

Colorado's Water Plan

Colorado Water Conservation Board
July 2015



COLORADO

Colorado Water
Conservation Board

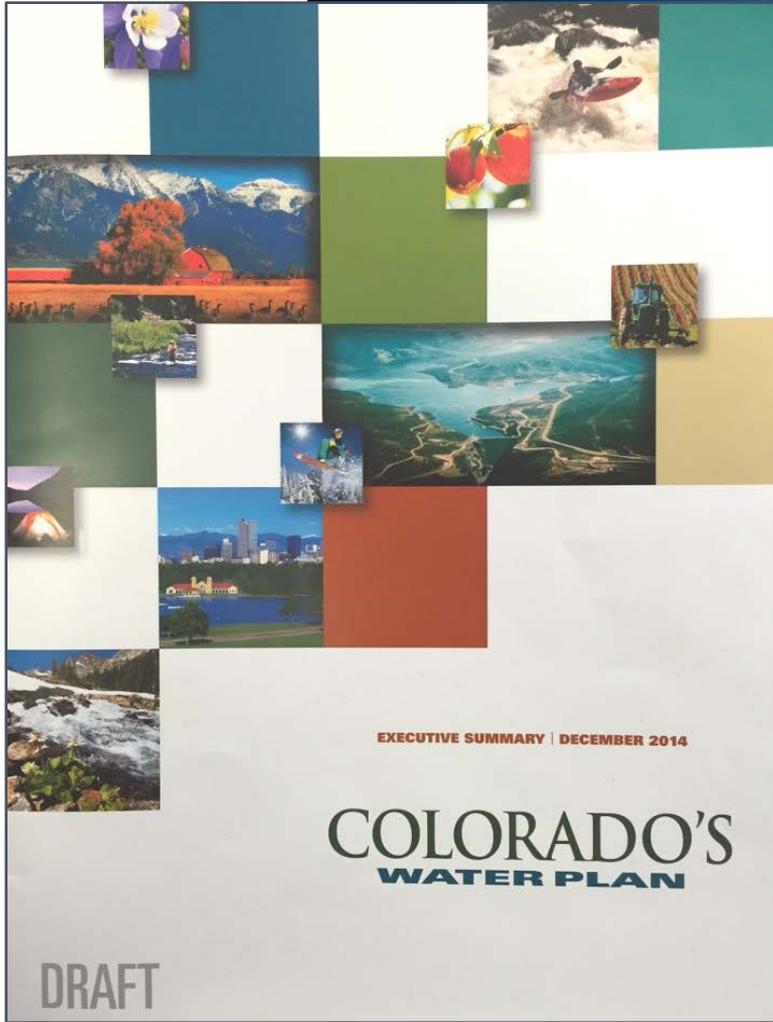
Department of Natural Resources

COLORADO'S
WATER PLAN

Webinar Outline

1. Background
2. Critical Action Plan (Ch 10)
3. Efficient & effective permitting (9.4)
4. More detail on environmental resiliency
5. M&I conservation, reuse, and land use
6. More detail on funding
7. Update on status of Conceptual Framework
8. Strategy for Updating Colorado's Water Plan (Ch 11)
9. Other changes in the second draft of Colorado's Water Plan
10. How to stay involved as the plan is finalized and implementation begins

1. Background on Colorado's Water Plan



EXECUTIVE SUMMARY | DECEMBER 2014

COLORADO'S WATER PLAN

DRAFT



BALANCING OUR WATER NEEDS.

A PLAN
THAT CONSIDERS
STATEWIDE
VALUES.

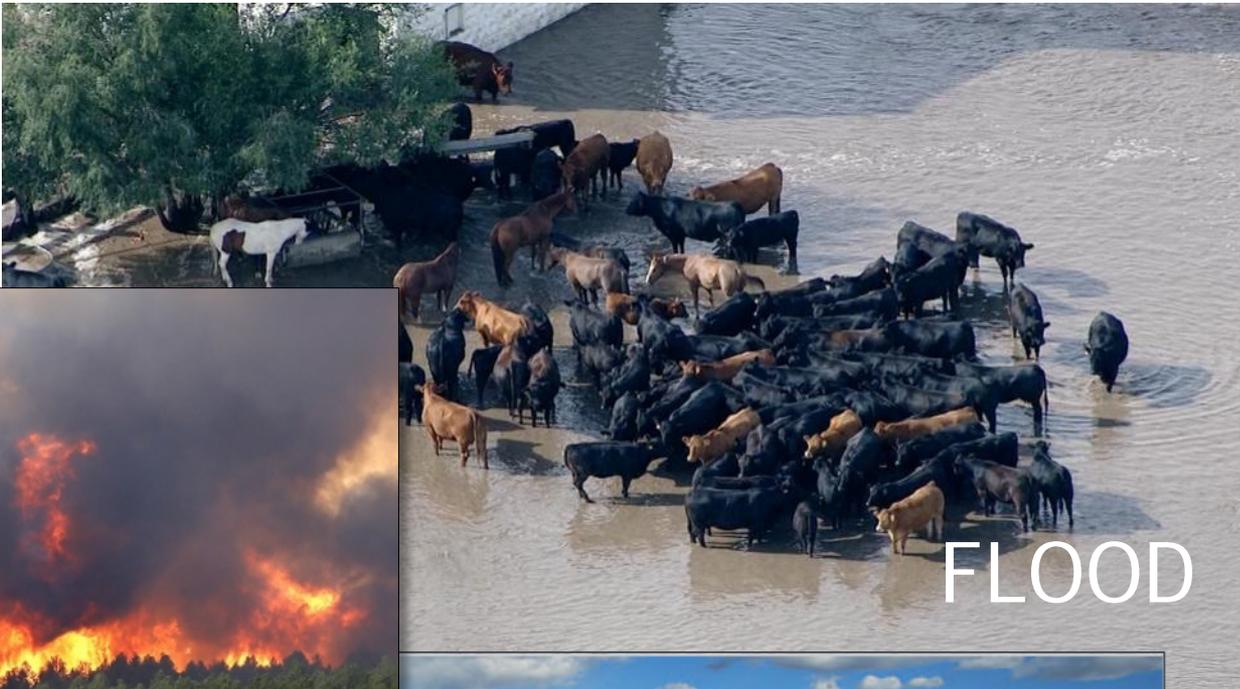


Photo by Jessica Marsan

WE ALL LOVE COLORADO.

