## This presentation premiered at WaterSmart Innovations

watersmartinnovations.com



## How Can Water Efficiency Improve Stream Flows?

Water Smart Innovations Conference October 6, 2011

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## What is it?

A joint project of :

- The Alliance for Water Efficiency
- The Environmental Law Institute
- American Rivers

Funded by:

 The Walton Family Foundation's Freshwater Initiative Strategy



#### Our focus: Colorado River basin







## **Our questions**

- Has this already been done?
- Legal issues?
- Practical challenges?
- Opportunities?



## **Case studies**

- Deschutes River, OR- role of nonprofit
- Grand Valley, CO-modernizing irrigation
- Manastash Creek, WA-agricultural efficiencies
- Cedar River, WA-Long term conservation
- N Blackfoot River, MT-individual efforts
- Russian River, CA-more natural flows



## What the cases tell us

- 1. External drivers often prompt action
- 2. Creative funding is key to success
- 3. Cooperation multiplies benefits and success
- 4. Water efficiency is just one part of package
- 5. Scale and location are site-specific



## Grand Valley, CO



# Legal setting

- Law of the river is a framework
- Federal influence and management are significant
- Each state's prior appropriation law differs
- Assessment is needed case by case



## Colorado River basiro





## **Practical challenges**

- Legal obstacles
- Institutions and motivations
- Economics and finance
- Physical and environmental
- Water use
- Many challenges suggest incentives or strategies



# How to forge a link

- Attitude, trust, willingness counteract obstacles
- Partnerships and leadership are key
- External drivers not required
- Money not the only factor
- Actual law and perception of it can differ
- Timing and location, not just volume, matter



## What makes for success

- Clearly identified stream flow stretch and need
- Water efficiency program that produces water when and where needed



### **Colorado River basin**



## Water efficiency factors

- Need to translate annual water savings to real- time stream flow benefit
- Volume
- Timing day and season
- Location withdrawal and return
- Legal protections and water rights
- Part of water management package



## What makes for success

- Willing partners
- Champion for the cause
- Locally tailored approach
- Creative funding
- Defined legal path
- Short term efforts



## Approaches to partnership

- Farmer and nonprofit
- Community with direct river connection
- Modernizing agricultural district
- Three way trades
- Nonprofit catalyst
- Multiple watershed partners



## Setting the stage

- Major legal or policy changes not necessary
- Connecting existing state programs a place to start
- Pilot projects show possibilities
- Upcoming ESA hot spots matter
- Dialogue with conservation practitioners can spark ideas







# Water efficiency and stream flows

- Water efficiency can help improve stream flow
- Possible legally in each basin state
- Willing partners most important
- Tailored incentives for different partners
- Several approaches possible
- Can work in other basins



## Where to get the report

 online on the Alliance for Water Efficiency's home page:







#### Making the Link in Practice



October 2011





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