STATE OF COLORADO

Colorado Water Conservation Board
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TO: Colorado Water Conservation Board Members

FROM: Jacob Bornstein, Water Supply Planning Section

DATE: January 15, 2013

SUBJECT: **January 28-29 Board Meeting**
Agenda Item 29 – Basin Roundtable Project Exploration Committee

Attached is the Phase 1 Report of the Basin Roundtable Project Exploration Committee, and Appendices A-D, F, and I. In addition, the remaining appendices are available online at http://cwcbweblink.state.co.us/weblink/0/doc/169034/Electronic.aspx?searchid=f6a324cc-d280-4675-9569-6f6e71ed1f50 for the board's review.

Appendices include the following:

- **Appendix A:** Threshold Steps and Process Framework for Consideration of a Major New Supply Allocation from the Colorado River (Complete Flow Chart)
- **Appendix B:** Sample Scope of Work for Phase 2 Dialogue
- **Appendix C:** Basin Roundtable Project Exploration Committee Protocols
- **Appendix D:** Interests and Issues in a Flaming Gorge Water Supply Project
- **Appendix E:** Meeting Summaries December 2011 through November 2011
- **Appendix F:** Concerns / Challenges and Potential Benefits of Any New Supply Project and of a Flaming Gorge Project
- **Appendix G:** Flaming Gorge Task Force Assessment Report
- **Appendix H:** Final WSRA Grant Application to CWCB
- **Appendix I:** Final Scope of Work Approved by CWCB in September 2011

Two members of the committee will be presenting to the board – Gary Barber from the Arkansas Roundtable and Ken Spann from the Gunnison. Additional members will be in the audience.

Basin Roundtable Project Exploration Committee
Phase 1 Report to the Colorado Water Conservation Board

The Purpose of the Committee

The purpose of Basin Roundtable Project Exploration Committee was to 1) explore interests and issues related to a possible Flaming Gorge water supply project, 2) explore the current state of knowledge regarding the potential impact of a Flaming Gorge water supply project on those interests and issues, and 3) explore what additional work or activities would be needed to address the identified interests and issues. The process was initially focused on a possible Flaming Gorge water supply project, but the Committee took great care to explore issues, ideas, concepts, or concerns that emerged that apply to other potential transmountain water supply projects, while also exploring potential impacts to nonconsumptive values and the agricultural community in Colorado. **The Committee makes the following report and recommendations to the Colorado Water Conservation Board in completion of its work and urges the CWCB to continue to advance the dialogue in Colorado on the challenging issues related to water and meeting Colorado's future water supply needs.**

Recommendations

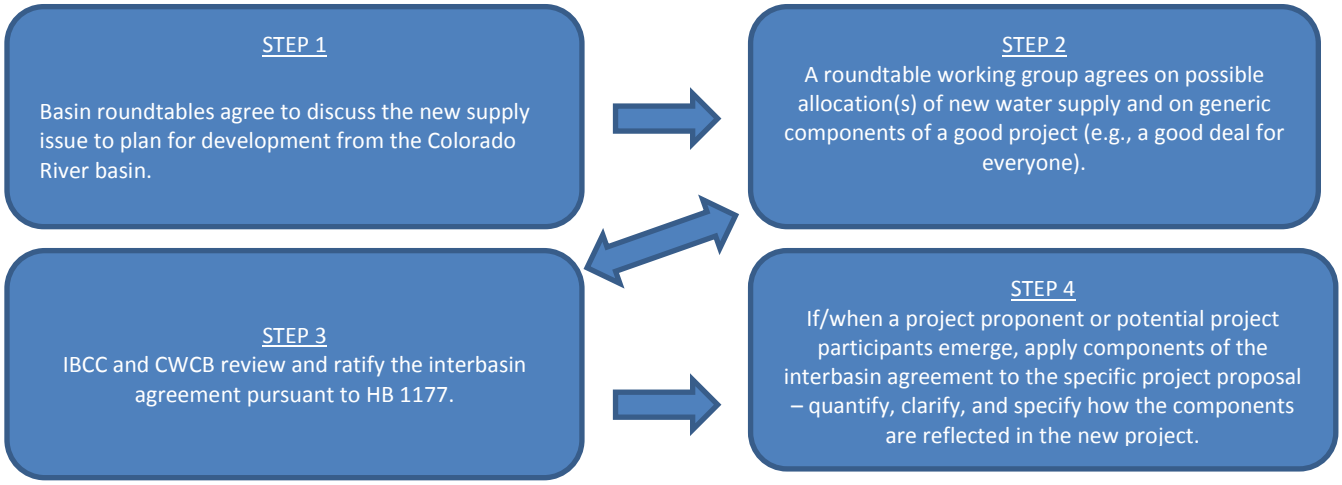
In the course of its work, the Committee has come to more fully understand and appreciate the gravity and risks of the status quo and the need to develop new supply[1] solutions that balance the current and future consumptive and nonconsumptive needs of both slopes and all basins. The municipal gap on the Front Range is immediate, the dry-up of agriculture is real and certain, and the environmental and economic concerns are serious and numerous. In the process of becoming informed about and discussing the benefits and costs of a specific new supply project focused around Flaming Gorge, the Committee has identified a key threshold step that must happen in order to move beyond the status quo in developing any significant new supply solution: an immediate and focused conversation with each roundtable and state leaders at the table must begin, aimed at developing an agreement or agreements around how water supply needs around the state can be met. Our conclusion and consensus is that the conversation needs to be transparent and inclusive in order to arrive at consensus agreements that can lead to meaningful statewide-level water supply solutions. The immediate need for this robust, focused, transparent, and balanced conversation is at the heart of each of our recommendations.

The Committee has developed a consensus flow chart that identifies threshold steps and a process framework for moving forward with major new supply allocation from the Colorado River. The flow chart and the process it outlines suggests a pathway to achieving statewide consensus for a new supply project, based on roundtables defining the scope of a project, the IBCC and CWCB providing insight and approval, and project proponents or participants designing a project based on statewide consensus about the criteria of what characteristics and components are needed to be included into the design, implementation, and operation of a water project for that project to be considered a "good" project for Colorado. The flow chart is based on several assumptions:

- The goal is to minimize the risk of a Compact call.
- An M&I gap exists and needs to be filled. Some of the water needed to fill that gap may come from the Colorado River. That portion of the gap that is not satisfied by identified projects or processes, conservation, or new supply will likely come from the change of agricultural water to municipal and industrial use.
- The current legal framework will apply.
- All roundtables are affected by a new supply project.
- This process would be voluntary. An inability to complete the process (all STOP signs in the complete framework) means that proponents revert to "business-as-usual" for building a new project.

[1] "New supply project" as shorthand to refer to a new water supply project that develops water from the Colorado River.

The complete flow chart is available in Appendix A. The key elements of the process are:



RECOMMENDATION 1: Convene the substantive dialogue on the new supply leg of the "four-legged stool" (Step One of the process flowchart). The Committee concludes that the roundtable-based process was very productive and therefore recommends that the Colorado Water Conservation Board strongly encourage the Interbasin Compact Committee (IBCC) and the several roundtables, in cooperation with the Department of Natural Resources senior staff to use the $100,000 reserved for Phase 2 of this process to convene or reconstitute a broad, knowledgeable group to initiate a discussion that would address the following issues related to new supply development from the Colorado River basin. This discussion is the first step in the process framework developed by the Committee. Questions to address include:

a. How can Colorado maximize use of its Colorado River entitlement while also minimizing the risk of overdevelopment of the Colorado River?
b. How can future water needs on the West Slope be adequately addressed in the development of a new transmountain diversion?
c. Who would finance a project, who has bonding authority, and what would the State's role be in funding a project?
d. What is the appropriate role of the State in a new supply project?
e. What are the alternatives to a new supply project, how can they receive sufficient consideration and analysis, and how can they promote flexibility and reliability of current water supply systems?
f. How might the State Engineer and the Upper Colorado River Commission (UCRC) administer a Compact call? Could this process influence that approach?
g. Do we want to affirmatively use the Colorado River Storage Projection Act (CRSPA) reservoirs as *sources* for water to use and consume **or** as *banks and protections* from the downstream compact obligations and develop other new storage? Are the two uses mutually exclusive or is there flexibility that would allow use of the reservoirs for both purposes and, if so, to what extent?
h. How do the member states in the UCRC coordinate and/or consult on a major new diversion from or potential impact to a CRSPA reservoir?

The Committee recommends that the dialogue be roundtable-based, meet monthly, have defined membership (which could include current members of the Committee, members of the New Supply Subcommittee, and community leaders), have a clear charge with identified benchmarks, and have the approval and support of the IBCC and the Colorado Water Conservation Board. The Committee further recommends that this roundtable-based dialogue use existing and future roundtable work and State reports (including the forthcoming Colorado River Water Availability Study II) in its deliberations. A sample scope of work for Phase 2 is included in this report as Appendix B.

RECOMMENDATION 2: Include a Dialogue on This Issue in a Future Statewide Summit

The Committee recommends that the Colorado Water Conservation Board include a dialogue on the work of this Committee in a future statewide summit to provide an opportunity for the roundtables, IBCC, CWCB, legislators, and community leaders to all hear the Committee's recommendations at the same time, ask questions, discuss the concept, and provide feedback.

RECOMMENDATION 3: Continue to Support Interbasin, Roundtable-Based Dialogues Like This One

The Committee recommends that CWCB continue to support and fund roundtable-based dialogues like this one. While this group's discussion has not always been easy, it has been immensely helpful in increasing understanding among roundtable members from different basins and in fostering the development of truly groundbreaking ideas that have support of the basin roundtables. Continuing to encourage, support, and fund these types of dialogues is an excellent way for the Board to advance the statewide water discussion and implement the spirit of the Colorado Water for the 21st Century Act (HB05-1177).