SOLUTIONS
FOR OUR
WATER VALUES.

A Land of Extremes



FLOOD



WILDFIRE



DROUGHT

Executive Order Values

- A productive economy that supports cities, agriculture, recreation and tourism;
- efficient and effective water infrastructure; and
- a strong natural environment including healthy watersheds, rivers, streams and wildlife



COLORADO'S WATER PLAN 2015 TIMELINE

(CWP = Colorado's Water Plan)

2015

2nd Draft CWP Released for Public Review
July 7

Final Public Comment Deadline
September 17

All comments received by this date will be
considered in the final Colorado's Water Plan.

Final 2015 CWP Submitted to
Governor by December 10, 2015

We're all Rodney Dangerfield



Agriculture

- Global economics are tough
- Urban landscapes grow onto agricultural lands
- Municipalities and industry buy agricultural water
- Environmental concerns and regulations restrict agriculture
- Everyone thinks they should get agricultural water
- Not enough money

Municipalities

- Permitting is horribly difficult
- Continued growth means more water is needed, but nobody wants it to come from them
- Everyone thinks conservation can solve all municipal use, but people need green space and outdoor use is only about 2% of all water use in Colorado
- Raising rates is often not feasible

Environment

- Everyone wants more water, and that takes away from the environment
- Municipalities and agriculture are resistant to solutions that would benefit the environment
- The environment hasn't had nearly the history of understanding it's water needs that ag and municipalities do
- Not enough money

2. More detail on the Critical Action Plan (Ch 10)

Critical Action Plan

- I. Develop a Multi-purpose Funding Plan**
(funding alignment, assessment, new sources)
- II. Promote Multi-purpose Initiatives** (permitting, water quality, ATMs, meet gaps, storage/infrastructure)
- III. Promote Vibrant and Sustainable Cities**
(conservation/efficiency, reuse, land planning)
- IV. Address Agricultural Viability and Efficiency**
(viability, conservation/efficiency)
- V. Support a Strong Environment and a Robust Recreation Industry** (imperiled species, economic values, protect healthy environments)
- VI. Prepare for an Uncertain Future** (planning, critical watersheds, natural disasters, compacts, climate change)
- VII. Advance Education and Outreach**

Example of Action Plan

- e. **Promote Additional Storage and Infrastructure:** Assess and promote opportunities for multi-purpose and multi-partner storage projects that address strategic needs.

Critical Actions to Promote Storage	Section	Partners	When	Type
1. Provide financial support to technical and practical innovations in the use of aquifer storage and recovery where it is practicable.	6.5	CWCB	Ongoing	Programmatic
2. Assess storage opportunities to determine where existing storage can and should be expanded or rehabilitated to prepare for climate change, improve sharing and use of conserved water, and meet Colorado's compact obligations.	6.5	CWCB, DWR, local partners	Near-term	Programmatic
3. Prioritize grants and loans to support the implementation of BIP identified multi-purpose projects and methods, taking into consideration locally identified geographic and/or seasonal gaps.	6.5, 6.6	CWCB, BRTs	Near-term	Funding

