Joint IBCC/CWCB Meeting

Denver, Colorado

November 15, 2012

Agenda

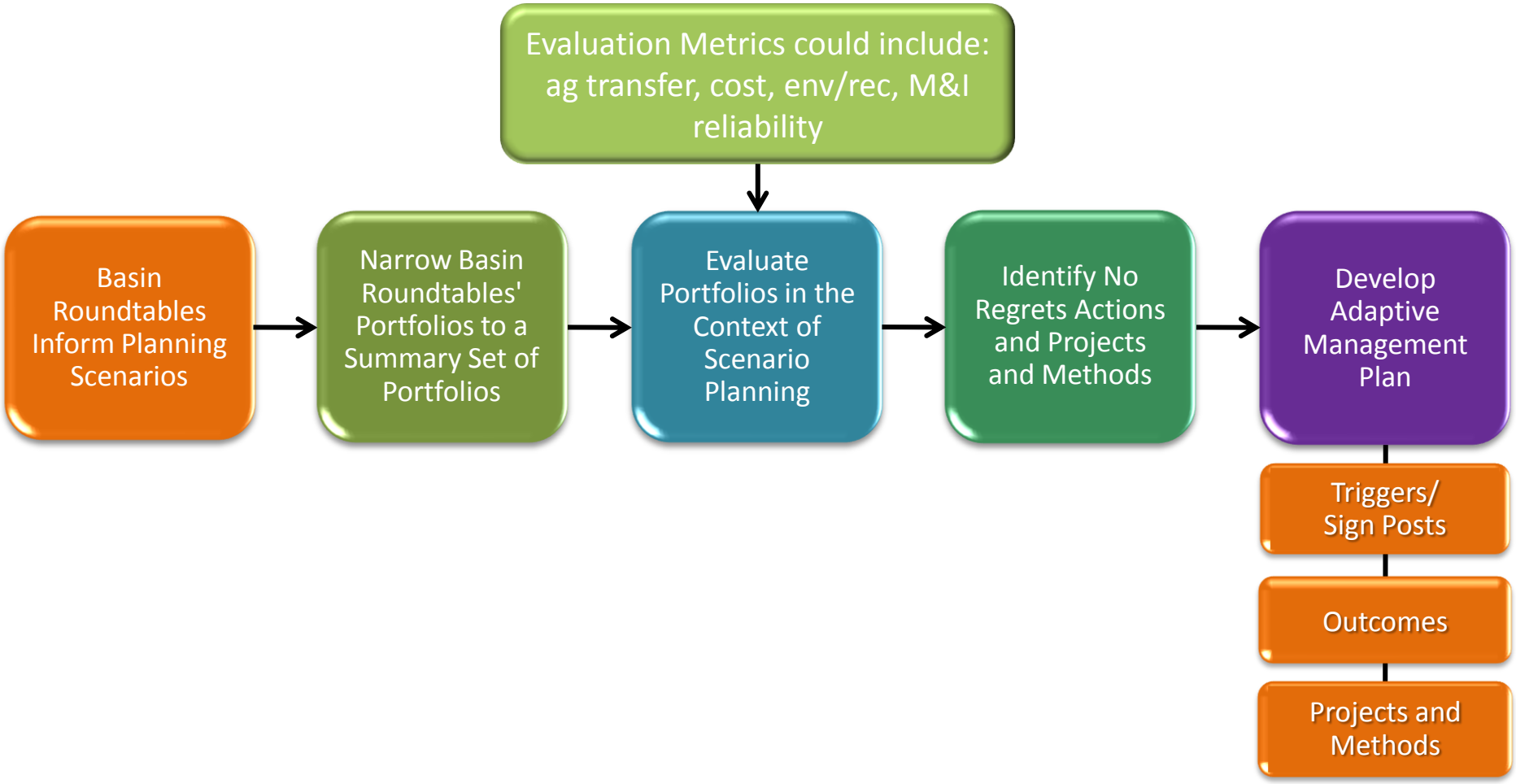
- Welcome & Introductions
- Approach Overview
- Review and Approve Scenarios
- Discuss Implementation of “No Regrets” Actions
- Governor Hickenlooper
- Continue to Discuss Implementation of “No Regrets” Actions
- Update on Alternatives to Permanent Agricultural Transfer Methods Program
- Next Steps

Meeting Objectives

- Joint discussion with CWCB
- Review and approve scenarios developed by Task Group
- Begin to increase specificity on implementation of “no regrets” actions