Invitation for Feedback

The Committee strongly encourages members of Colorado's water community to provide feedback on the process framework and the other recommendations included in this report. Any feedback received will be shared with the Phase 2 dialogue group to help inform their work, including the scope and substance of their deliberations. Feedback should be submitted to the facilitator, Heather Bergman, who will aggregate all responses into a single document and provide it to the Phase 2 group at their first meeting. heather@peakfacilitation.com

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Principles of a "Good" New Supply Project

The Committee invested a lot of time in learning about a possible Flaming Gorge project and worked to identify potential benefits and concerns about such a project (see below). As this dialogue unfolded, the Committee began to see that many of the potential benefits, concerns, and challenges could emerge from any new supply project and any new supply project that would be supported by individuals and communities around the state would need to address similar concerns and challenges. The Committee therefore decided to develop a consensus list of principles or characteristics of a "good" new supply project, or a new supply project that would have the highest likelihood of gaining support around the state. A "good" new supply project does the following:

- Facilitates Colorado's use (but not overuse) of its entitlement under the Colorado River Compact
- Decreases, or at least does not increase, the risk of Compact curtailment to existing water users
- Is clear about how it would affect the state's Compact compliance and also how storage would be a part of the project
- Is clearly related to the big picture of statewide water supply and demand
- Reduces municipal reliance on Denver Basin non-tributary groundwater, while promoting conjunctive use of groundwater and groundwater used as a dry-year, firm supply
- Provides a new water supply that is a viable option when compared to conversion of East Slope agricultural supplies
- Is designed and operated to create maximum flexibility for municipalities, industries, and agricultural producers, and still meet nonconsumptive uses during drought years
- Does not reduce yield to existing water users

- Does not forestall future West Slope water uses that are based on existing plans but are not as immediate as East Slope needs
- Explicitly protects existing agriculture
- Does not result in agricultural water rights being exchanged for other agricultural water rights (i.e., dry-up of West Slope agriculture in lieu of dry-up of East Slope agriculture)
- Entails cooperation among multiple entities and multiple basins
- Is multi-purpose, even if its primary purpose is to provide water for municipal or industrial uses and the secondary purposes are to provide water for agricultural and nonconsumptive uses
- Addresses hydrological and spatial variability among basins in order to prevent divisiveness between Front Range and West Slope communities
- Has support from basins on both sides of the Divide
- Represents a net benefit to the basin in which diversion occurs in terms of meeting water, environmental, social, and/or economic needs
- As much as possible, promotes ongoing economic strength, vitality, and benefits not only to the basin of receipt but to the source basin and the state as a whole
- Maintains or improves environmental conditions
- Does not require that the project proponent mitigate or redress environmental or other impacts of the past or of other projects and does not worsen environmental impacts created from the past; such additional mitigation would be funded as much as possible by other sources (State, federal, etc.); project would be even better if environmental conditions can be improved directly or in partnership with other entities
- Incorporates sufficient environmental and other impact review early on in the process; no reasonably foreseeable additional requirements or reviews will emerge in the middle of the process unless project scope or elements change
- Minimizes the need for new infrastructure / utilizes existing infrastructure to the maximum extent possible
- Has an identified source of funding and a clear governance, management, and operational plan
- Reflects exploration and implementation of as many alternatives as possible to ensure that demand and supply are both being addressed as creatively and comprehensively as possible

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Background on the Committee

Membership

The Committee was comprised of two representatives of each of the nine basin roundtables (BRTs) in Colorado, with the exception of the North Platte and Rio Grande Roundtables, which had one representative each. The State of Colorado had three seats but elected to be represented by one person with one vote. The environmental, recreation, and agricultural interests each had two seats. This group of individuals brought substantial geographic and substantive diversity to the discussion, with a wide variety of opinions and perspectives enhancing the discussion at every meeting. The complete list of Committee members is available in the protocols document in Appendix C.

How the Committee Was Established

The Flaming Gorge Committee process began with a Water Supply Reserve Account (WSRA) grant application from the Arkansas Basin and Metro Roundtables. The purpose of the first WSRA grant was to do a situation assessment to determine if stakeholders in Colorado's water community believed that a dialogue about a possible Flaming Gorge project would be productive and add value to the state's water discussion. In late 2010 and early 2011, stakeholders throughout the state participated in individual interviews, and an additional 32 individuals responded to an online survey. The vast majority of assessment respondents indicated that a

dialogue about a possible Flaming Gorge project would be valuable. The final stage of the assessment process was an in-person meeting with a small but diverse group of stakeholders to finalize a process concept that would become the foundation of a new WSRA grant application to fund the Flaming Gorge dialogue itself. The in-person meeting (June 2011) resulted in an agreement that the Flaming Gorge dialogue should be a roundtable-to-roundtable discussion, with additional seats made available for environmental, recreation, and agricultural interests.

The roundtable-based dialogue process became the foundation of a second WSRA grant application to Colorado Water Conservation Board. At their September 2011 meeting, the Board reviewed the new WSRA grant application, took substantial public comment, and then requested that the project scope and budget be revised. The project was subsequently divided into two phases.

- **Phase I** of the project was tightly focused on gathering information about a possible Flaming Gorge project and identifying what additional work might be needed to ensure sufficient understanding of such a project. The project was also reframed as a pilot project to test the idea of using roundtable-to-roundtable dialogue as a way to explore issues related to new projects and other water-related issues. Additional seats were also added for East Slope and West Slope representatives from the environmental, recreation, and agricultural communities. Phase I funding includes funds from the statewide WSRA account, as well as allocations of basin funds from eight basin roundtables.
- The revised project scope allowed for a possible **Phase II** of the project, with up to $100,000 of additional statewide funds set aside for additional work by the Committee, if the Committee agreed that such work would be valuable and the Board approved. The Board approved this revised project at the September meeting, and project planning and implementation began. (The situation assessment report and the revised, the approved WSRA grant application and revised scope of work for the Flaming Gorge Committee are attached, Appendices G, H, and I, respectively.)

How the Committee Operated

The Committee developed operating protocols to guide their work together and establish decision-making parameters. The Committee agreed to work to achieve consensus in all decisions. Consensus was defined as "all members of the Committee can live with" the proposal. This is a consensus report from the full Committee; all members agree that this report is an accurate summary of their work. Topics upon which the Committee did not seek consensus are identified as such for clarity. (The Committee protocols are attached in Appendix C for reference.)

As part of the Committee's commitment to transparency and participation, all Committee meetings were public. Anyone who wanted to requested notification of meetings and final meeting summaries was added to an email distribution list. Additionally, the Committee invited public comment during the first and last ten minutes of each meeting. Public comments were received and are documented in the Committee's meeting summaries.

The Work of the Committee

Identification of Interests and Issues (January 2012)

The Committee's work progressed through three distinct phases. First, the group identified interests and issues at play in a Flaming Gorge discussion. This step helped the Committee understand the breadth of issues associated with a possible Flaming Gorge project and prioritize its work. These interests and issues took the form of questions, and while many of the questions apply uniquely to a possible Flaming Gorge project, most of them apply equally to any new water supply project. As part of its commitment to continue to engage the water community in this dialogue, the Committee solicited comments on the interests and issues list from the basin roundtables, stakeholder groups, and the New Supply Subcommittee of the Interbasin Compact Committee

(IBCC). The complete, consensus list of interests and issues is available in Appendix D. Below is a summary of some of the questions that the group sought to address during this process.

- Big picture and tradeoffs in meeting Colorado's water supply gap
- Seniority of water rights of a new water supply project
- Technical feasibility
- Legalities (including Compact compliance and administration of a Compact call)
- Economic cost
- Environmental impacts (both positive and negative)
- Recreational impacts (both positive and negative)
- Agricultural impacts (both positive and negative)
- Socioeconomic impacts (both positive and negative)

Consultation with Experts (March - August 2012)

Following the identification of interests and issues, the Committee spent several meetings educating themselves about several issue clusters. To help them better understand the unique aspects of two different versions of a possible Flaming Gorge project, the group heard presentations from two project proponents. To increase the shared understanding of the Colorado River Compact, how it could affect water development in Colorado, and how a Compact call might be administered, the Committee heard presentations from both the Executive Director of the Colorado Water Conservation Board and the Colorado State Engineer. In order to understand how a possible Flaming Gorge might be addressed by the federal government and how it might impact endangered fish recovery on the Green River, the Committee heard from the US Bureau of Reclamation and the US Fish and Wildlife Service. Finally, two members of the Committee researched the role that states in the West have played in developing new water projects for discussion with the full group. The full presentations and the question/answer sessions that followed each of them are summarized in the appropriate meeting summaries in the Appendix E.

Concerns & Benefits of a Flaming Gorge Project (June – November 2012)

Upon learning about the two Flaming Gorge project concepts from the proponents and about some of the related issues from other experts, the Committee identified several concerns and benefits of a Flaming Gorge project. This list is available in Appendix F. The list represents the individual perspectives of Committee members. The concerns and benefits discussions occurred in a brainstorming format; the Committee did not seek to vet or otherwise assess the accuracy of the items on the list. The group also did not seek consensus on each item on the list and not all members agree with all items on the list. However, the Committee does agree that the list reflects the universe of ideas and issues that were raised. Rather than spend a lot of energy working to achieve consensus on each item in the list of issues related to a Flaming Gorge project, the Committee instead turned its attention to the bigger picture and what they had learned about issues related to any new supply project (see below).

Principles of a "Good" New Supply Project (June – November 2012)

See above

Recommendations (October – December 2012)