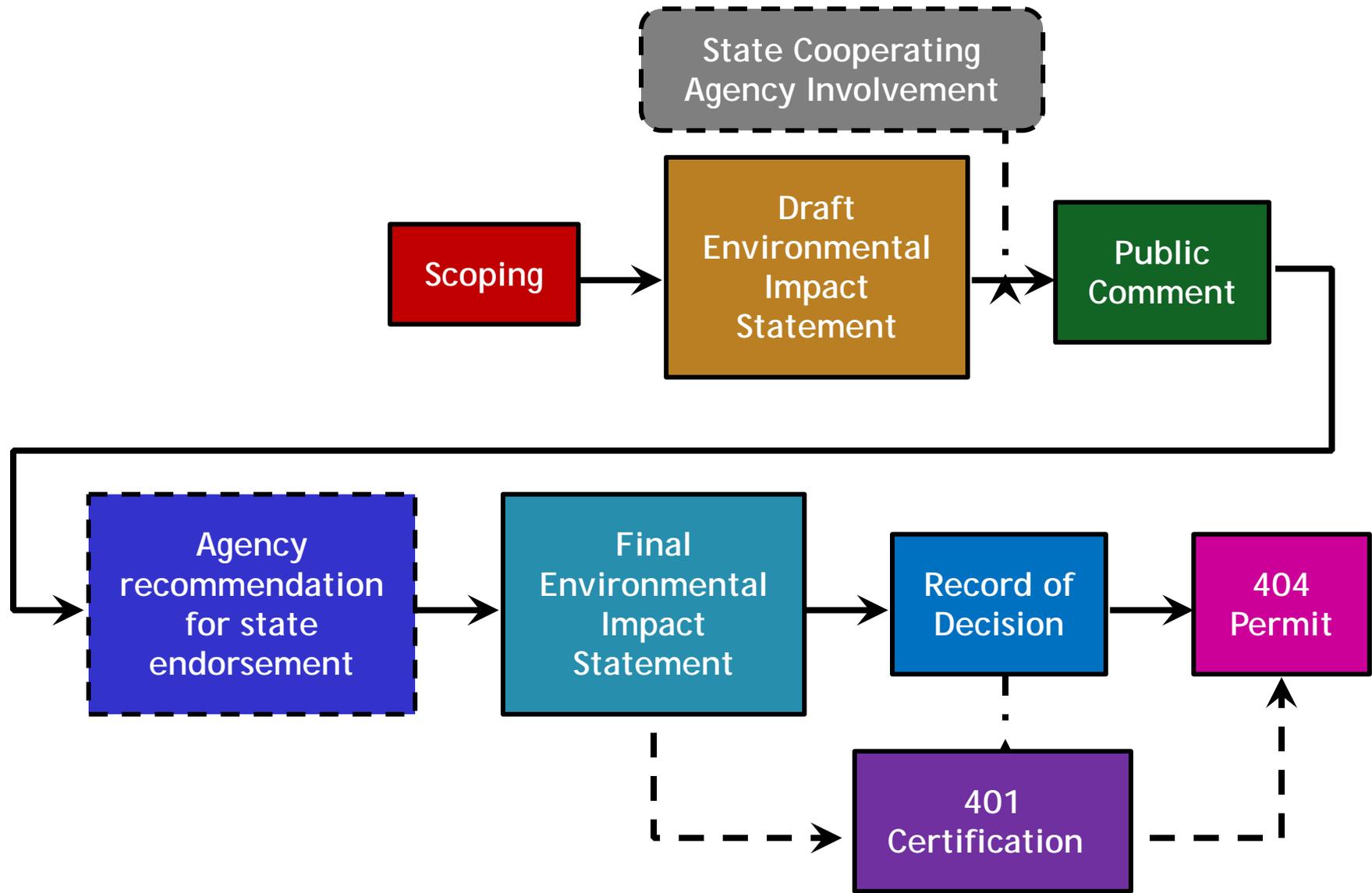
3. More detail on Section 9.4: Permitting

Permitting Actions:

- Conduct a series of lean events among state and federal agencies and stakeholders in order to improve the efficiency of the permitting process by eliminating duplication and eliminating redundant review efforts,
- Clarify the path to state endorsement,
- Indicate the need to determine a lead state agency for each major category of issues related to water project permitting
- Plan to create a permitting handbook is explored within the section,
- Ensure that state agencies actively participate as cooperating agencies from the outset of the regulatory process



Proposed Process



* If 401 certification occurs before the ROD, it will automatically be a conditional certification w/ the first condition being if the underlying assumptions of the FEIS change or if the preferred alternative changes as part of the ROD, the 401 cert. will need to be completed again after the ROD.

4. More detail on environmental resiliency

Environmental Resiliency



Resilience of a stream or watershed can be measured as an ecosystem's ability to recover function after a disturbance, whether acute or chronic.

Stream Management Plans

A stream management plan should:

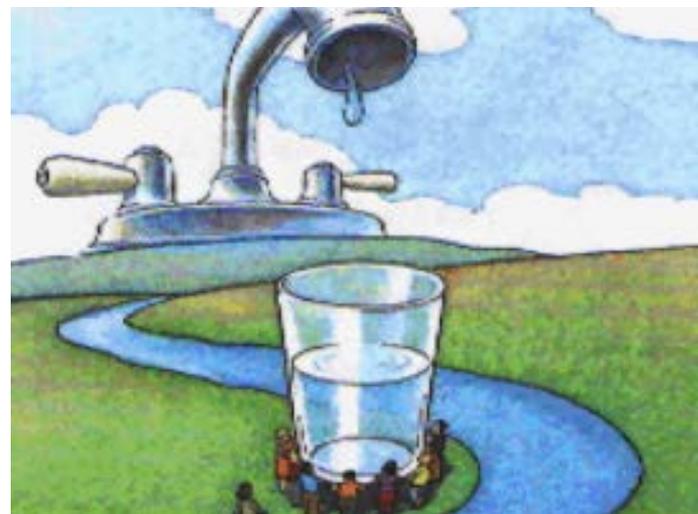
- (1) involve stakeholders to ensure their acceptance of the plan;
- (2) assess existing geomorphic conditions at a reach scale;
- (3) identify flow needs for environmental and recreational water uses given appropriate geomorphic conditions;
- (4) incorporate environmental and recreational values and goals identified in a basin roundtable's BIP; and
- (5) identify actions to maintain or improve flow regimes. Such plans can provide a framework for decision-making and project implementation related to environmental and recreational water needs for basin roundtables, local stakeholder groups and decision makers.

5. Municipal & Industrial Conservation, Reuse, and Land use

Municipal Water Conservation and Efficiency Stretch Goal

Reduce Colorado's projected 2050 municipal water demands by 400,000 acre feet statewide.

- **Benefits:** A stretch goal is in the state's best interest as part of a responsible and sustainable water plan.
- **Achieving the Stretch Goal:** High levels of customer participation will result from new regulatory mandates, technology innovations, incentives, and changing customer behaviors to reduce Colorado's 2050 water demands by 400,000 acre-feet statewide. This level of conservation includes an additional 60,000 acre-feet of demand reduction beyond the no and low regrets recommendations. Based on current conservation plans statewide, the committee believes this is achievable.