Approach Overview

IBCC's Approach to Scenario Planning and Adaptive Management



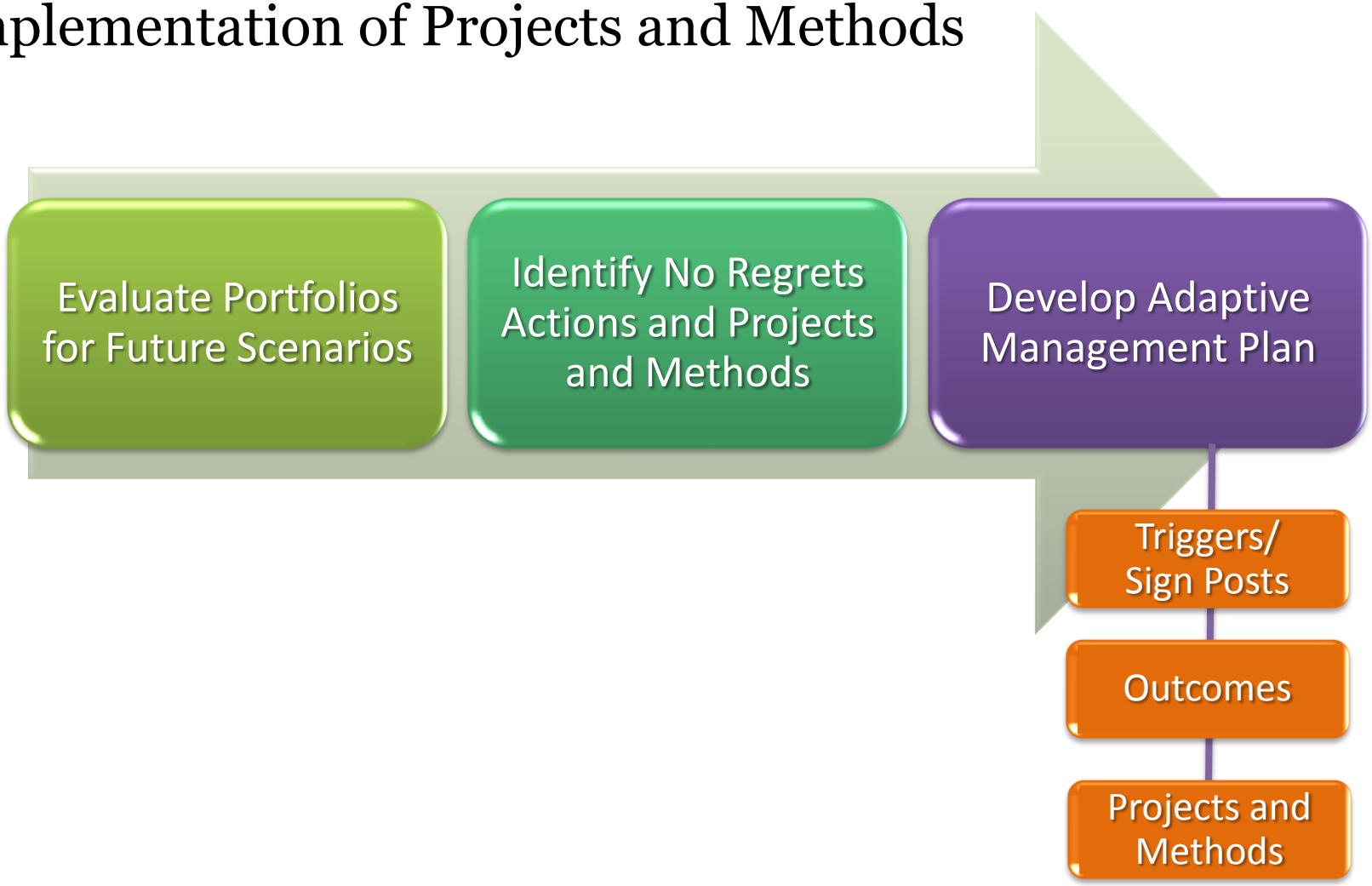
Current Approach

1. Summarize roundtables' portfolios and the range of each portfolio element
2. Get specific about projects and actions that make up a portfolio
3. Apply those specified portfolios to the five scenarios developed by the IBCC
4. Use a mix of qualitative and analytical tools to evaluate the portfolios
5. Some portfolios will do better in some scenarios than in others
6. This will help us understand what the low regrets/no regrets actions may be
7. Use the metrics and best professional judgment to launch a policy level discussion about how the portfolios could be improved and then improve them

Scenario Planning and Adaptive Management Definitions

Scenario Planning	A process to formulate and evaluate future uncertainties regarding demand and supply
Scenarios	Alternative futures (water demand and supply) that portfolios will be tested against
Portfolios	Different combinations of strategies to address future M&I demands
Strategies	Groupings of similar projects and methods (e.g., "four legs of the stool," IPPs, Conservation, Ag Transfers, and New Supply)
Projects and Methods	Specific actions that help implement a strategy (e.g., IPPs, roundtable projects and methods, long-term conceptual projects)
Metrics	Evaluation indicators that assess how the portfolios relate to meeting M&I demands, nonconsumptive needs, and agricultural needs
No Regrets Actions	Near-term strategies or projects and methods that produce benefits under most future scenarios
Adaptive Management	The process of using triggers and outcomes to develop phased implementation of future projects and methods
Triggers	Decision points based on scenarios used to identify possible outcomes
Outcomes	Varied future paths based on triggers and used to establish phasing of future projects and methods

