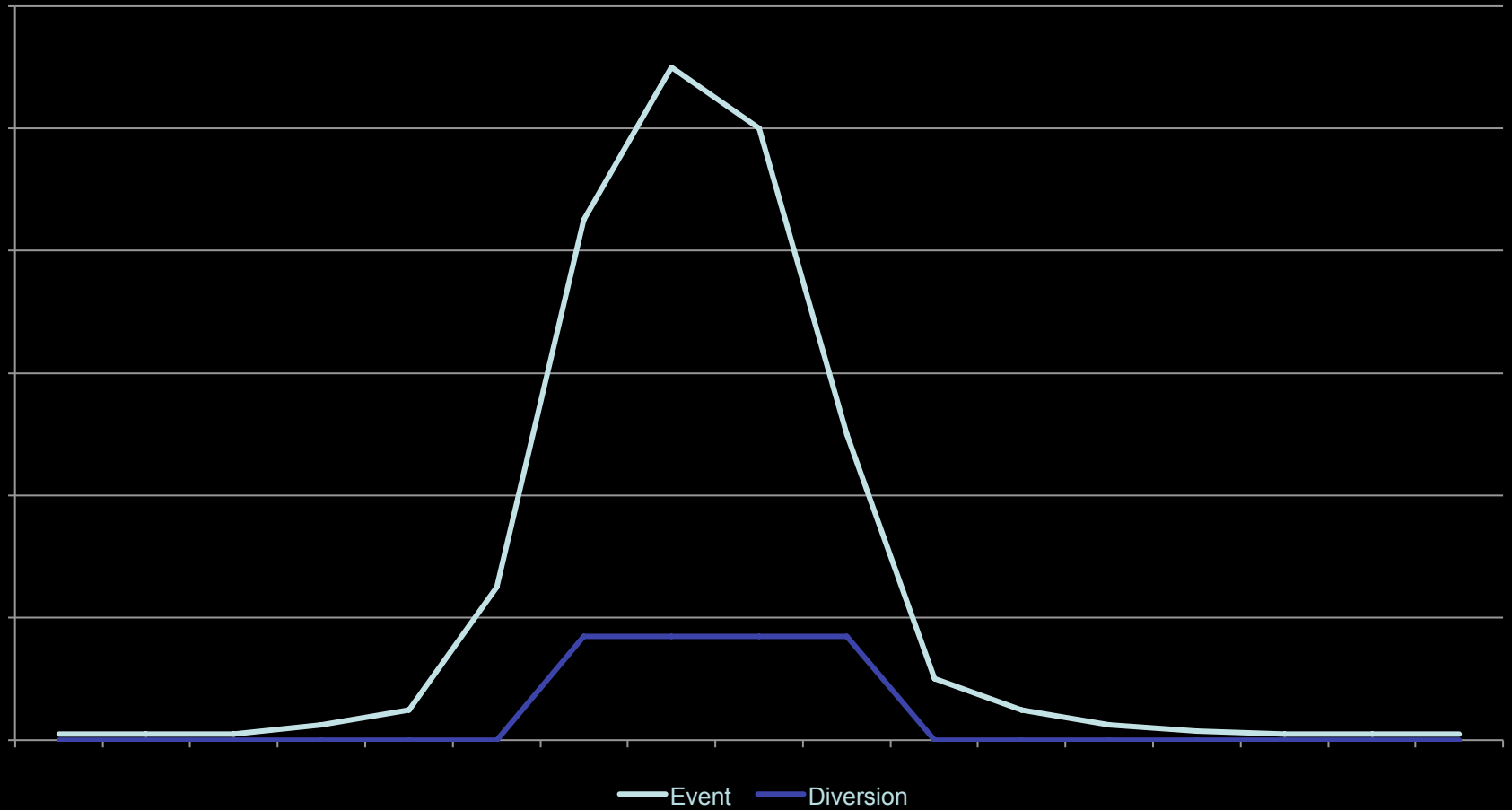
# Event

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