See above

Appendices A – F

Appendix A:	Threshold Steps and Process Framework for Consideration of a Major New Supply Allocation from the Colorado River (Complete Flow Chart)
Appendix B:	Sample Scope of Work for Phase 2 Dialogue
Appendix C:	Basin Roundtable Project Exploration Committee Protocols
Appendix D:	Interests and Issues in a Flaming Gorge Water Supply Project
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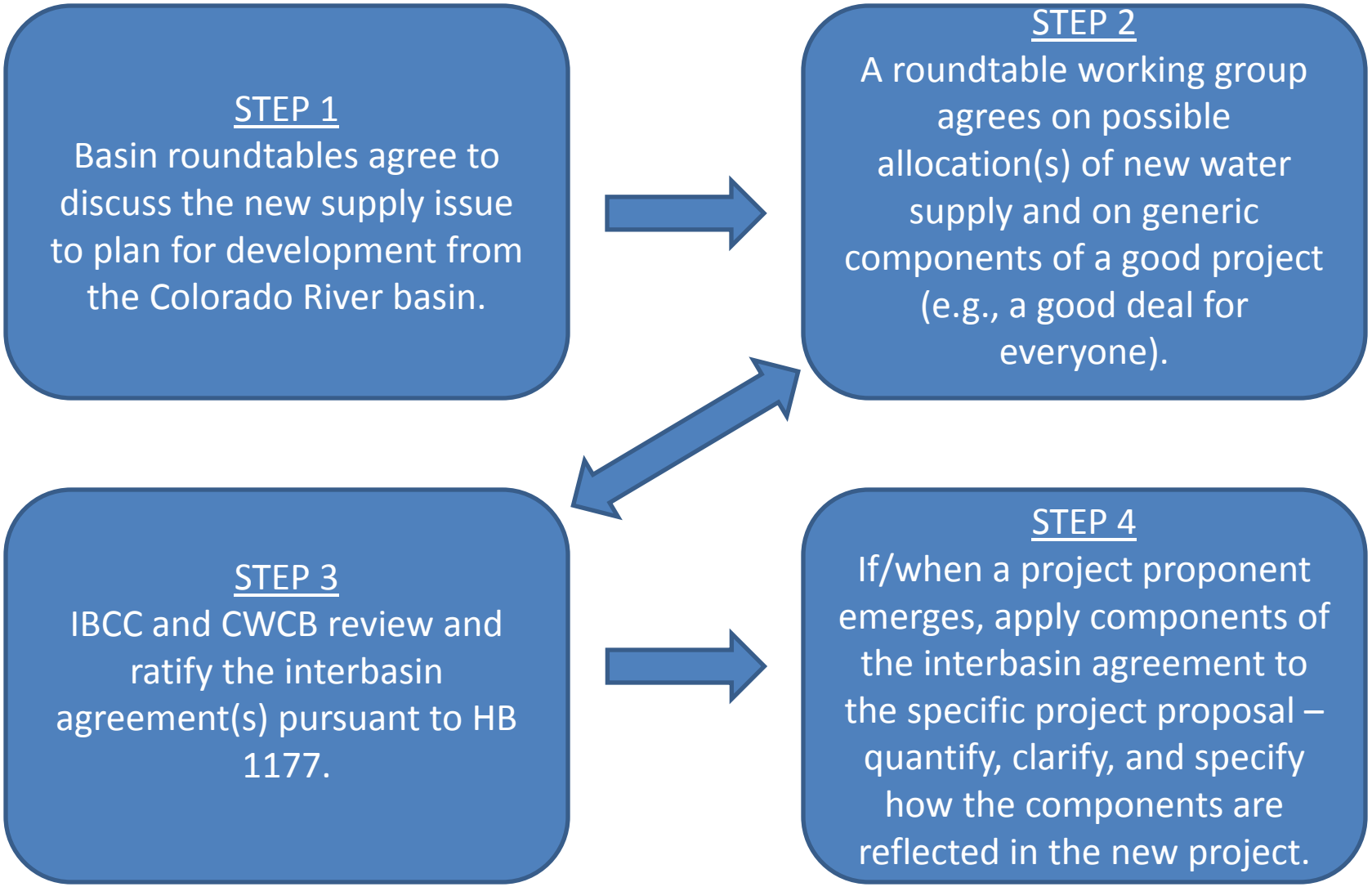
Appendix A

Threshold Steps and Process Framework for Consideration of a Major New Supply Allocation from the Colorado River

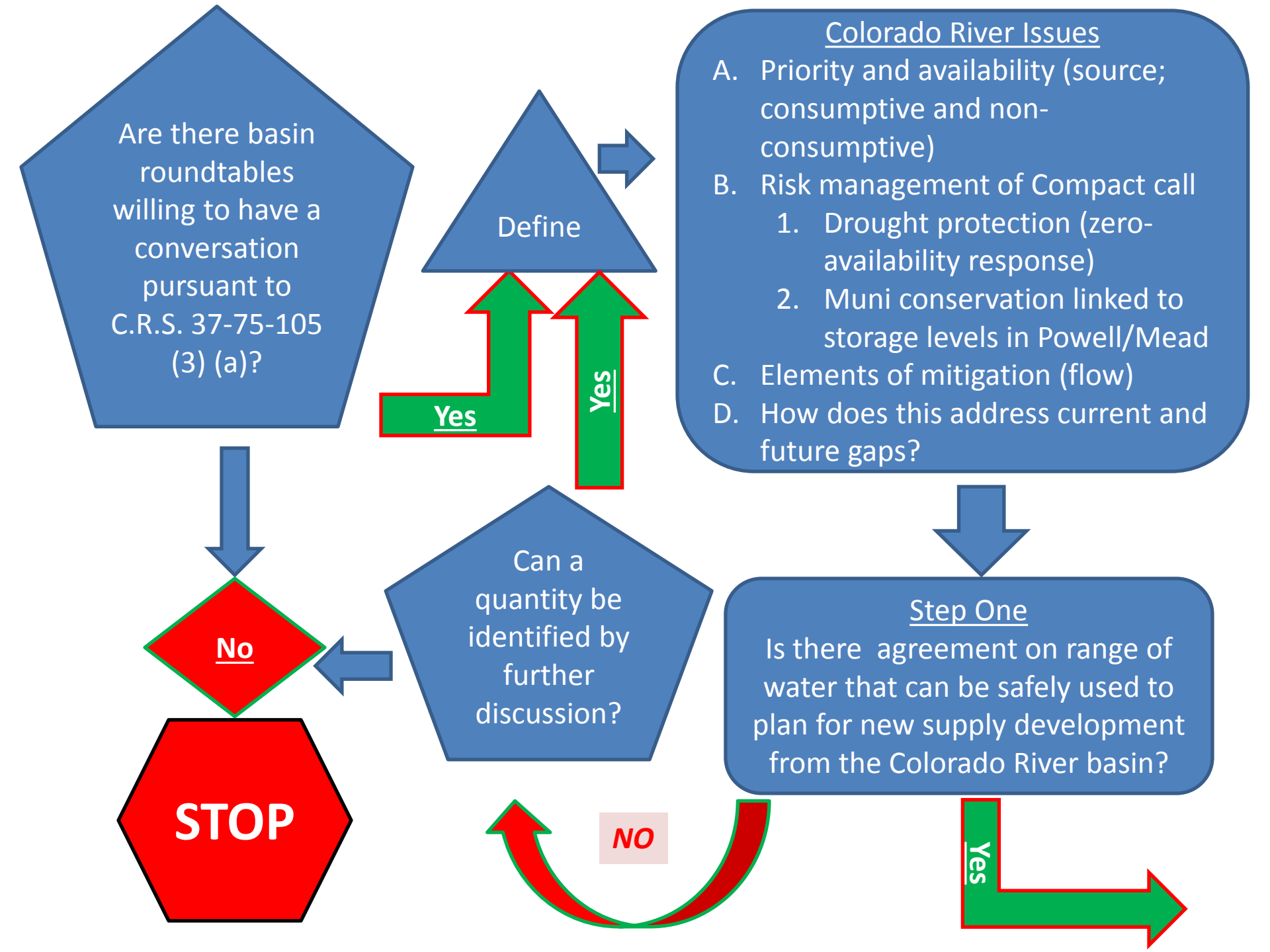
Developed by the Basin Roundtable
Project Exploration Committee

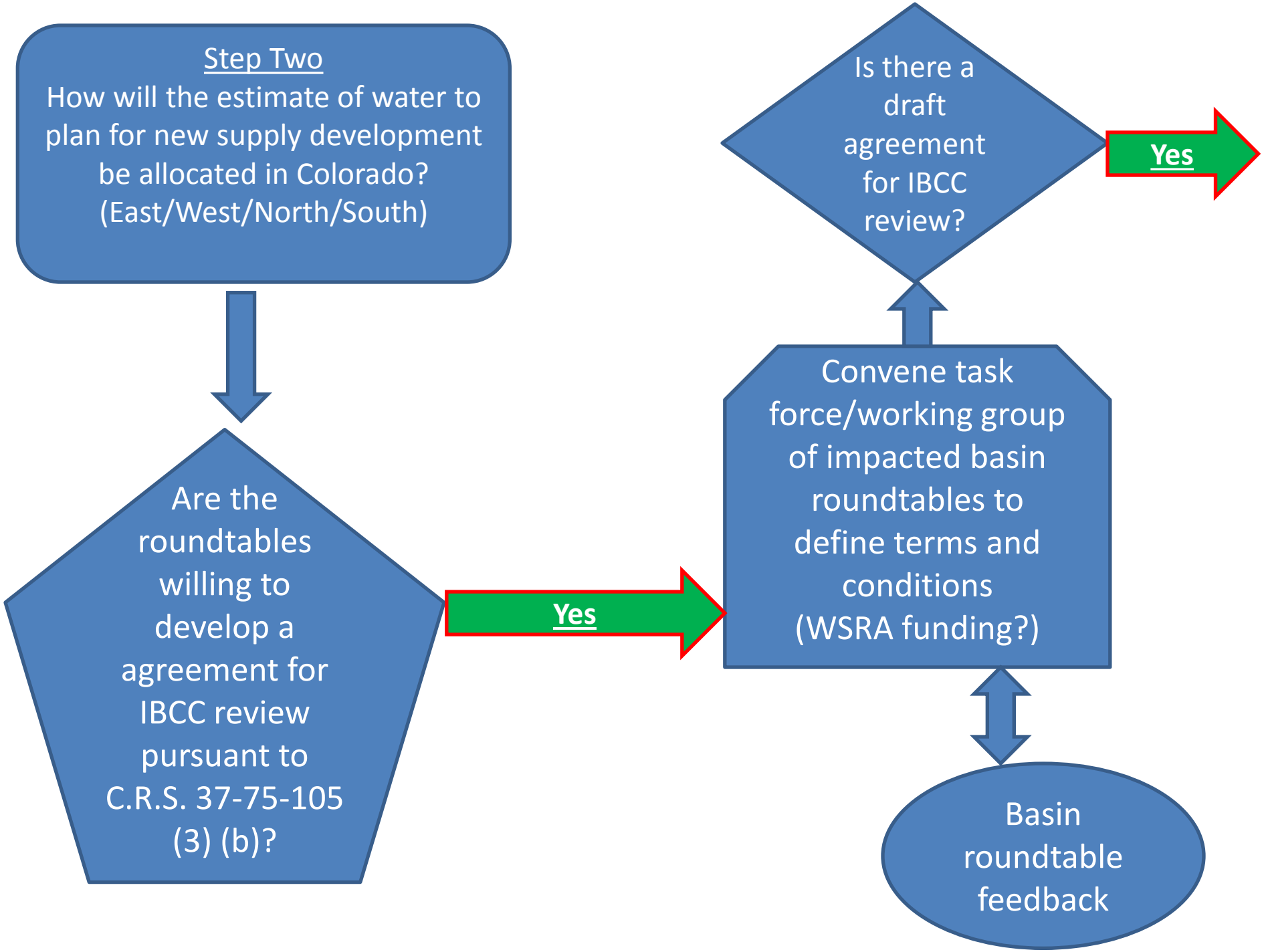
Final Draft from Project Exploration Committee Meeting 1_3_13