Municipal Water Conservation and Efficiency Stretch Goal (continued)

- **Implementation**
 - **Accountability:** For the goal to be successful, water providers will be encouraged to do comprehensive integrated water resource planning, geared toward implementing the best practices at the higher customer participation levels. This will be part of the necessary requirements to achieve state endorsement of projects, and financial assistance.
 - **Best Practice Based:** The goal can only be achieved through the implementation of best management practices at higher customer participation levels. The best management practices will continue to adapt and evolve over time, incorporating innovative technologies, providing opportunities for contribution to these demand reductions
 - **Maintain Local Control:** The goal recognizes the importance of local control and flexibility, while encouraging higher levels of conservation and adoption of innovative practices across the state.
 - **Monitoring:** Tracking demand reductions as part of future SWSI updates will be necessary.
 - **Adaptive Management:** The goal may need to be adapted based on future demand and other factors and incorporated into the portfolios and scenarios over time.

Conservation Toolbox

1. Mandates for dense housing	4. Encourage water providers to do conservation programs	7. Require good planning
2. Regulations requiring conservation	5. Encourage Coloradans to do conservation	8. Fund loans for conservation
3. Require retailers to sell efficient products	6. Encourage local governments to implement water / land use practices	9. Fund grants for conservation

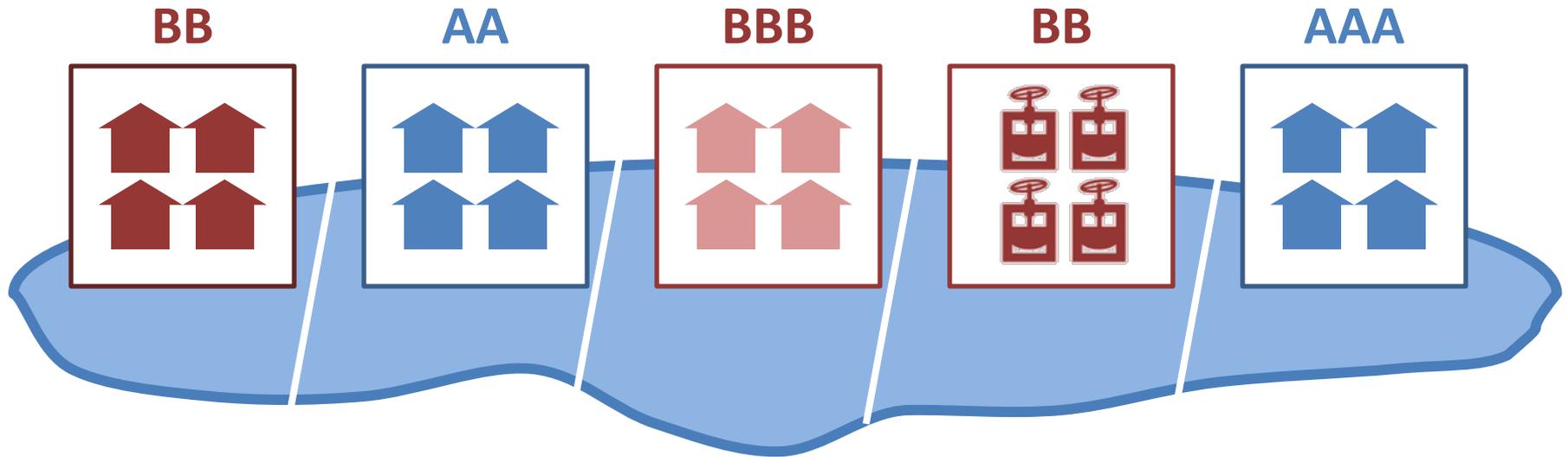
Reuse and Land Use

- **Water Reuse:** Section 6.3.2 was expanded to explore the need for regional reuse options and to clarify the regulatory environment. Section was updated to incorporate the work of the Water Environment Research Foundation.
- **Water and Land Use:** The Section on the integration of land use and water resources planning was expanded based on Senate Bill 15-008, public comment, updated BIPs, and the Colorado Water and Growth Dialogue. Section 6.3.3 also now includes the need for training on water and land use, and the incorporation of land use practices into water conservation plans.



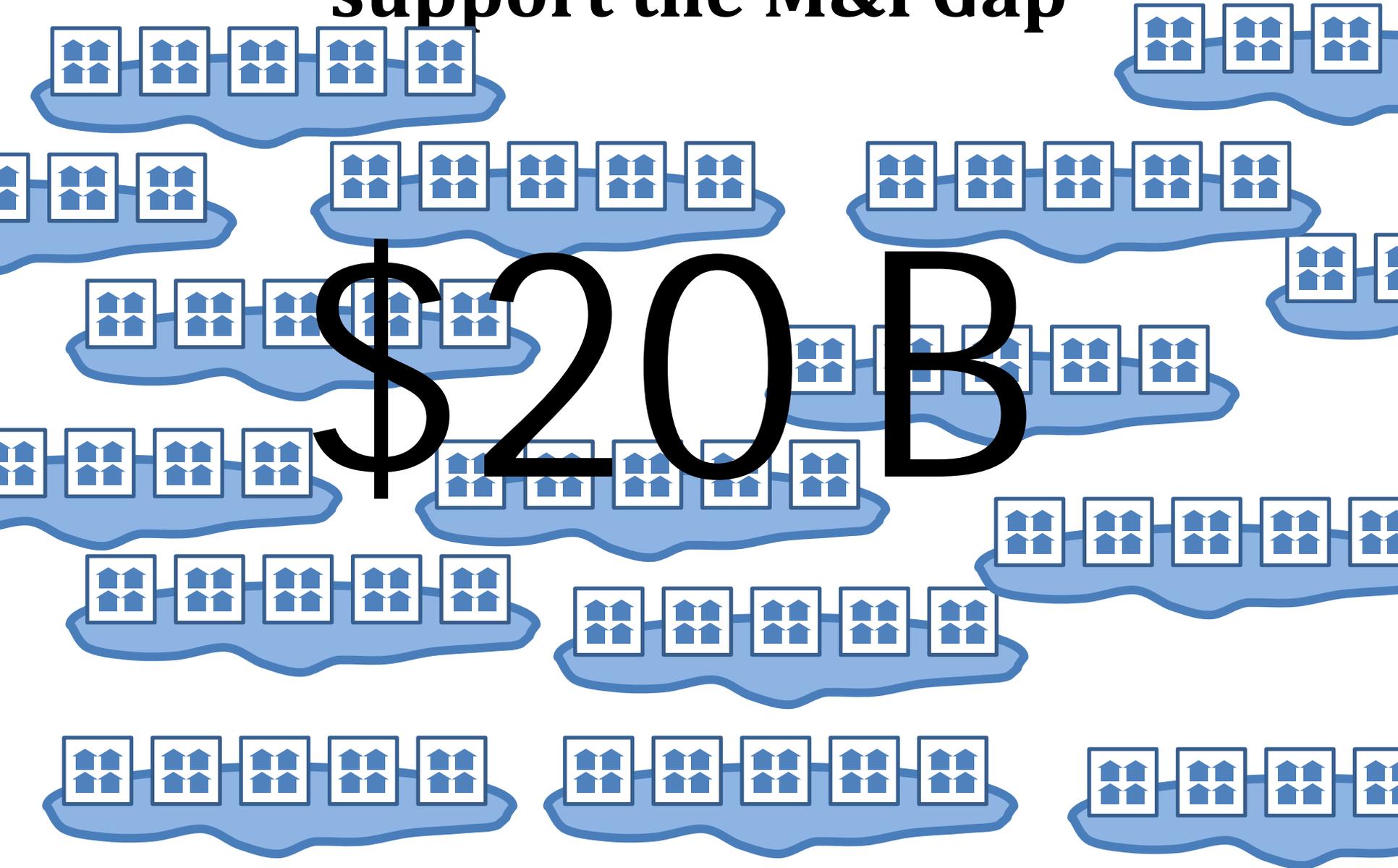
*6. More detail on
Section 9.2
Economics and Funding*