Adaptive Management will lead to Phased Implementation of Projects and Methods



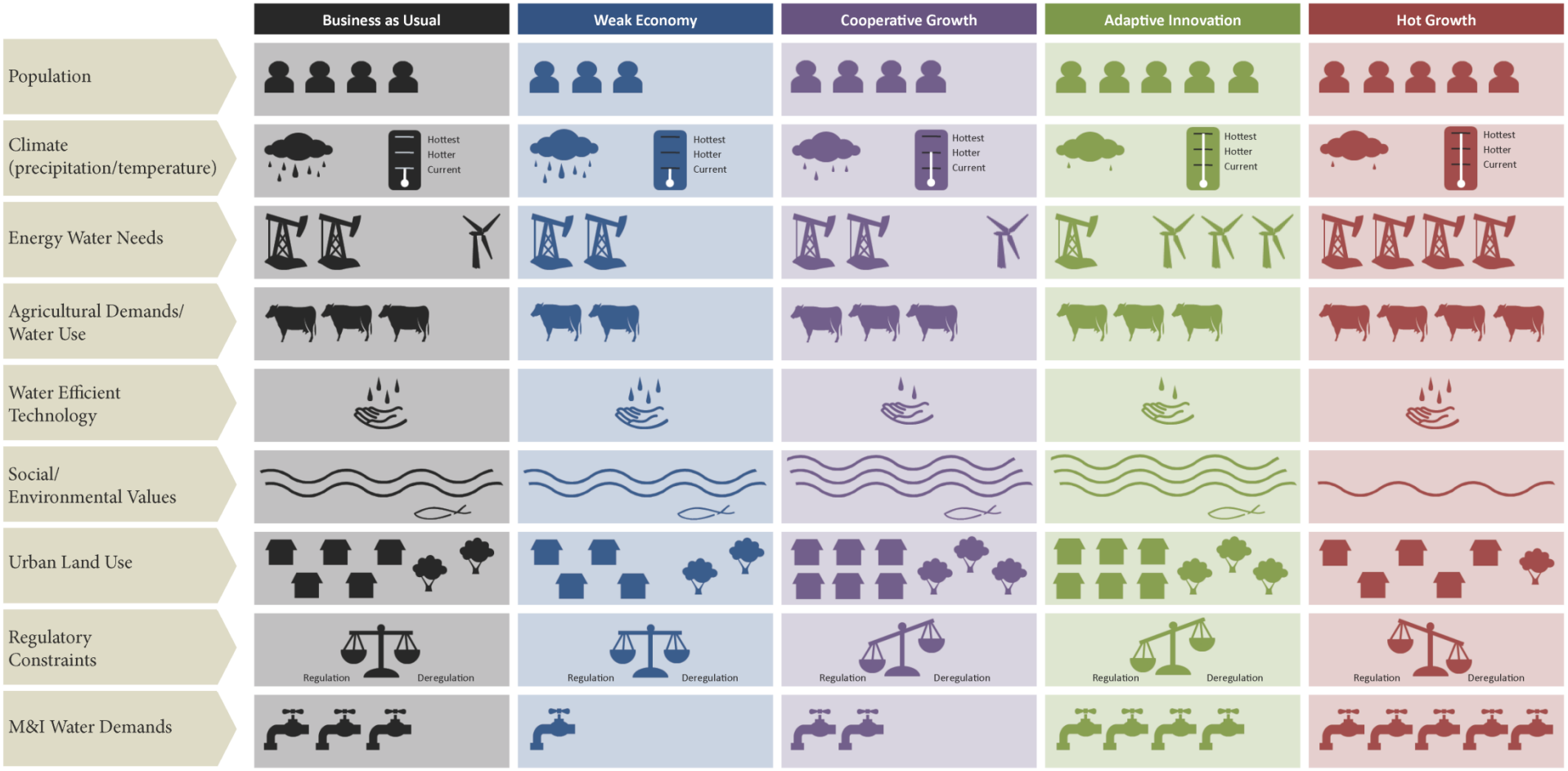
Examples of Adaptive Management Triggers/Sign Posts

- Are M&I demands tracking low, medium, or high?
- Is supply reliability lower or higher on the east slope?
- Is supply reliability lower or higher on the west slope?
- Are environmental flows being met (i.e., ISFs, RICDs, ESA)?
- Are storage mechanisms in place to develop Colorado River Water?
- Has use of Denver Basin aquifer decreased?
- Is agricultural dry-up occurring?
- Have ESA Recovery programs been successful?
- Are we providing future options?