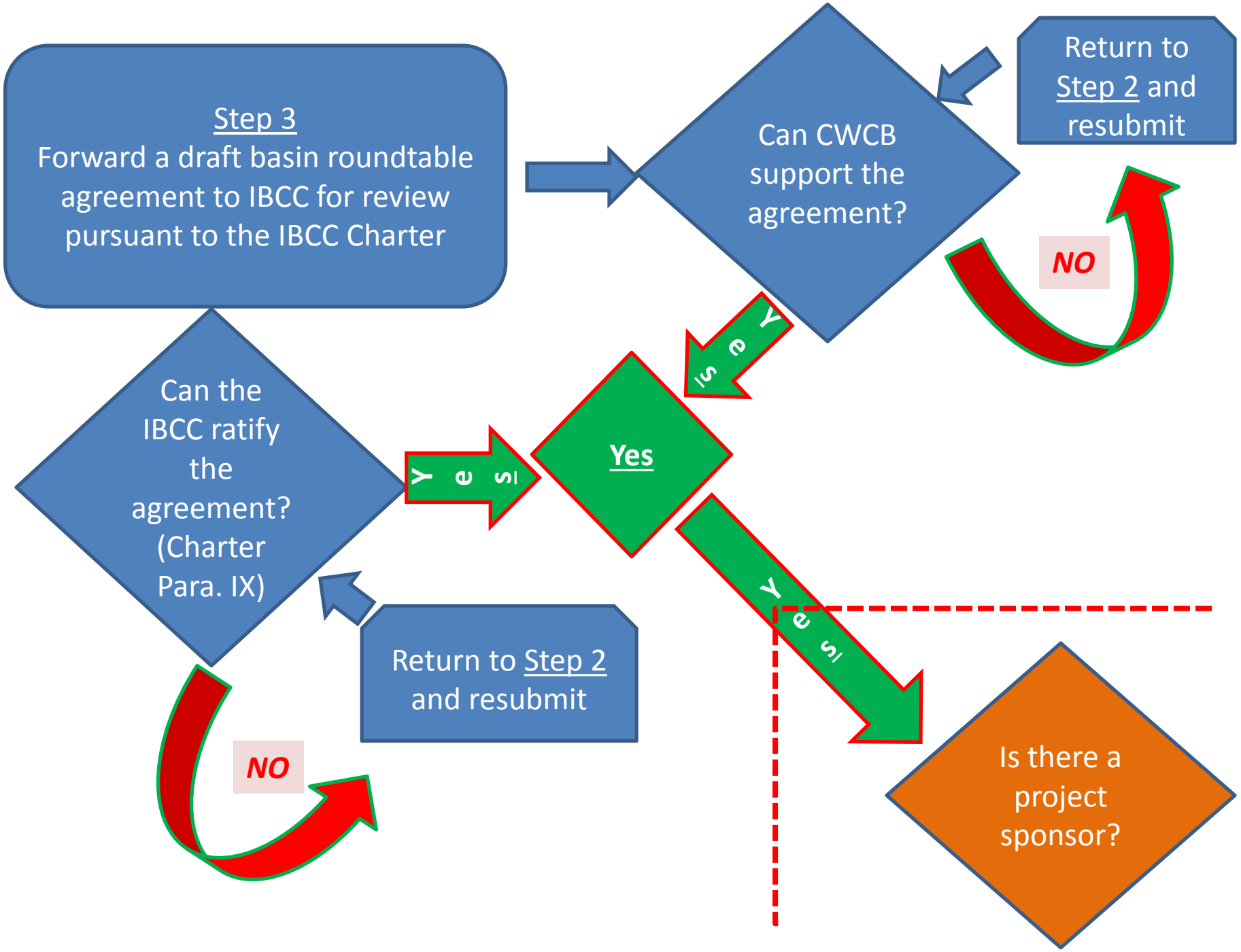
Framework Overview: 30,000-Foot Look at the Process

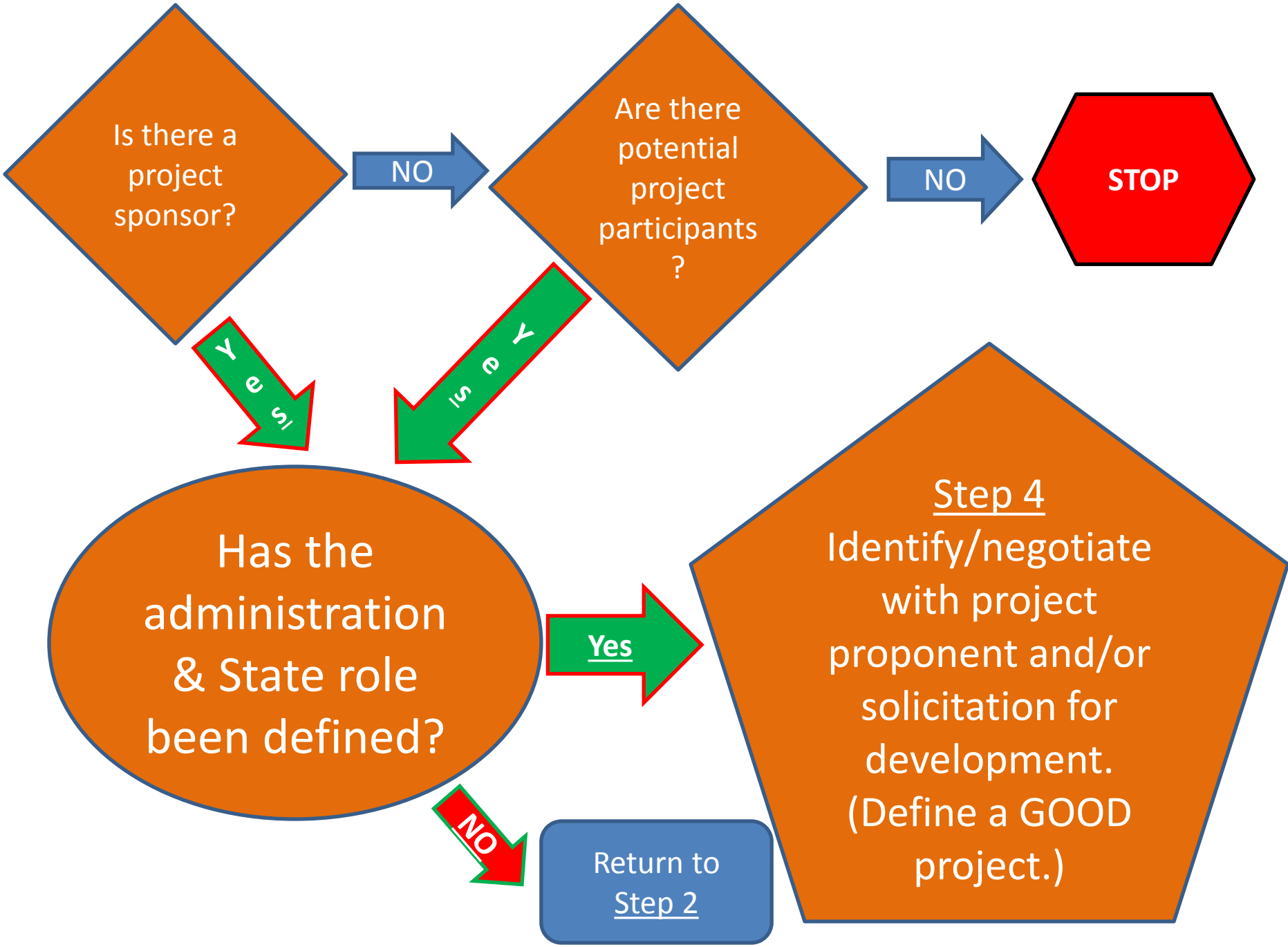


Framework Details

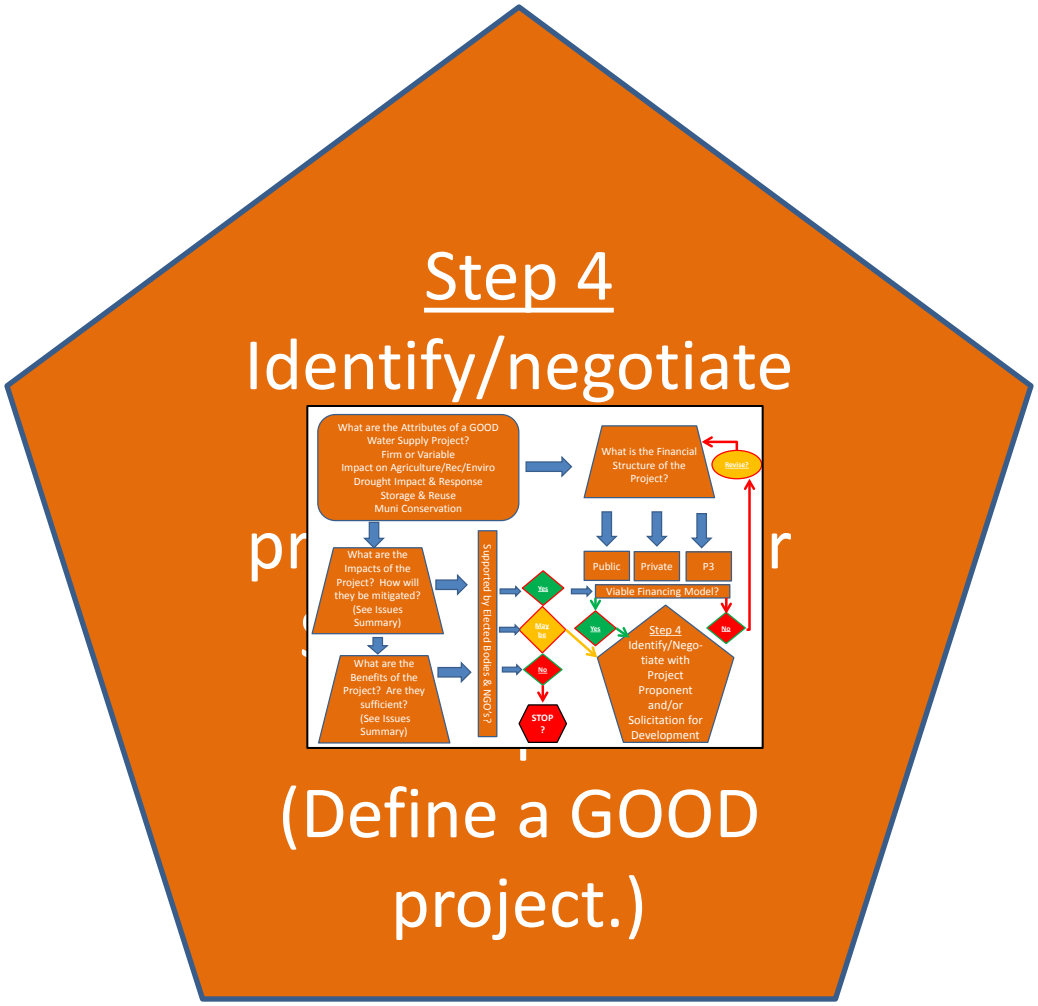

Are there basin roundtables willing to have a conversation pursuant to C.R.S. 37-75-105 (3) (a)?
Define
Yes
Yes
Colorado River Issues
A. Priority and availability (source; consumptive and non-consumptive)
B. Risk management of Compact call
1. Drought protection (zero-availability response)
2. Muni conservation linked to storage levels in Powell/Mead
C. Elements of mitigation (flow)
D. How does this address current and future gaps?
Step One
Is there agreement on range of water that can be safely used to plan for new supply development from the Colorado River basin?
Yes
NO
Can a quantity be identified by further discussion?
No
STOP