Problem: Multi-partner & multi-purpose projects are discouraged

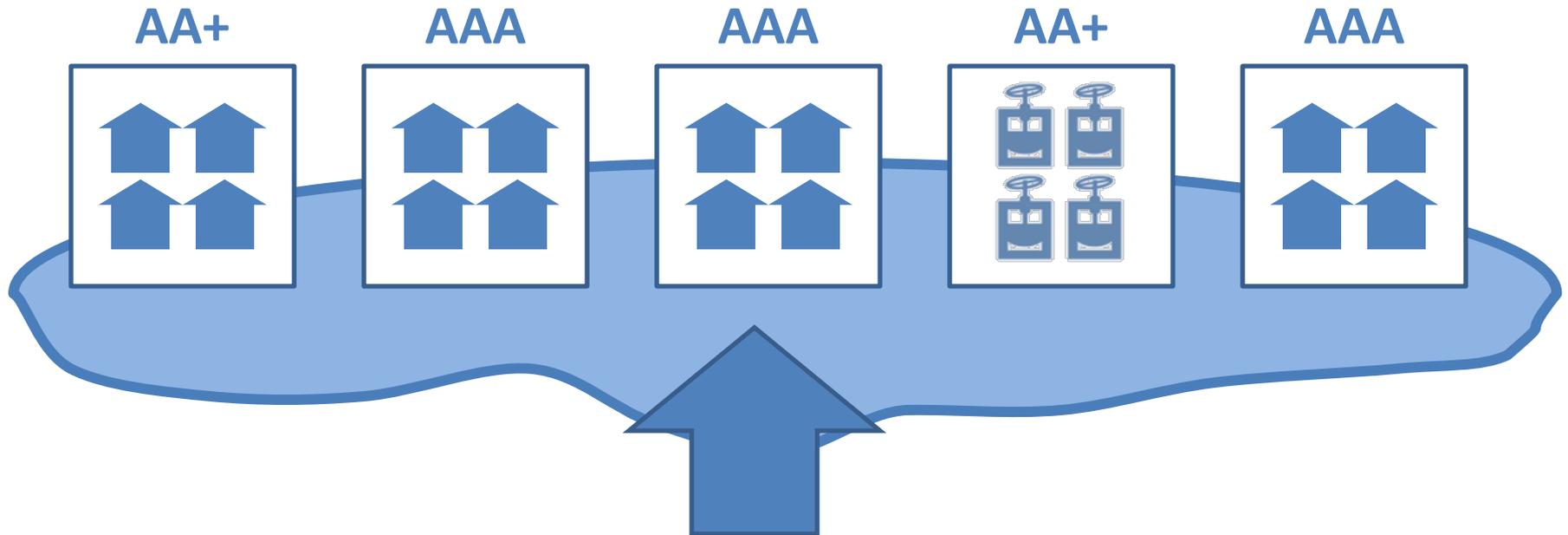


Problem: Insufficient funds to support the M&I Gap

\$20B