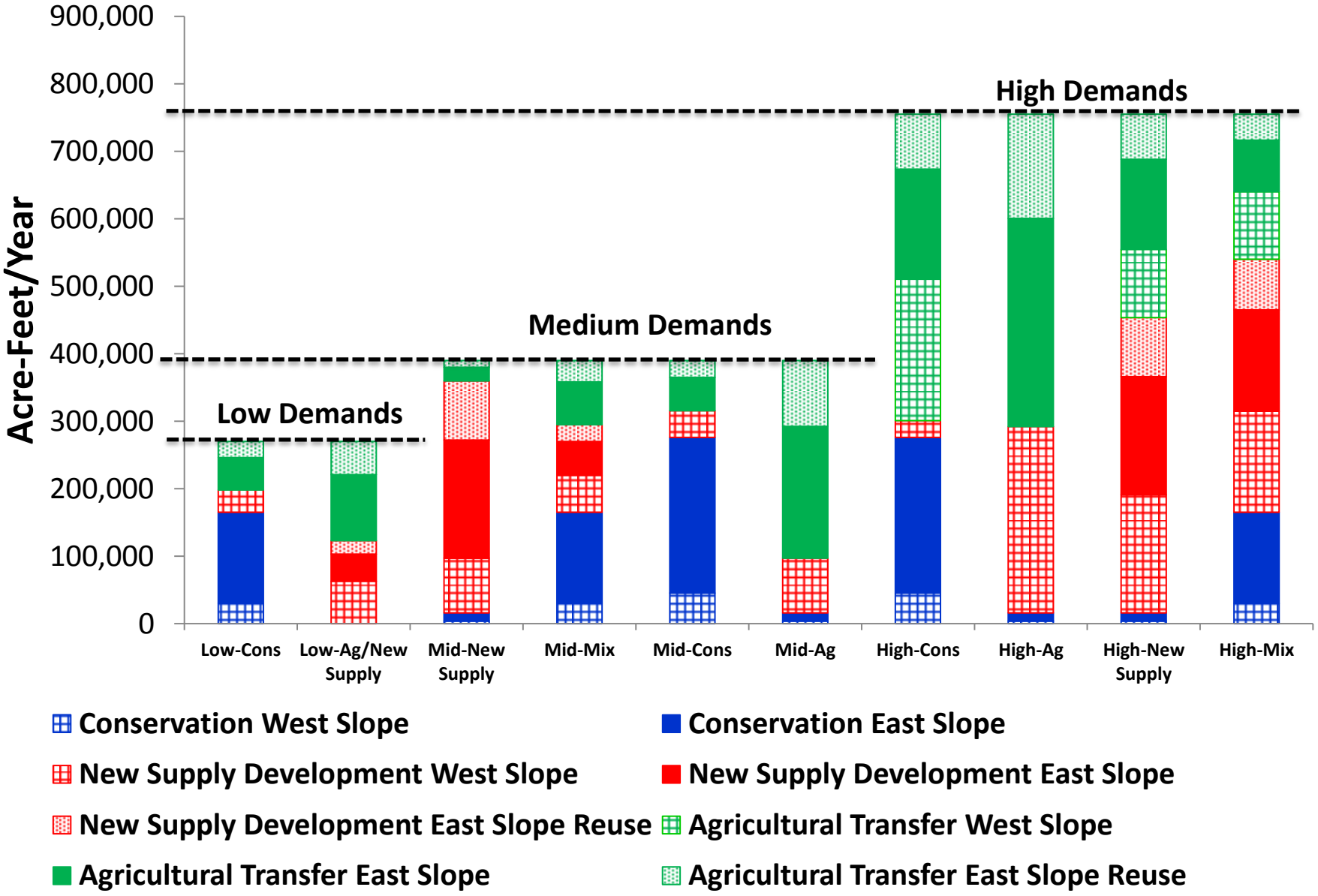
Review and Approve Scenarios

Review Handout

Handout


Business as Usual
Weak Economy
Cooperative Growth
Adaptive Innovation
Hot Growth
Population
Climate (precipitation/temperature)
Hottest
Hotter
Current
Energy Water Needs
Agricultural Demands/ Water Use
Water Efficient Technology
Social/ Environmental Values
Urban Land Use
Regulatory Constraints
Regulation
Deregulation
M&I Water Demands