# Event

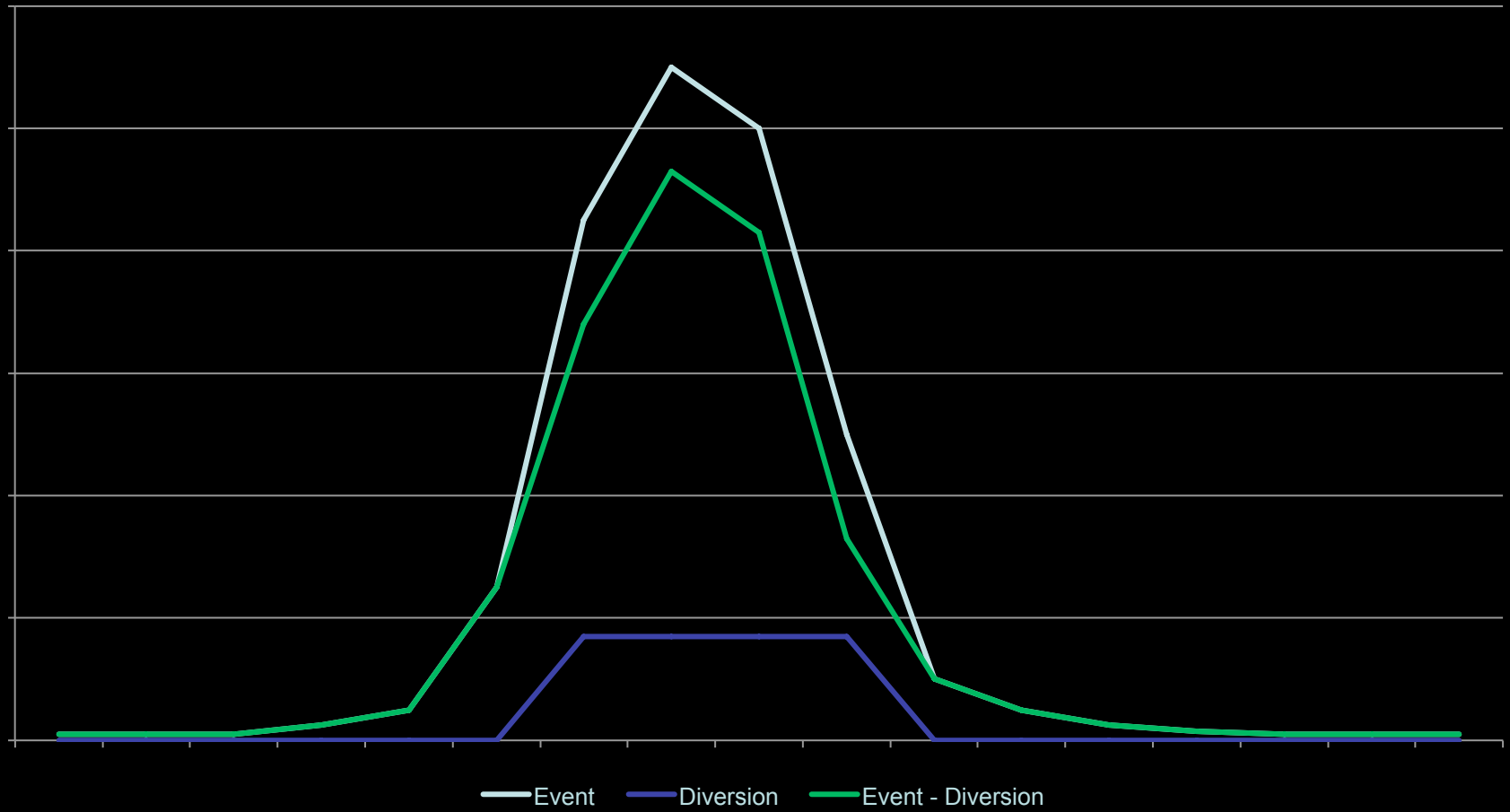