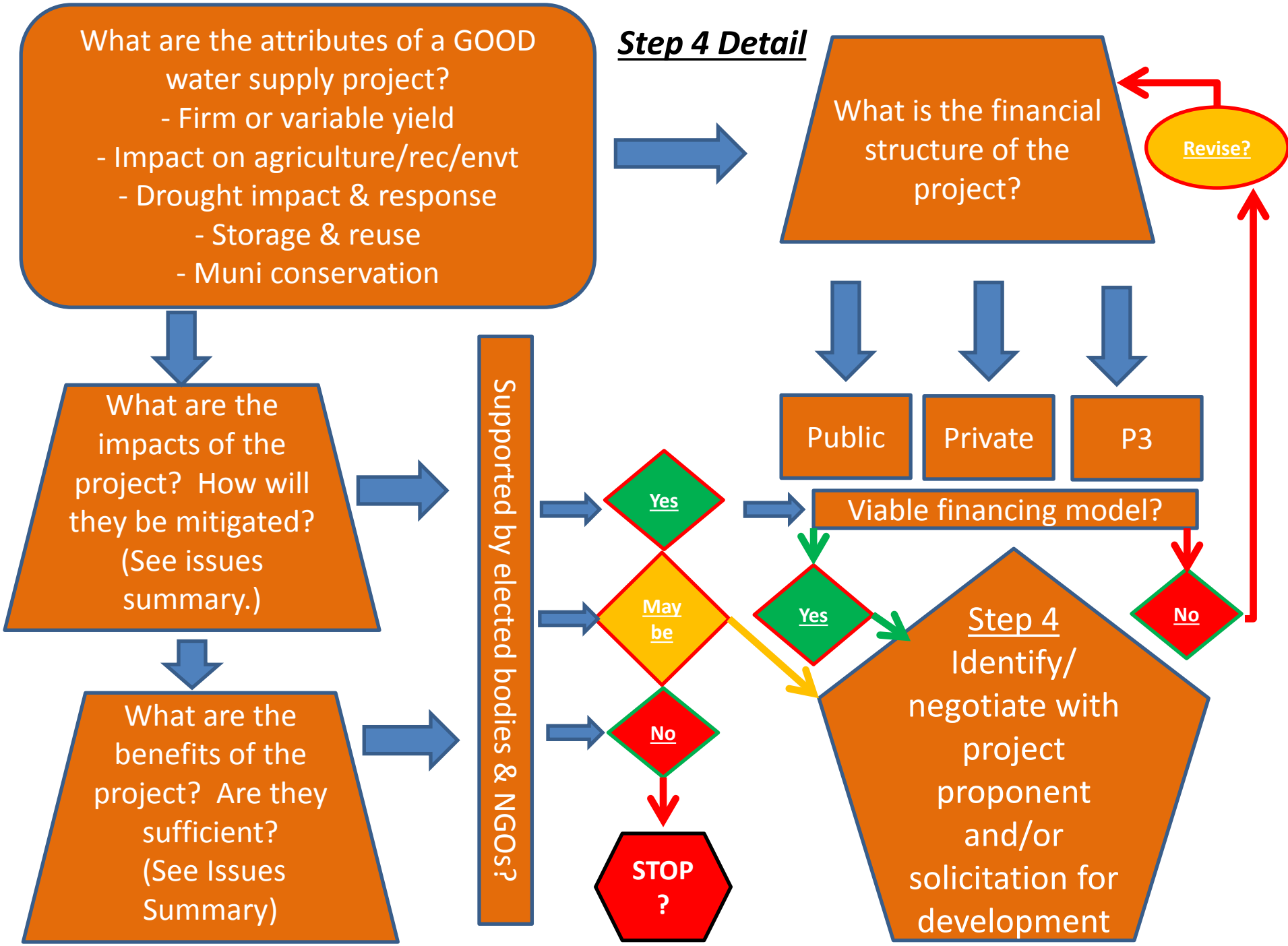

Step Two
How will the estimate of water to plan for new supply development be allocated in Colorado? (East/West/North/South)
Are the roundtables willing to develop a agreement for IBCC review pursuant to C.R.S. 37-75-105 (3) (b)?
Yes
Convene task force/working group of impacted basin roundtables to define terms and conditions (WSRA funding?)
Basin roundtable feedback
Is there a draft agreement for IBCC review?
Yes


Step 3
Forward a draft basin roundtable agreement to IBCC for review pursuant to the IBCC Charter
Can CWCB support the agreement?
Return to Step 2 and resubmit
NO
Yes
Yes
Can the IBCC ratify the agreement? (Charter Para. IX)
Yes
Return to Step 2 and resubmit
NO
Yes
Is there a project sponsor?


Is there a project sponsor?
NO
Are there potential project participants ?
NO
STOP
Yes
Yes
Has the administration & State role been defined?
Yes
Step 4
Identify/negotiate with project proponent and/or solicitation for development. (Define a GOOD project.)
NO
Return to Step 2

The Next Slide is embedded in Step 4




What are the attributes of a GOOD water supply project?
- Firm or variable yield
- Impact on agriculture/rec/envt
- Drought impact & response
- Storage & reuse
- Muni conservation
Step 4 Detail
What is the financial structure of the project?
Revise?
What are the impacts of the project? How will they be mitigated? (See issues summary.)
What are the benefits of the project? Are they sufficient? (See Issues Summary)
Supported by elected bodies & NGOs?
Yes
May be
No
STOP ?
Public
Private
P3
Viable financing model?
Yes
No
Step 4
Identify/ negotiate with project proponent and/or solicitation for development

Appendix B

Basin Roundtable Project Exploration Committee
Example Scope of Work for Phase 2 Dialogue

Task One: Convene the Committee (1 Meeting)

- Reset members at discretion of individuals, roundtables, and stakeholder groups and with advice of the CWCB and the IBCC
- Convene with existing protocols
- Review roundtable feedback/input
- Identify group's desired outcome(s) and develop a tentative scope of work and schedule
- Consider outreach at a major water event such as a statewide summit

Task Two: Roundtable Outreach (6-8 Meetings)

- Engage in roundtable and stakeholder outreach specific to the process framework flow chart
- Obtain roundtable and stakeholder input to inform Step One of the process framework
    - Identify studies, reports, and experts for information to provide to the Committee
    - Organize presentations as appropriate for the Committee's Task Three (below)
    - Outreach could be done by a sub-group of the committee (Committee members only, no facilitation required; Committee members' travel expenses covered)

Task Three: Discuss the New Supply Issue to Plan for Development from the Colorado River Basin (4 -8 Meetings)

- Invite selected presentations from basin roundtables to inform the dialogue
- Identify the opportunities, concerns, and constraints in each major West Slope basin (Yampa, Gunnison, Colorado Mainstem, Southwest) that relate to new supply planning
- Continue to identify the attributes of a "good" project
- Work with CWCB on Phase II of the Water Availability Study to understand the parameters of the Compact and Compact administration; integrate understanding into work of the Committee
- Stay abreast of basin-wide studies and discussions and how those might influence the work of the Committee
- Take public comment at each session of the committee
- Have dialogue with CWCB
- Encourage roundtables to convene regional summits on Colorado River water development issues
- Participate in a statewide roundtable summit on Colorado River water development issues

Task Four: Roundtable Outreach and Feedback (7~9 committee-and-roundtable meetings)

- Meet as a committee with basin roundtables in "impacted" basins (may include joint meetings with multiple roundtables)
- Have workshop with CWCB
- Review the feedback and revise as appropriate
- Take public comment at each session of the committee

Task Five: Presentation of Draft Report (2 Meetings)

- Provide preliminary results to IBCC/CWCB in an open forum for feedback prior to finalizing work
- Revise the draft report to complete the final report

Task Six: Submit Final Report (0 Meetings)

- Submit final report to CWCB
- Complete work of the Committee

Appendix C

Basin Roundtable Project Exploration Committee: Flaming Gorge
Final Committee Protocols – May 3, 2012

1. **Purpose**

The purpose of Basin Roundtable Project Exploration Committee is to 1) explore interests and issues related to a possible Flaming Gorge water supply project, 2) explore the current state of knowledge regarding the potential impact of a Flaming Gorge water supply project on those interests and issues, and 3) explore what additional work or activities would be needed to address the identified interests and issues. Additionally, the Committee is a pilot project that seeks to assess the effectiveness of using a roundtable-based collaborative dialogue to explore water supply projects and issues. The process is focused on a possible Flaming Gorge water supply project, but the Committee will note any issues, ideas, concepts, or concerns that emerge that may apply to or be associated with other potential water supply projects. ***The Committee is engaged in an exploratory and information-gathering process; no decisions or recommendations about whether or how to build a Flaming Gorge water supply project will emerge from this process.***

2. **Guiding Principles**

The Committee's work together is founded upon the following guiding principles:

a. Exploration: asking questions, examining information, and seeking new information
b. Openness: willingly sharing ideas and information
c. Open-mindedness: being open to ideas and information provided by others
d. Transparency: engaging in open, public dialogue
e. Shared education: learning together about the issues and interests at hand
f. Civil discourse: treating everyone in the group with dignity and respect
g. Productive dialogue: working to increase understanding and advance the discussion

3. **Representation**

Each Committee member was chosen to represent a particular roundtable or interest and should bring to the group the concerns, perspectives, and interests of their particular constituents. However, Committee members are committed to considering issues and ideas from a statewide perspective as well.