Summary Portfolios to Evaluate for a Range of Scenarios

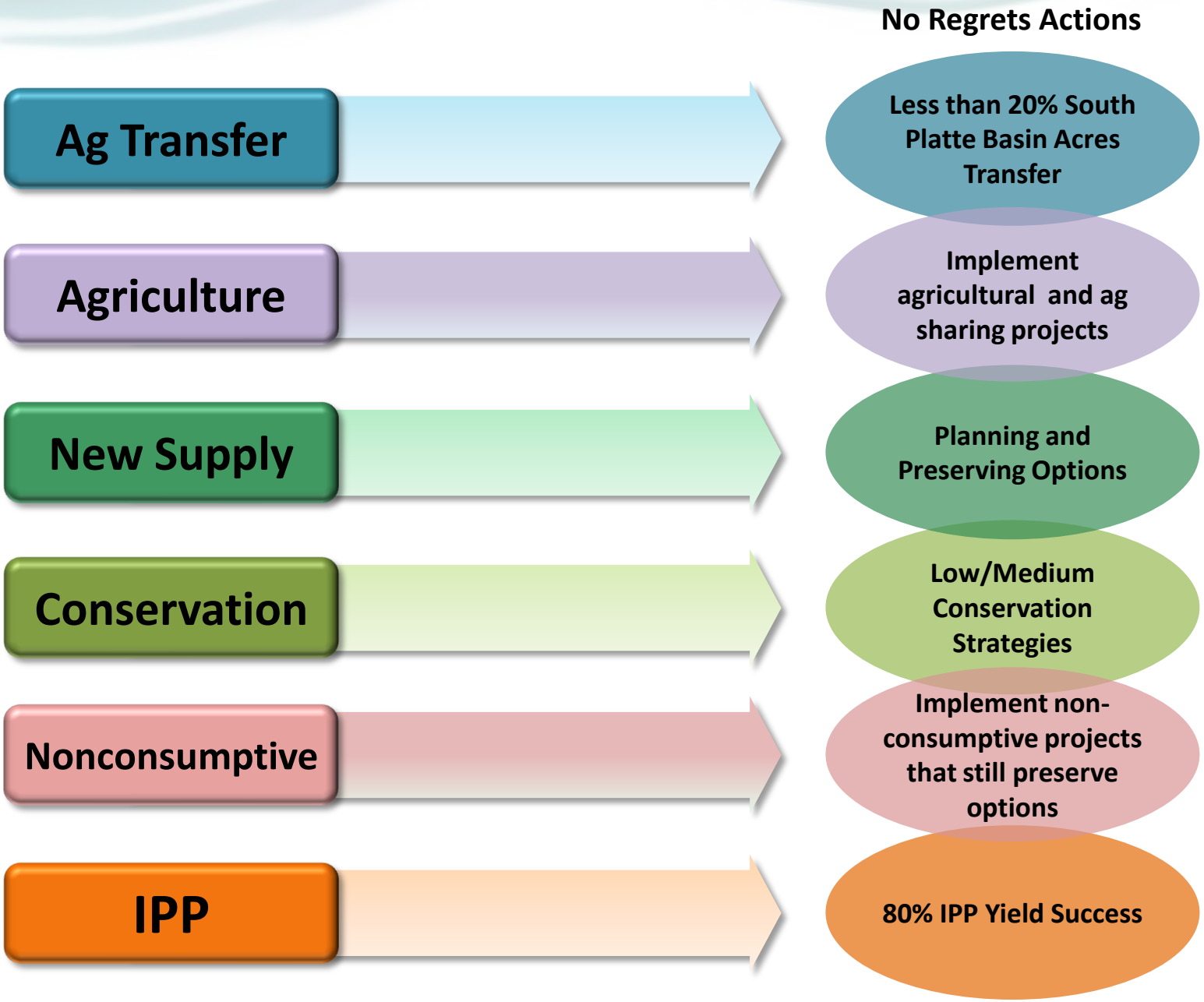


Discuss Implementation of "No Regrets" Actions

“No Regrets” Actions Overview

- First phase of State Water Plan /SWSI 2010 Implementation
- Actions if implemented have are not/less regrettable in the future
- Implementation can begin immediately before SWSI 2016/State Water Plan
- Address the M&I Gap
- Necessary actions regardless of future scenario
- Actions we agree to move for right now