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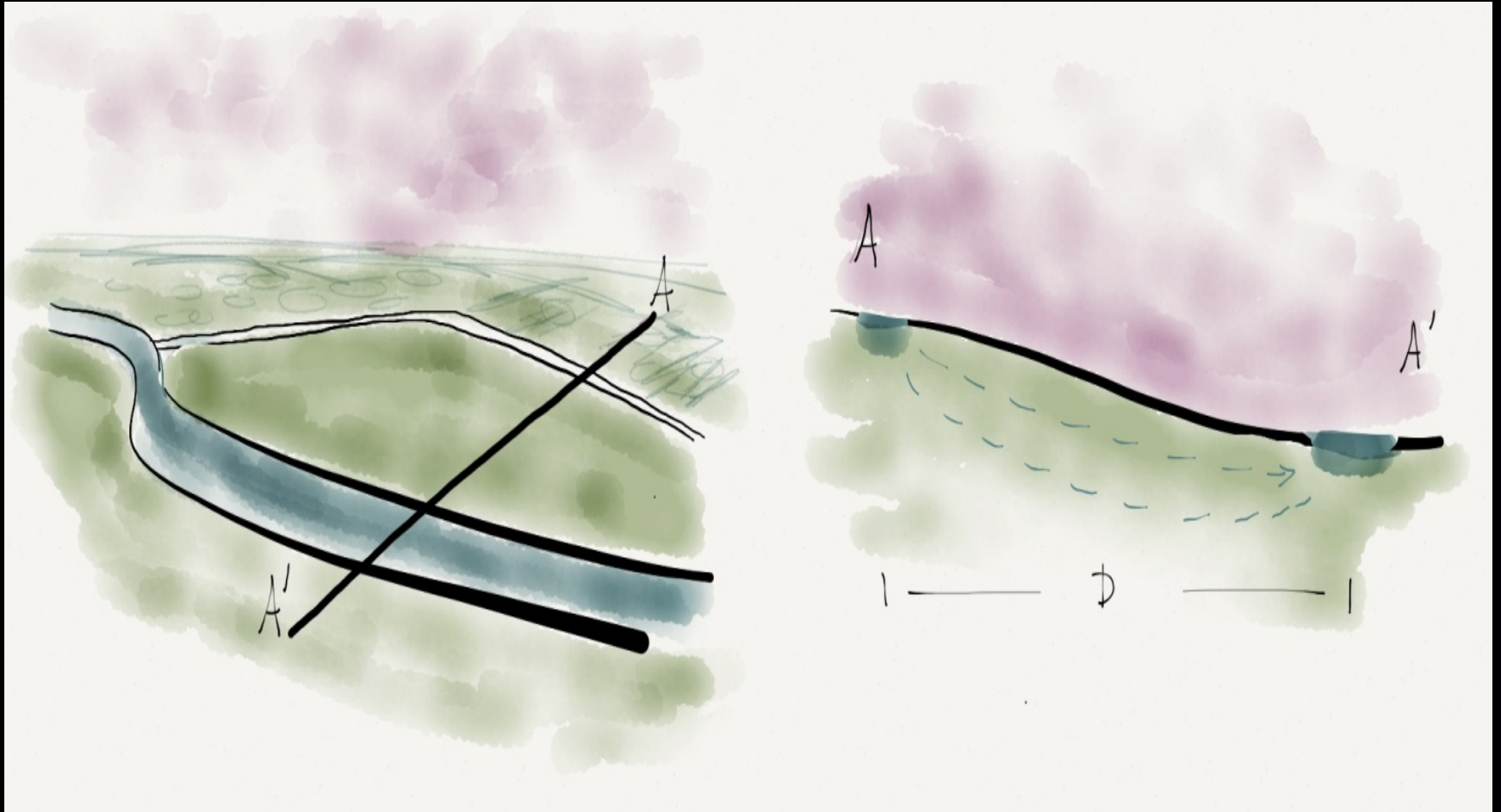