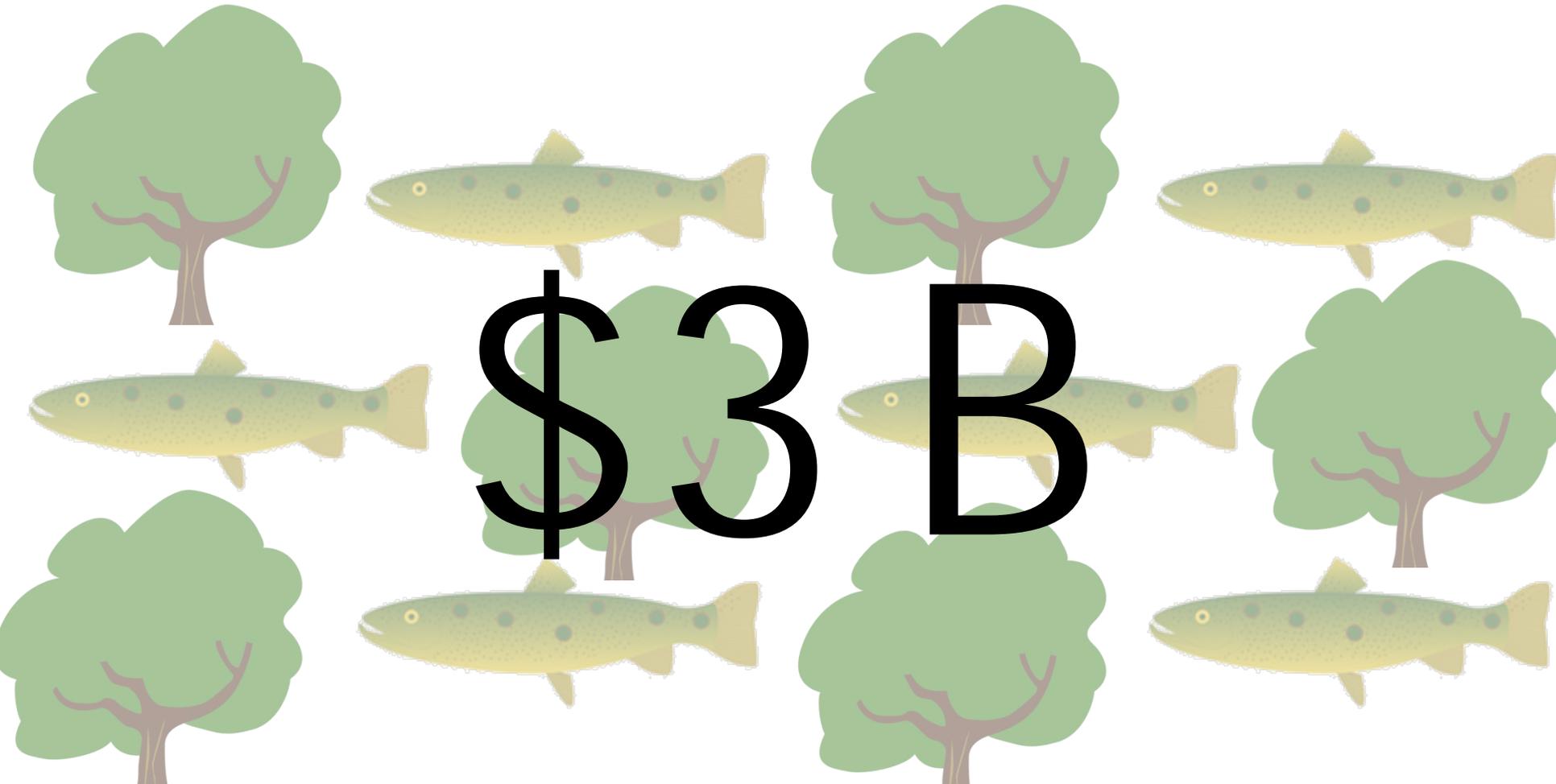
Solution: Repayment Guarantee Fund



Repayment Guarantee Fund

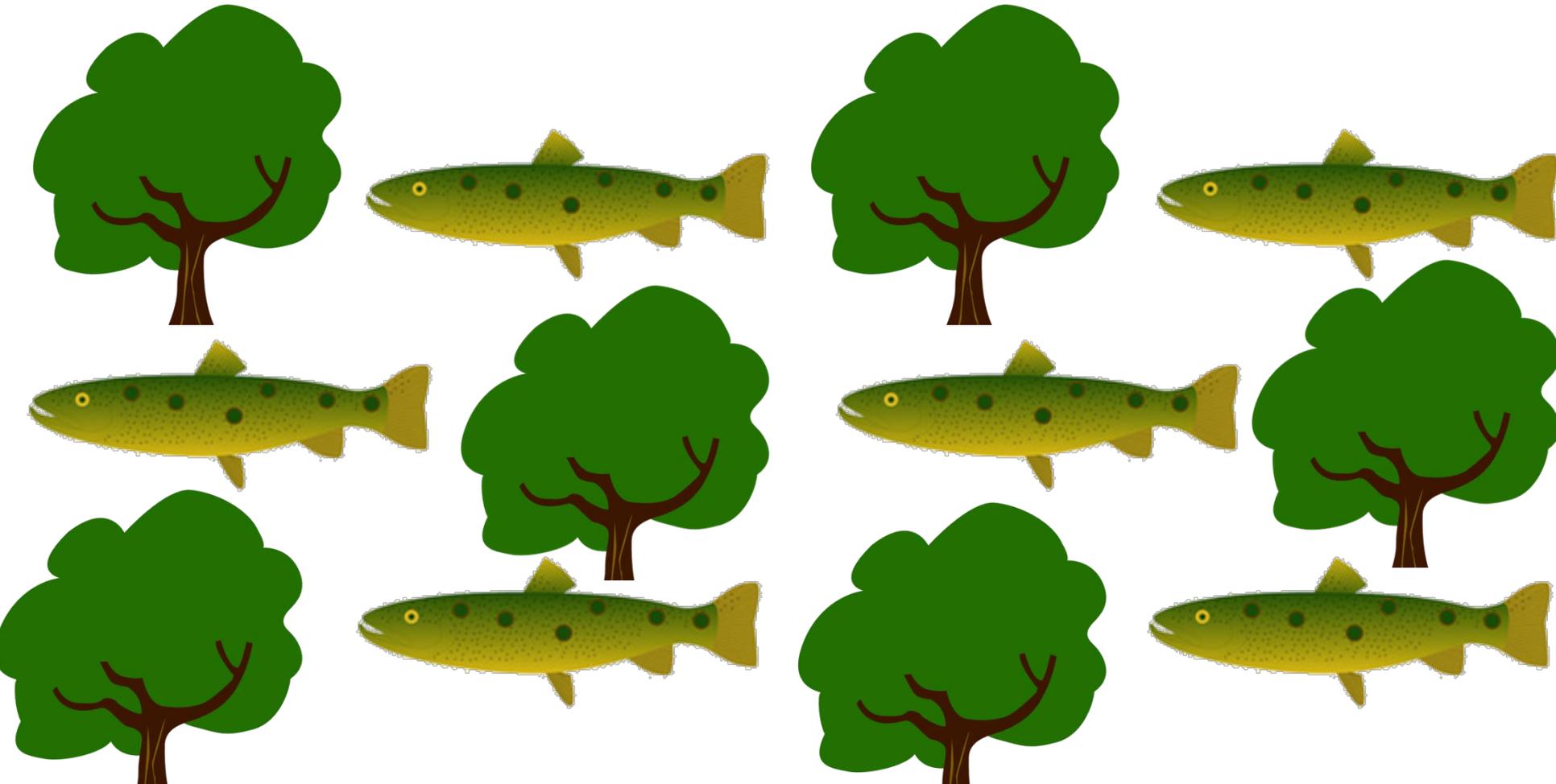
Could be used to
incentivize regional
water authorities