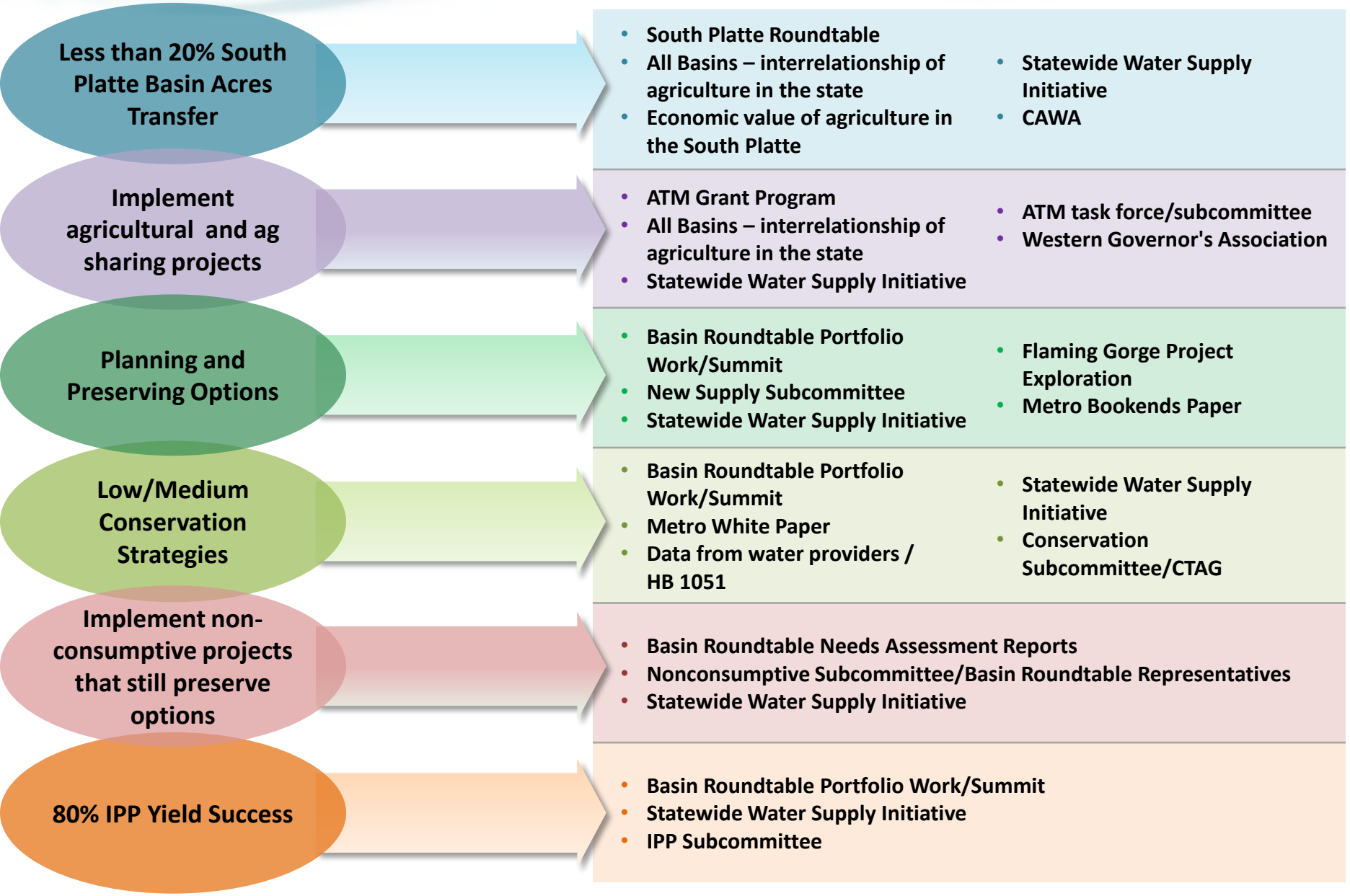
“No Regrets” Actions



“No Regrets” Yield

- M&I Needs at 2050 are 620,000 acre-feet/year to 1,230,000 acre-feet/year
- IPP Yield at 80 percent 350,000 acre-feet/year to 475,000 acre-feet/year
- Conservation yield 160,000 acre-feet/year to 330,000 acre-feet/year (not all of yield can be applied to M&I gap)

How Did We Get to No Regrets?



Less than 20% South Platte Basin Acres Transfer

Completed Actions	Future Actions
• Implement ATM Grant Program • Ongoing CWCB and IBCC Support	• Track Ongoing Process

Todd

Implement agricultural and ag sharing projects

Completed Actions	Future Actions
• Super Ditch pilot effort	• Implement ATM programs

Todd

Planning and Preserving Options

Completed Actions	Future Actions
• Strategies Report – Cost Estimates for New Supply and Agricultural Transfers • Potential diversion locations	• Evaluate environmental impacts at each location • Preserving options for new supply

Jacob

Low/Medium Conservation Strategies

Actions	Future Actions
• Metro Roundtable memo • Conservation Subcommittee	• Define actual amounts to Gap

Greg

Implement non-consumptive projects that still preserve options

Actions	Future Actions
• Look at progress for ESA • Implementation of basin nonconsumptive projects	• Prevent ESA listings