4. **Membership**

The Committee is comprised of two representatives of each of the nine basin roundtables in Colorado, with the exception of the North Platte and Rio Grande Roundtables, which have one representative each. The State of Colorado has three seats but has elected to be represented by one person with one vote. The environmental, recreation, and agricultural interests each have two seats.

Members of the Committee do not have alternates. Although other roundtable or community members are welcome to attend meetings, only named members of the Committee may participate in decision making. It is the responsibility of each Committee member to attend Committee meetings, engage in the dialogue, and do preparatory work to the best of his or her ability. If a Committee member is unable to attend a meeting, it is his or her responsibility to notify the facilitator and discuss alternate arrangements. If a Committee member is no longer able to serve on the Committee, it is his or her responsibility to ensure that a suitable replacement is identified in a timely fashion.

Committee Membership (5/2/12)

Seat / Interest	Representative 1	Representative 2
Arkansas BRT	Gary Barber	Betty Konarski
Colorado BRT	Dan Birch	Mel Rettig
Gunnison BRT	Rick Brinkman	Ken Spann
Metro BRT	Janet Bell	Tim Murrell
North Platte BRT	Carl Trick	N/A
Rio Grande BRT	Mike Gibson	N/A
South Platte BRT	Eric Wilkinson	Jim Yahn
Southwest BRT	Bruce Whitehead	Ann Oliver
Yampa/White/Green BRT	Kevin McBride	Kai Turner
State of Colorado	Jacob Bornstein	N/A
Environmental	Chuck Wanner (West Slope)	Bob Streeter (Front Range)
Recreation	Ken Neubecker (West Slope)	Reed Dils (Front Range)
Agriculture	T. Wright Dickinson (West Slope)	Gene Manuello (Front Range)

5. **Committee Member Responsibilities**
   a. Abide by the protocols and allow the facilitator to enforce them
   b. Engage in meaningful and productive dialogue
   c. Actively participate in discussions
   d. Speak up if in opposition to a proposal and provide an alternative approach or proposal
   e. Provide an explanation for all objections
   f. Avoid destructive language and personal attacks
   g. Speak only to own motivations and interests; refrain from characterizing others' motivations and interests
   h. Read materials prior to meetings; come prepared
   i. Be or become knowledgeable about the issue at hand
   j. Proactively work to keep constituents, colleagues, and managers informed about the work of the group
   k. Avoid surprises
   l. Disclose conflicts of interest
   m. Respect the time of the group; speak briefly and stay on topic
   n. Review draft documents in a timely fashion
   o. Protect the spirit of exploration and openness by refraining from attributing comments made in meetings to other Committee members

6. **Decision Making**

The Committee will seek to achieve consensus in all decisions. Consensus is defined as "all members of the Committee can live with" the proposal. If consensus is not possible, the Committee will use majoritarian voting to find resolution, and a super-majority (2/3 of the members in attendance) will be required to pass the proposal. In consensus and in majoritarian voting, each Committee member has a single and equal vote. Dissenting or minority opinions will be documented by the facilitation team in meeting summaries; Committee members are responsible for

ensuring that the summaries reflect their views accurately. No freestanding dissensions or minority reports will be produced by Committee members or the facilitation team. The opinions and actions of the Committee do not necessarily represent the opinions of, or bind, the individuals serving on the Committee or their organizations.

7. Agency Roles

The State of Colorado is represented by one individual who will ensure that the Colorado Water Conservation Board, the Colorado Department of Natural Resources, and the Governor's Special Advisor on Water Policy are aware of the Committee's work. The State representative will participate fully in the Committee and provide information and perspectives from the State proactively and as needed.

Although Wyoming, Utah, and several federal agencies do not have seats on the Committee, the Committee acknowledges the importance of these entities in a discussion about a possible Flaming Gorge water supply project. The Committee anticipates inviting individuals from these entities to participate in meetings as needed.

8. Role of the Facilitator

a. Managing all meeting logistics
b. Facilitating meetings to be on point, productive, and on time
c. Enforcing protocols
d. Being issue-neutral
e. Treating all participants fairly and equally
f. Maintaining confidentiality of any discussions with members if requested
g. Documenting all meetings
h. Making best effort to incorporate all suggestions for change to draft documents or providing explanation of why suggestions were not incorporated
i. Providing a next steps summary within 2 days of each meeting and a meeting summary within 2 weeks of each meeting
j. Managing and producing interim and final grant reporting and deliverables
k. Providing updates on the Committee to the Colorado Water Conservation Board as needed or requested
l. Deciding to cancel and/or reschedule a meeting due to weather and notifying the group in a timely fashion (cancellation will be based on whether travel conditions would affect safe travel for over half the group)
m. Making best effort to provide conference call access if needed and where equipment can be provided

9. Travel

The Pikes Peak Regional Water Authority will process all travel reimbursements for Committee members. There is $1,000 in travel funds available for each basin roundtable representative for up to 12 meetings. There is $2,000 in travel funds available for allocation among the six representatives from the environmental, recreation, and agricultural communities for up to 12 meetings. In all cases, travel reimbursements will be applied as requested until funds are gone. Basin roundtable members' reimbursements will be deducted from the appropriate basin roundtable account, while non-roundtable members' travel will be deducted from the project account. The State of Colorado travel rules and regulations apply to all reimbursements and have been provided to all Committee members.

In order to minimize travel costs, meetings will be held in the I-25 and I-70 corridors, unless the Committee agrees otherwise. Additionally, meeting locations will vary and occur around the state to distribute the travel burden among Committee members.

10. Media Interaction

The Committee process is intended to be open and transparent. Committee members may speak to the press at their discretion, but they may only speak about their own perspectives and the overall process. Committee members may not speak about the perspectives or ideas of other members of the group. Additionally, all final meeting summaries are public documents, and members may share these documents with the press at their discretion. Members will use their best judgment in all discussions with the press, working to ensure the ongoing collaborative spirit and integrity of the process. All Committee protocols apply in any interaction with the press.

11. Interaction with Other Entities

The Committee will maintain ongoing and open communications with the Colorado Water Conservation Board, the Interbasin Compact Committee (including its New Supply Subcommittee), and the basin roundtables. Committee members will not work outside the process to influence Committee discussions or outcomes. All concerns or desires about the process will be raised openly with Committee. Any need or desire to coordinate or collaborate with other groups or efforts must be discussed and agreed to by the Committee.

12. Documentation

All documents are draft unless labeled "final." Draft documents should not be construed as final. Only the information contained in final documents represents the opinion and action of the Committee. Circulation of draft documents should be limited; draft documents are intended for use by the Committee until documents are approved as final. Each meeting will result in a list of next steps available to members within two days of the meeting, and a draft meeting summary will be circulated to Committee members for review and revision before being finalized. Committee members will have one week to respond to draft documents. Information expressed in a draft document does not necessarily represent the opinion of the Committee.

13. Public Meetings and Notification

All Committee meetings are public. Anyone who would like to receive notification of meetings and final meeting summaries should contact the facilitator to be added to the email distribution list. The public and the Committee will receive a meeting notification two weeks prior to the meeting and a reminder several days before the meeting.

14. Public Comment

Public comment will be invited at each meeting during the first and last ten minutes of the meeting. Time allocation per person will be based on the number of speakers and will be at the facilitator's discretion.

15. Amending the Protocols

These protocols can be amended by the Committee. The decision-making methods outlined in Item 6, above, apply to any effort to amend the protocols.

Appendix D

Basin Roundtable Project Exploration Committee: Flaming Gorge
Interests and Issues in a Flaming Gorge Water Supply Project
WORKING DOCUMENT – PREPARED FOR ROUNDTABLE, IBCC, AND CWCB FEEDBACK

Note: This document is a brainstormed list. The Committee does not anticipate being able to answer or explore all of the questions identified in this document. Letters and numbers do not reflect prioritization; they are for reference only.

FG or Any[1]	Interests, Issues, and Related Questions
A. Understanding the Big Picture and Tradeoffs	
	1. Scope, Purpose, and Need a. What is the scope of the project? b. What is the purpose of the project? c. What is the need for the project?
	2. Other Options Are there other projects that, while perhaps not meeting the full yield of a Flaming Gorge pumpback, could meet an increment of new demands and that are less costly, more reliable, with greater certainty and with lesser impacts?
	3. Impacts to "the Stool" a. How does building or not building the project impact the "new supply leg of the stool"? b. How does building or not building the project impact the other legs of the stool (conservation, IPPs, and agricultural transfers)?
	4. Tradeoffs and Benefits a. How does building or not building the project impact the tradeoffs considered in the Portfolio Analysis and Tradeoff Tool (i.e., reductions in irrigated acres, nonconsumptive metrics, cost, etc.) and any other tradeoffs that need to be considered? b. How can the project be designed to develop multiple benefits for a variety of interests? c. What are the options for tradeoffs, mitigation, and compensatory projects?
B. Understanding Whether a Project is Technically Feasible	
	1. Water Source, Water Rights, and Seniority a. What are the options for the physical source of the water for a project? b. Does it come from actual new appropriations on the Green River? If so, under what water right? c. Could it be a joint Wyoming or Colorado water right? d. What should the seniority of the project water rights be? e. Will they have priorities governed by Wyoming law? f. Would taking the water under a junior priority remove some of the risk from other users on the stream?

[1] Indicates whether an issue or question applies only to a Flaming Gorge project (FG) or to any transbasin diversion (Any)

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FG or Any[1]	Interests, Issues, and Related Questions
	g. What are the risks to other vested water rights, both in Wyoming and in Colorado? h. What are those risks under "normal" operation and under a Compact-delivery shortage scenario? i. Should they have a priority in the Colorado administration system as a condition of moving forward?
	2. Water Purchase and Cost a. Could the water be purchased? At what cost? In what sort of payment structure? b. Would that cost be the same as that offered to other users on the river? c. Would the purchase price include compensation for downstream injury due to the loss of otherwise available return flows? d. Would the water be purchased, contracted, or adjudicated under Wyoming law?
	3. Water Availability and Impacts at Flaming Gorge Reservoir (FGR) a. What is the designated amount of water to be moved annually? b. What are the options for contracting out of Flaming Gorge Reservoir (FGR)? c. Is the water truly available on a long-term, firm-yield basis? d. If it is contracted from FGR, what are the effects on the obligations of the other Colorado River Storage Project Act (CRSPA) facilities? e. What is the effect on the minimum power pool at FGR? f. How does the contracting party avoid the inherent safety (escape) clauses in a standard contract in the event of a drought?
	4. Water on the Front Range of Colorado a. What are the options for the amount of water brought to the Front Range, the timing of the water, and the variability of water amounts from year-to-year? b. How do these variations offset other issues? c. What are the options for cooperative infrastructure on the Front Range for delivering water from Flaming Gorge?
	5. Federal Permitting and the Role of Federal Agencies a. Can the project be permitted? This question applies to multiple components of a project, including diversion, storage sites, and pipelines. b. What is the role of the Bureau of Reclamation (BoR) in a project? c. What is the role of the US Army Corps of Engineers (USACE)?