Problem:
**Insufficient funds to support
environmental protection & recovery**



Solution:

Create a Colorado Market for Green Bonds



And there are lots of other needs too

Incentivize &
implement
alternative
transfer methods
\$300 M

Incentivize &
implement
conservation
\$300 M

Pay for up front
costs & planning
\$200 M

Further support
agricultural
viability
\$100 M

Fund water
education &
outreach
\$30 M

Over the next 30 years

What's the funding bucket?

• State bond referendum

Too big an ask; P.T.S.D.

• Mill levy increases

Takes away local options

• Water user fee

Takes away local options

• Insurance tax

Takes away from General Fund

• Initial \$123M

Initial kick-start

• Severance Tax Increase

Volatile, but could provide initial funds

• Container ballot initiative

Long term viability

• Water fixtures, appliances & equipment fee

Potential long term addition

How it could work

Container Fee
\$100M/yr

Initial
\$123M

Funds can grow to support
billions in projects
over time

May need perpetual base
account to bridge the gap

Agriculture Funding

\$100M
grants & loans

Ag. viability &
conservation

Support & Planning Funds

WSRA, ATMs, Ag.
Conservation, E&O

Guarantee Fund

Leverages
\$1B in projects

Green Bonds

Repayment of
\$100M
investment
over time

grants

Prioritize existing
CWCB loans



Recycle as loan is repaid
(Multi-purpose \$\$\$)

Other potential solutions

1. Expand CWCB loan programs' authority to cover some reuse, conservation, environmental, and recreation projects.
2. Initiate a tax credit for homeowners who install efficient outdoor landscapes and irrigation as part of the container fee.
3. Create a P3 center of excellence with incentives for regionalization.
4. Modify legislation to allow for P3s.
5. Extend loan repayment periods.

7. Update on the status of the Conceptual Framework

Colorado River Collaborative Program

- New section within Section 9.1 that describes the need to initiate a program that seeks to prevent a compact deficit from occurring on the Colorado River System.
- Continued efforts on developing the Conceptual Framework are underway and will be incorporated into the final Colorado's Water Plan.

Figure 2

The Colorado River System



*8. Other changes in the
second draft of
Colorado's Water Plan*

Agricultural Viability

The plan explores agricultural viability in Sections 6.3.4 and 6.5. CWCB added new actions to investigate opportunities for ditch-wide and regional planning, support for voluntary flow agreements that use water efficiency practices to increase environmental flows, establishment of an agriculture education and assistance program, and the development of an agricultural transfer evaluation.



Climate Change

A high-altitude mountain landscape with snow-covered peaks and a hiker in the foreground. The sky is clear blue, and the mountains are rugged with patches of snow. A hiker is visible on a snow-covered slope in the lower left.

More detail concerning climate change was added to Chapter 4 and added additional actions to Sections 7.2, 6.5, and 6.6 to proactively identify and address regulatory barriers to climate adaptation and incorporate potential climate change effects into planning for projects and methods.