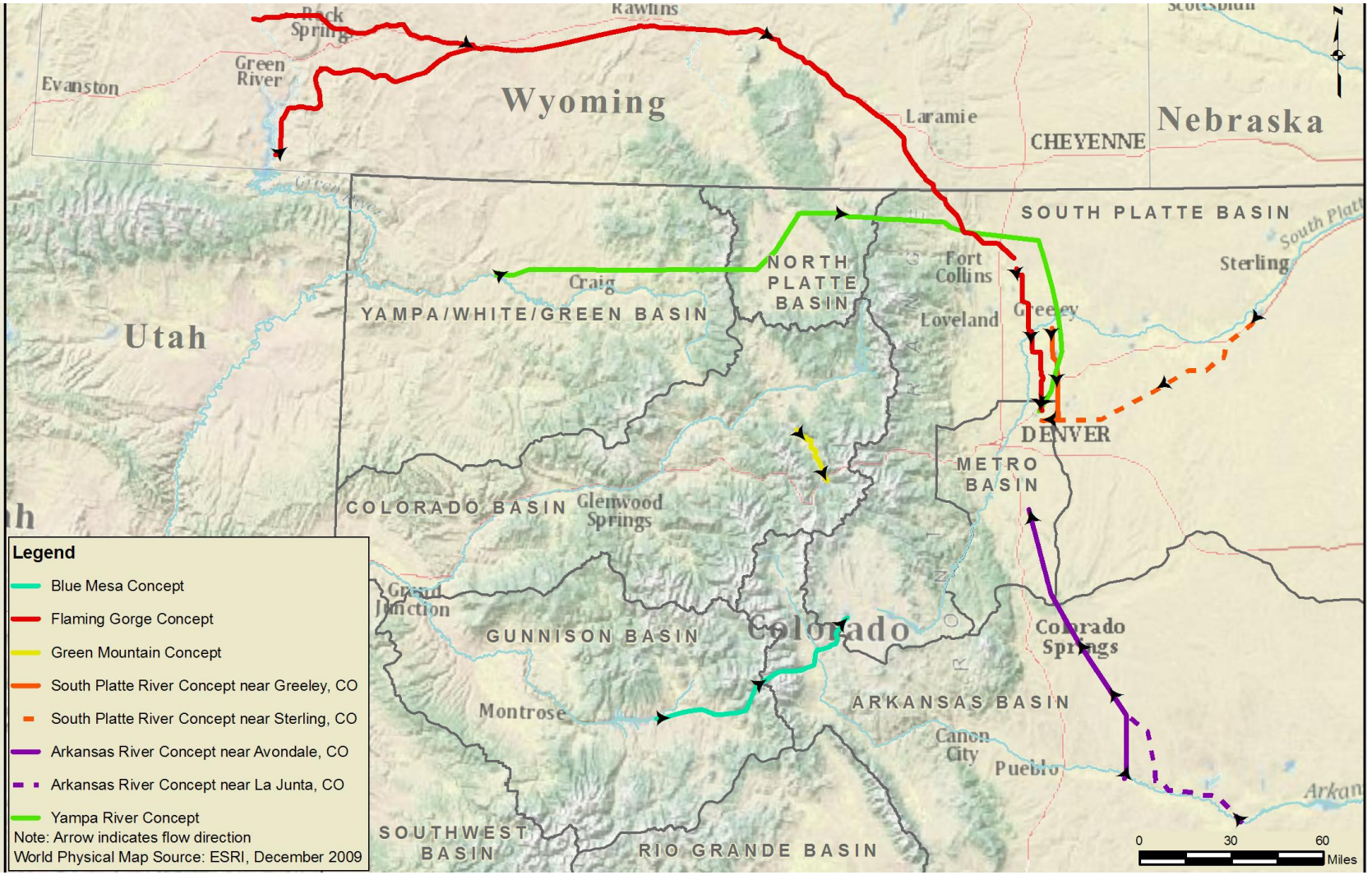
Jacob

80% IPP Yield Success

Actions	Future Actions
• Policy Recommendation • Letter to the Governor • Formation of Task Force • State Actions - Letter from Governor	