# Event

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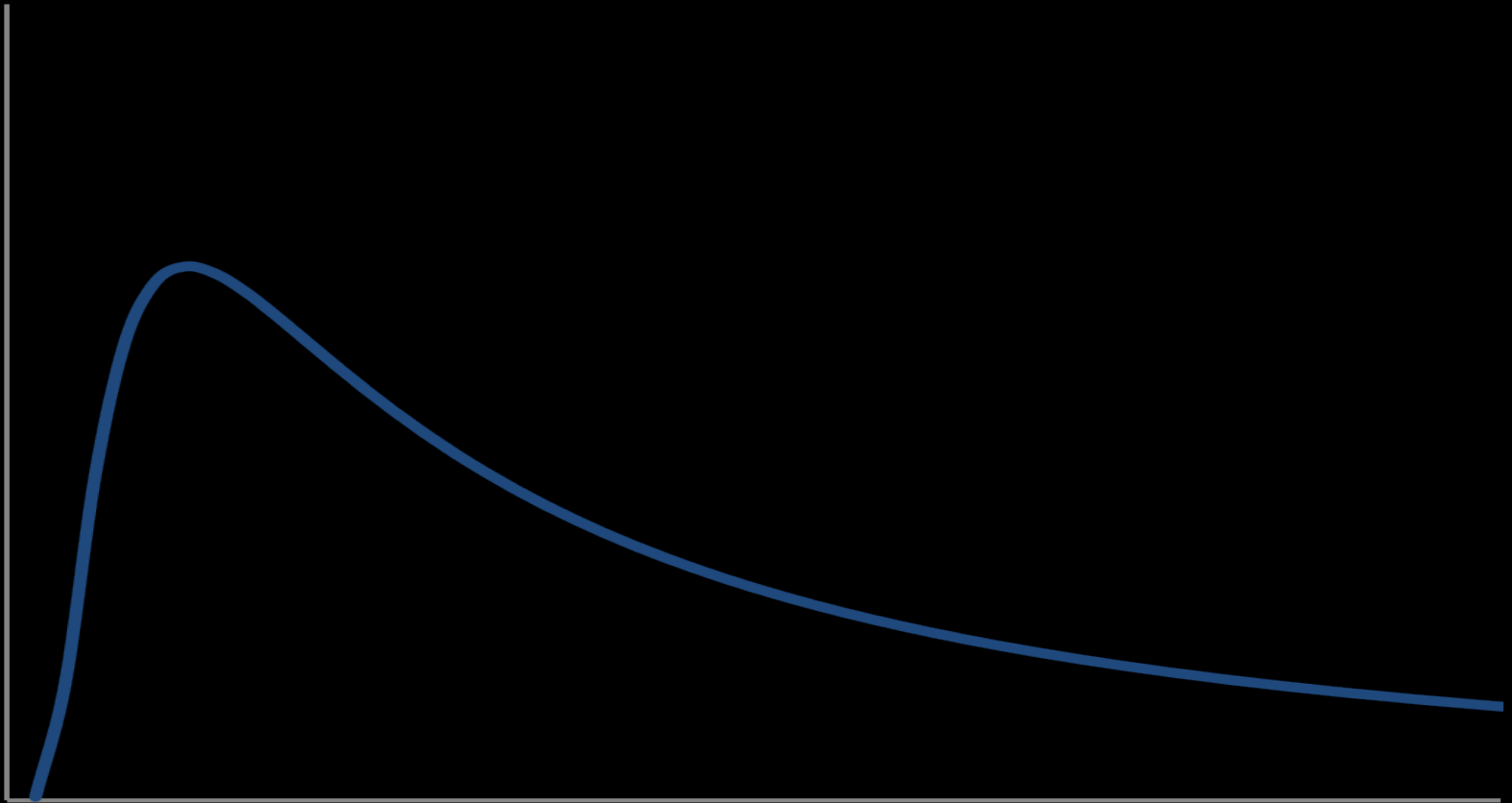


# GW Storage and Return



# Return Flow Accretion

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# 2011 Demonstration

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Project successes:

1. Diversion: 200,000 acre-feet
2. Seepage: 90,000 acre-feet
3. 10 year Accretion: 20,000 acre-feet

# Conclusions

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1. Modeling for CWM requires sophisticated tools to reduce uncertainty and understand temporal and spatial effects of actions
2. Nebraska has tools in place or in development to support meaningful assessment of CWM actions
3. Nebraska is actively managing its water resources in ways that its tools will help explain





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