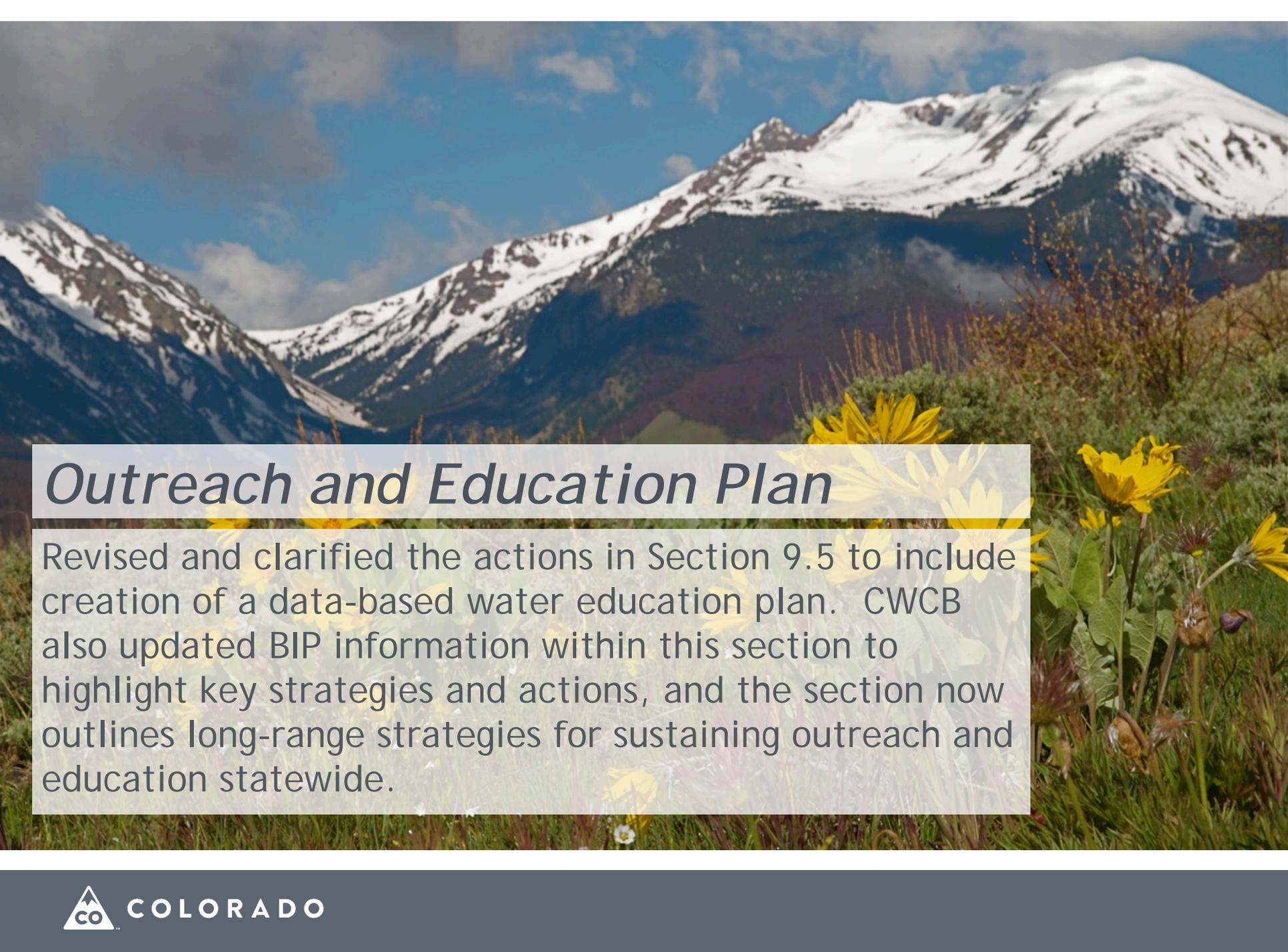
Basin Implementation Plans

Updated several sections based on the final Basin Implementation Plans (BIPs). Within the final BIPs, many of the basin roundtables developed priority lists of projects or refined their pre-existing lists. We now have an in-depth and multifaceted suite of options for each basin. The direct result of this work is that we can close many of our identified water supply gaps strategically, while minimizing the negative impacts.

Alternative Agricultural Transfers

Facilitate Alternative Transfer Methods: Respect property rights and the contributions of the agricultural industry by maximizing options for alternatives to permanent farmland dry-up to share 50,000 acre-feet annually within the next decade.





Outreach and Education Plan

Revised and clarified the actions in Section 9.5 to include creation of a data-based water education plan. CWCB also updated BIP information within this section to highlight key strategies and actions, and the section now outlines long-range strategies for sustaining outreach and education statewide.

9. Strategy for Updating Colorado's Water Plan (Ch 11)

Next Steps for Basin Roundtables

- Engage in SWSI through outreach and review
- BRTs as implementation catalysts
- Continued education and outreach
- BRTs should continue to be proactive and responsive with WSRA grants and continue to serve as a policy forum



Updating Colorado's Water Plan

The CWCB will determine when the next version of the water plan will be completed within the next 5 to 10 years, based on BIP and SWSI progress.





Defining Success - Now

- Together we created a clear path forward and actionable next steps are apparent.
- We brought together work from water interests across the state on actions needed to secure Colorado's water future.
- The public is clearly engaged and their comments are reflected in the plan.
- Agencies are collaborating. State, local, federal, and private water interests and resources are aligning to better respond to changing conditions and support the values of the water plan.
- Some BRTs are already working to implement BIPs (Arkansas, Gunnison, South Platte/Metro, Yampa/White/Green).

Defining Success - In the Future

- Do basin roundtable members believe the plan is an accurate reflection of the BIPs and Interbasin Compact Committee recommendations?
- Are the basin roundtables making progress on the measurable outcomes set forth in the BIPs?
- Is funding as recommended in Colorado's Water Plan falling into place?
- Are the actions outlined in Chapter 10 of Colorado's Water Plan moving forward?
- Is this a plan/process that can continue to adapt and improve as circumstances change in the future?
- Is public awareness and engagement on water issues improving?



*10. How to stay involved
as the plan is finalized
and implementation
begins*

Public Involvement



- Over 24,000 comments submitted
- Over 150 basin outreach meetings
- Over 1,000 regular roundtable meetings
- Nearly 15,000 unique pageviews on website
- SB115 outreach by (WRRC) legislature - more hearings this summer
- CWCB Board meetings through September 2015
- All input and CWCB responses available online

How can you stay engaged in this process?

- Engage with the basin roundtables and CWCB as the water plan process continues and implementation begins.
- Read through the second draft and submit comments online.
- Visit www.coloradowaterplan.com to learn more.



**YOUR
VOICE
MATTERS.**

COMMENT ON
THE DRAFT PLAN
HERE.

We're looking for photos!
Please send them to cowaterplan@state.co.us.



Photo by Travis Harvey, Submitted by CO Dept of Ag



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