Becky

Infrastructure Evaluation in SWSI

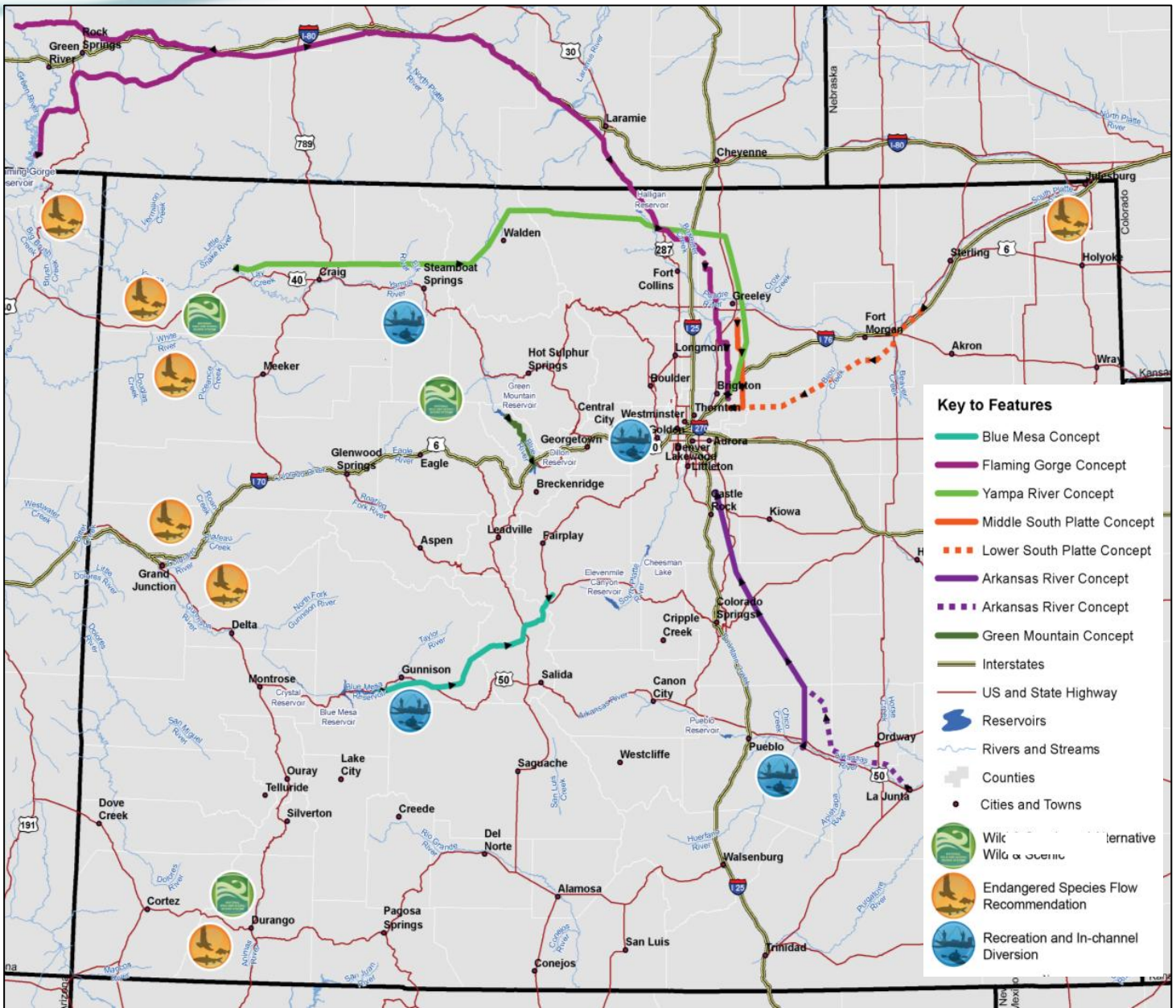


New Supply Development and Agricultural Transfer Concept Attributes

Concept	Water Source/ Water Rights	Conveyance and Storage	Water Quality and Treatment Costs
Lower South Platte	• South Platte agricultural rights	• 36 to 84 mile pipeline with static pumping requirement of 700 to 1,300 feet • Firming storage required	• RO or advanced water treatment will be required
Lower Arkansas	• Arkansas agricultural rights	• 96 to 133 mile pipeline with static pumping requirement of 3,100 to 3,600 feet • Firming storage required	• RO or advanced water treatment will be required
Green Mountain	• Blue River water in the Colorado River basin as well as new South Platte water rights	• 22 mile pipeline with static pumping requirement of 1,100 feet • Firming storage required	• Conventional treatment technology
Yampa	• New water rights appropriation	• 250 mile pipeline with static pumping requirement of 5,000 feet • Firming storage required	• Conventional treatment technology
Flaming Gorge	• Contract with BOR for water from the Flaming Gorge marketable pool	• 357 to 442 mile pipeline with static pumping requirements of 1,400 to 3,100 feet • Firming storage required	• Conventional treatment technology
Blue Mesa Reservoir	• Contract with BOR for water from the Aspinall marketable pool	• 81 mile pipeline with static pumping requirement of 3,400 feet • Firming storage required	• Conventional treatment technology

Source: SWSI 2010, Section 7

New Supply No Regrets will Look at Activities on a Statewide Basis



Flaming Gorge Task Force Update

Alternatives to Permanent Agricultural Transfer Methods Program Update

Next Steps

2013 Milestones

Feb. 2013

- Finalize No Regrets Actions
- Discuss Adaptive Management Plan
- Review metrics

Jun. 2013

- Utilize metrics and scenarios to develop specific implementable outcomes
- Continue work on Adaptive Management Plan

Dec. 2013

- Finalize Adaptive Management Plan