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FG or Any[1]	Interests, Issues, and Related Questions
	d. What is the role of the Federal Energy Regulatory Commission (FERC)? e. What is the role of the US Environmental Protection Agency (EPA)? f. What are the options for who should be the lead agency on the federal permitting process? g. What is a realistic timeframe for permitting, financing and constructing a project of this magnitude? Are there recent examples?
	6. <u>State and Local Permitting</u> a. What are the respective permitting requirements in Wyoming and Colorado at the state level? b. What are the respective permitting requirements at the local government level(s) in Colorado and Wyoming?
	7. <u>Building a Project</u> a. What are the options for who would build the project? b. Who or what entity truly has the resources or funding base to undertake the project? c. Are named water providers willing to step forward and take the risk?
	8. <u>Funding a Project</u> a. What are the options for financing a project? b. What are the likely repayment obligations and means to pay for it? c. What are the likely water rates to the end users likely to be to service these payment obligations? d. Could the State of Colorado build a project with project beneficiaries paying the State back over a pre-determined period of time?
	9. <u>Water Allocation and Use</u> a. What are the options for allocating water to/among ultimate end users? b. Who, among various interests likely to receive water, should have priority and in what order? c. How much water should be allocated to filling the projected M&I gap on the Front Range of Colorado? d. How much water should be allocated to filling existing agricultural shortages on the Front Range of Colorado? e. How much water should be allocated to filling existing and new non-consumptive demands along the Front Range in Colorado? f. How much water should be allocated to M&I needs in Wyoming? g. How much water should be allocated to agricultural shortages in Wyoming?

Basin Roundtable Project Exploration Committee: Flaming Gorge
Interests and Issues in a Flaming Gorge Water Supply Project
WORKING DOCUMENT – PREPARED FOR ROUNDTABLE, IBCC, AND CWCB FEEDBACK

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FG or Any[1]	Interests, Issues, and Related Questions
	10. Diversion Points and Implications a. What are the options for the diversion point? b. Would the project divert directly from FGR? If so, what are the implications of direct diversion? c. Would the project divert upstream of FGR? If so, what are the implications of upstream diversion from the Green River or its tributaries? d. What are the implications of having a large-scale collection system?
	11. Pipeline Specifics a. How long would the pipeline need to be? b. Where would it go? c. Where are the ultimate delivery objectives and who is/are truly the ultimate end user(s)? d. What is the best route from an engineering standpoint? e. What are the likely size, diameter, and strength of the pipeline requirements? f. Could some of the distance be done in existing stream channels or in a concrete-lined ditch? g. What are the pumping requirements?
	12. Storage Options and Requirements a. What kind of firming storage would be required? b. Where could that storage occur? c. Could Flaming Gorge Reservoir be used to provide the necessary firming storage? d. Would firming storage be required on essentially both ends of the pipeline and at every major pumping point in the route? e. What assumptions need to be made in terms of scale regarding the firming storage? f. What are the additional cooperative, legal, administrative, and other issues associated with pursuing storage somewhere other than in the Flaming Gorge Reservoir?
	13. Water Quality and Treatment a. What is the current quality of the anticipated water source? b. What will be the effect of depletions caused by the project on water quality in the Green River and/or FGR? c. Will the effect on existing quality be magnified at points of diversion or in the tributary reaches of a large-scale collection system?

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FG or Any[1]	Interests, Issues, and Related Questions
	d. How will the water be treated to ensure that it is safe to drink? e. What additional treatment might be required to ensure that water is safe to drink? f. What treatment technology will be used? g. What additional costs or infrastructure requirements does the treatment entail? h. Would treatment occur at the point of diversion or point of delivery?
	14. Energy Needs, Cost, and Impacts a. How much energy would be required to operate the project? b. What would the source of that energy be? c. What would the cost of that energy be? d. Would additional transmission capacity be required and at what cost? e. Would additional generation capacity be required and at what cost? f. Would the project's water generate any power via hydroelectric generation in the pipeline? g. What will be the long-term effect on the federal minimum power pools at FGR?
	15. Hydropower Creation and Revenues a. What will be the resulting federal hydropower revenue stream from FGR as a result of the diversions contemplated by the project being fully implemented? b. What are the current hydropower revenues under historical operations at FGR? c. What are the likely hydropower revenues at different scenarios of diversions to the project?
	16. Wyoming Participation and Needs a. What are the options for Wyoming or Wyoming entities to participate in the project? b. What are their needs and delivery requirements?
C. Understanding Legalities of Building and Operating a Project	
	1. Ownership and Operation a. What are the options for ownership of the project? b. What are the options for ownership of the water? c. What are the options for who could/would operate the project once it is built?
	2. Contracting and Administration with BoR a. If water is supplied through a supply contract with the Bureau of Reclamation, what are the options for who would hold

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FG or Any[1]	Interests, Issues, and Related Questions
	the contract? b. What are the Bureau of Reclamation's authority, requirements, and limitations for contracting the water (i.e., amount or duration of contract, operations limitations, and connection facilities to the reservoir)?
	3. Legality of Depletion a. What are the legal options for depletion of Colorado River water in Wyoming or Utah for use in Colorado? b. What are the legal hurdles for such a depletion?
	4. Project Administration a. How would the project be administered within Wyoming and Colorado water law? b. How would interstate cooperation be established and implemented to administer the project? c. Would Wyoming be a participant or beneficiary? d. What legal requirements would be necessary for cooperative efforts between Colorado and Wyoming?
	5. Water Availability and Risk a. Given current levels of depletions, full use of existing systems (such as Denver's Dillon Reservoir system), currently anticipated projects (such as Windy Gap Firming and Moffat Enlargement), and the potential for other West Slope needs for water such as for energy development, is there sufficient remaining water supply to develop? b. Does the physical water exist for this project and what are the options for protecting other users if a project is built? c. How much water is available in FGR? d. How much water is available in e. How much water is expected to come from peak flows on the Green River and how much from base flows? f. How does a Flaming Gorge pumpback increase the risk to other existing uses whether senior or junior to the pumpback? g. What are the options for eliminating, minimizing, or managing risks? h. What are the impacts to the firm yield of the project if the anticipated amount of water is not available from FGR's CRSPA water right? i. What are the impacts to water availability from coalbed methane (CBM) water being returned to the river system after use in Wyoming?
	6. Colorado River Compact Entitlement and Impacts a. What would the impacts of a project be on compliance with the Colorado River Compact and other interstate agreements? b. How much is Colorado's remaining entitlement under the Colorado River Compact?

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FG or Any[1]	Interests, Issues, and Related Questions
	c. What are the effects on Colorado of developing this level of Colorado's remaining entitlement in this manner? d. How would a project affect curtailment under the Colorado River Compact? e. Could this lead to curtailment of other users in Colorado in the event of drought? f. Who should bear the risk of curtailment in the future if this project moves forward? g. What are the implications of the project on the 602(a) storage trigger in the Colorado River Storage Project Act? h. What are the implications of the project on the obligation of the Upper Basin states to deliver water to Mexico under the Mexican Treaty? i. What are the benefits to Utah and New Mexico if Colorado does not develop available Colorado River Compact Entitlements?
	7. <u>Seniority of Water Rights</u> a. What are the options for the seniority and priority date of the water rights? b. Will the project be junior to: 1) any Colorado water rights perfected by use prior to the Colorado River Compact, 2) any Colorado obligation to deliver water to Mexico, 3) any Colorado obligation to not deplete the Colorado River below 75 MAF over 10 years to the Lower Basin States, and 4) any water right perfected in Colorado prior to 2011?
	8. <u>Risk of Triggering a Compact Call</u> a. What ways exist for structuring the project to avoid or minimize the risk of triggering a Compact call? b. Is it sufficient to minimize the risk of a Compact call or should there be a more aggressive goal relative to the Compact? c. Can the project be built with acceptable triggers that would require diversions to cease in the event of certain conditions arising on the Colorado River System? d. Could Colorado create an Intentionally Created Surplus (ICS) in Lake Powell to help address risk management? (This would require Upper Basin negotiations.) e. To what extent would a project like this increase the frequency or duration of a Compact call?
	9. <u>Water Supply Benefits and Impacts</u> a. How would the project benefit or negatively impact Colorado's water supply? b. What are the benefits specifically? c. Who benefits? d. Are those who benefit paying for the impacts? e. How does that fit with a longer-term vision for the state?

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FG or Any[1]	Interests, Issues, and Related Questions
	f. Does the project improve water supplies in the context of global warming? g. Does the project place existing users (and their economic activity) at risk in the context of global warming? h. Are there opportunities for exchange to relieve pressure on Colorado River headwaters? i. Under correct configuration and State cooperation, would the project be able to benefit the South Platte, Arkansas, North Platte, Colorado, and Gunnison Rivers? j. What are the options for benefitting each West Slope basin if a Flaming Gorge project is built?
	10. <u>Conjunctive Use and Reuse</u> a. Are there opportunities for conjunctive use with non-tributary Denver Basin aquifer in dry years? b. What reuse options exist? c. Does reuse present a benefit for agriculture along the South Platte River? d. Are reuse benefits limited to municipal components in the Front Range corridor?
D. Understanding the Economic Costs of a Project	
	1. <u>Project Costs</u> a. What are the capital costs of a project? These costs include (but are not limited to): water rights, firming storage, transmission facilities, diversion structures, pumping facilities, terminal storage, water treatment, reuse facilities, permitting costs, mitigation costs, and any related engineering, legal, and administrative fees. b. What are the operation, maintenance, energy, replacement, and other life-cycle costs of a project? What would the acre-foot charge be for water for M&I use from the Bureau of Reclamation on an annual basis? c. What costs, if any, increase or decrease over time? Will it be likely that the cost of power and water will increase over the lifespan of the project? d. What costs, if any, increase or decrease depending on the diversion location or other project specifics? e. What is the total anticipated cost or cost range of a project? How are the real environmental and recreational costs and benefits of the project quantified and compensated for? f. What would be the required operational reserves? g. What are the annualized capital costs per acre-foot? h. What are the annual operating costs per acre-foot? i. What are the total annualized costs per acre-foot? j. What are the pre-treatment and post-treatment costs per acre-foot compared to other supply alternatives?

