

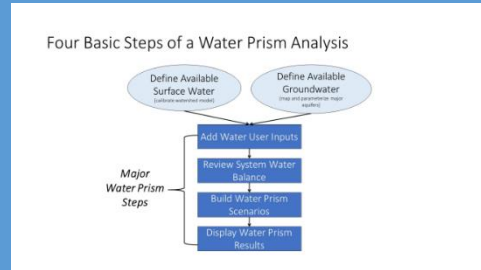
## Need: Basin-scale Collaborative Water Planning



Energy and food production, as well as ecosystem protection, depend on freshwater supply. Under ...

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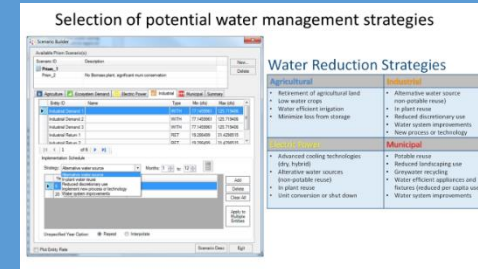
## Applying Water Prism



Water Prism includes an evaluation of both surface ...

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## Development of Water Management Strategies



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## Case Study Applications

Water Prism was applied to three prototype watersheds in the United States:

- Muskingum River Basin (Ohio) ~8,000 mile<sup>2</sup>
- Green River Basin (Kentucky) ~ 9,200 mile<sup>2</sup>
- Big Cypress/Sulphur Basin (Texas) ~7,300 mile<sup>2</sup>



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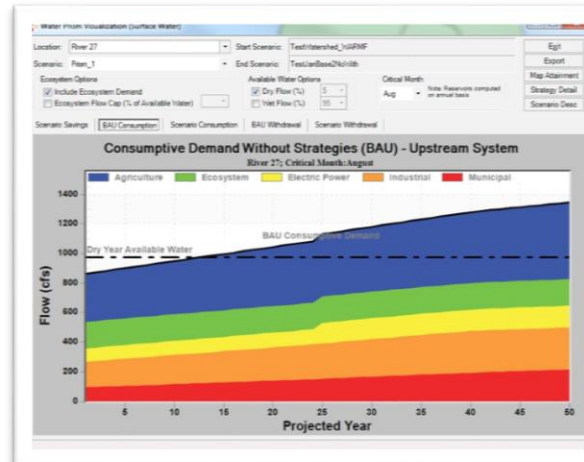
## Water Prism Framework

Water Prism is a highly visual, yet computationally sound a watershed-scale decision support system for:

- Understanding and verifying water risks
- Exploring water saving benefits across sectors
- Encouraging stakeholder collaboration
- Computing regional-scale water balance
- Projecting consumptive and withdrawal demands for 40- to 50-year horizon

It provides a watershed-scale assessment of water ...

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## Baseline Consumptive Demand Risk

About This Experimental Interactive Poster

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## Promoting Stakeholder Collaboration and Education

Potential Advantages of Water Prism:

- Identification of **local** water issues and basin risks;
- Comparison and understanding of **consumption** and **withdrawal** risks;
- Assessment of **reasonableness** of environmental flow limits;
- Comparison of water conservation and land use change **strategies**;
- A **single framework** for evaluation of multi-sector water uses
- Facilitation of effective **stakeholder collaboration** to develop sustainable water strategies.

**Water Prism: A Decision Support System** for Examining Strategies to Address Water, Energy, Food and Ecosystem Security Challenges  
*CWEMF Poster Session – 12 April 2016*

Robert A. Goldstein



Laura Weintraub

Paul L. Freedman

Theodore A.D. Slaweki