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FG or Any[1]	Interests, Issues, and Related Questions
	k. What are the externalized costs of a project (costs that accrue to society or other interests)?
	2. <u>Project Funding and Financing</u> a. What are the options to fund the project? b. Project proponents, the State, the federal government? c. How would the funder pay for it? d. How do the costs compare with other existing or reasonably foreseeable sources of water? e. If financed, what are the likely financing terms? f. Is the project viable from a financing perspective? g. How would bondholders view the project, especially given risks and uncertainties under the Compact? h. What are the options to pay annual operation and maintenance costs? i. What would be the required reserve funds for emergencies? j. How would these costs affect rates for consumers and tap fees?
E. Understanding the Environmental Impacts (Positive and Negative) of a Project	
	1. <u>General Environmental Impacts</u> a. What are the anticipated environmental impacts of a project (e.g., existing and future flow alterations, impacts to existing programs, ecosystem impacts, etc.)? b. What are the environmental impacts to the Yampa, White, and Green River Basins of development of a Flaming Gorge causing other M&I water users to turn to buy-and-dry of agricultural water to continue or expand their own operations? c. What options exist for mitigating potential negative impacts? d. What are the impacts from lower flows and revised dam operations for hydropower generation downstream? e. What are the cumulative impacts downstream to the confluence with the Colorado? f. Is mitigation of these impacts possible or realistic?
	2. <u>Endangered Fish</u> a. What are the effects on, and mitigation for, the Programmatic Biological Opinion (PBO) on the Green River and other Endangered Species Act (ESA) concerns? b. What flexibility does the Green River PBO offer relative to the PBOs on other systems (Yampa, Colorado, and Gunnison)? c. How does the project protect the 54,000AF of water reserved under the Yampa Plan and PBO?

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FG or Any[1]	Interests, Issues, and Related Questions
	3. Impacts to Water Quality a. What are the anticipated impacts to flow regimes on the Green River? b. What are the anticipated impacts to temperature on the Green River? c. What are the anticipated impacts to water quality generally on the Green River?
	4. Environmental Benefits What are the anticipated environmental benefits of a project?
F. Understanding the Recreational Impacts (Positive and Negative) of a Project	
	1. General Recreational Impacts a. What are the anticipated impacts of a project to recreation? (Particularly the world class trout fishery below the dam?) b. What options exist for mitigating potential negative impacts? c. Is mitigation even possible?
	2. Recreational Boating a. What are the potential impacts to stream recreation in the area of diversions? (E.g., side streams or the Green River and the Yampa.) b. What are the potential impacts to flat water recreation at FGR? c. What are the anticipated impacts to white water boating downstream through Dinosaur National Park, Grays Canyon, Desolation Canyon, and Canyonlands National Park through to the confluence with the Colorado?
	3. Recreation Benefits What are the anticipated environmental benefits of a project?
G. Understanding the Impacts to Agriculture across the State from a Project	
	1. General Agriculture Impacts a. What are the anticipated costs and impacts to agriculture in the state (on both the East and West Slopes)? b. What options exist for mitigating negative impacts?
	2. State Goals for Agriculture a. What is the goal for trying to meet the state's identified shortages of water for agricultural use on the East Slope? What are the requirements identified in SWSI 2010? b. What is the goal for trying to meet the state's identified shortages of water for agricultural use on the West Slope? What are the requirements identified in SWSI 2010?

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FG or Any[1]	Interests, Issues, and Related Questions
	3. Agricultural Benefits What are the anticipated benefits to agriculture from a project?
	4. Costs of Converting Agricultural Water to M&I Use a. What are the agricultural impacts to the Yampa, White, and Green River Basins of development of a Flaming Gorge causing other M&I water users to turn to buy-and-dry of agricultural water to continue or expand their own operations? b. What is the effect on Colorado's economy of properly utilizing the available Compact Entitlement vs. conversion of agricultural water to M&I use? c. What is the number of acres of agricultural dry-up for every firm acre-foot of available Compact Entitlement not developed? d. How would a project like this affect the resale value of agricultural water rights?
H. Understanding the Socioeconomic Impacts of a Project	
	1. General Socioeconomic Impacts a. What are the anticipated socioeconomic impacts of a project? b. Where do those impacts occur? (This should include an assessment of impacts above and below FGR.) c. What are the socioeconomic impacts to the Yampa, White, and Green River Basins of development of a Flaming Gorge causing other M&I water users to turn to buy-and-dry of agricultural water to continue or expand their own operations? d. What options exist for mitigation potential negative impacts?
	2. Socioeconomic Cost of Risk a. If the project places all water rights junior to the Colorado River Compact at greater risk of curtailment, what is the socioeconomic cost of that risk? b. Who should bear the cost of that risk?
	3. Socioeconomic Benefits What are the anticipated environmental benefits of a project?
	4. Impacts on Land Use a. What are the anticipated impacts (positive and negative) on land use patterns, density, and landscaping? b. What options exist for mitigating potential negative impacts?

Appendix F

Concerns / Challenges and Potential Benefits of Any New Supply Project and of a Flaming Gorge Project

*NOTE: The concerns and benefits discussions occurred in a brainstorming format; the Committee **did not** seek to vet or otherwise assess the accuracy or importance of the items on the list. The group **did not** explore the tradeoffs associated with the items on the list.* ***The group also did not seek consensus on each item on the list and not all members agree with all items on the list. However, the Committee does agree that the list reflects the universe of ideas and issues that were raised.***

Any New Supply Project

	Concerns and Challenges	Potential Benefits
Hydrology	There may not be enough water to develop a new project from the Colorado River. A project developed around "average" flows has the potential to create an unsustainable bubble economy during long term drought. Any project must be viable through dry cycles. The project would likely need to be "shut off" during dry cycles. Developing a new project may foreclose future options on the West Slope and on the Front Range. Other options and alternatives for additional conservation and efficiency in municipal and agricultural water use should be exhausted first. Climate change may increase the risk of Compact administration on the Colorado River making the project more unreliable.	There could be enough water to develop a new project from the Colorado River. Developing a new project could help reduce much of the M&I gap on the Front Range until 2050. A project configured around the variability of hydrology (wet-dry) could conjunctively capture more water for Colorado by coupling drought-proof Denver Basin water, storage and possibly improve flow in the upper reaches of the Colorado Basin. Because of time to develop a water project using new supplies, efforts should continue to explore opportunities concurrent with conservation and efficiency efforts. Associated project storage (if any) may lessen impacts from climate variability
Colorado River Compact Entitlement	A new supply project has the potential to use all of Colorado's remaining Compact entitlement, leaving nothing for development after 2050 as well as exacerbate Compact administration.	A new supply project would help ensure that Colorado uses and benefits from its full Compact entitlement.
Risk Assessment and Risk Management	A new supply project from the Colorado River system would increase the risk of Compact administration if proper legal and operational controls are not developed. Without clarity on the legal issues surrounding the 1922 and 1948 compacts, along with Colorado's administration of them it is not possible to evaluate the local	Defined hydrologic triggers could be developed, and agreed upon, for those participating in a new supply project in order to reduce the threat of Colorado River Compact administration. Investigation of potential project(s) will inform the discussion and provide more definition of challenges, concerns, and

Concerns / Challenges and Potential Benefits of Any New Supply Project and of a Flaming Gorge Project

	Concerns and Challenges	Potential Benefits
	impacts and risks. There has not been sufficient discussion of the acceptable level of risk or the triggers for risk management of Colorado River Compact administration.	solutions
Allocation of "New" Water	There is no way to ensure that water from a new supply project would be allocated in a fair way. Without such an assurance, all of the water could end up on the Front Range, leaving West Slope users, rivers and communities with an additional water supply gap. Any new supply project from the Colorado Basin to the Front Range could have significant new environmental impacts to western slope rivers and could exacerbate existing problems. Any new supply project could have serious negative impacts to the important recreational economy of the West Slope, especially in the headwaters counties.	A new supply project could help ensure that Colorado uses and benefits from its full Compact entitlement. Further discussion and investigation would inform decision and lessen likelihood of "unfair" allocation The Basin Roundtables are empowered by the Colorado Water for the 21st Century Act to allocate the water in a fashion acceptable to all impacted basins. An alternative method to bring Colorado River water to the Front Range that avoids further depletions of the headwaters could have the benefit of reliable flow for downstream users, both recreationally and for dilution of wastewater plant discharges, thereby avoiding costly upgrades to existing point source dischargers on the streams receiving additional water. Failure to develop any new supply has important, and perhaps significant, adverse impacts to the Colorado economy.
Agriculture	A new supply project could divert West Slope water that is used for agriculture to protect Front Range agriculture from supplying the water to meet the M&I gap. Trading West Slope agriculture for East Slope agriculture is not an acceptable solution. A new water supply project will only temporarily alleviate pressure on agriculture. A new supply project will not permanently eliminate demand for agricultural water. Agricultural dry-up could result in significant environmental injury.	A new water supply project will reduce pressure on agriculture by providing an alternative to buying up agricultural water for municipal use. In a variable hydrology approach, rotating fallowing (leases) could provide system reliability without permanent dry-up.

Concerns / Challenges and Potential Benefits of Any New Supply Project and of a Flaming Gorge Project

Impacts to Nonconsumptive Values	A project of this size may have environmental impacts that are too big and too geographically dispersed to be mitigated or even to allow it to be buildable. Environmental impacts in the future could be compounded by water use for oil shale development and by climate change. Getting a federal permit for a project of this size and scope may be difficult.	A new water supply project may provide relief at the headwaters of the Colorado River by allowing for water to be exchanged with water from the new project, leaving more water in the Colorado at the headwaters. A new water supply project could reduce the need for further diversions from the Colorado River and their associated environmental impacts.
Nature of the Solution	A large new water supply project is a temporary and short-term solution to a pending water supply problem but may not be a solution for long-term (+40 years) water supply problem.	A large new water supply project could substantially relieve the M&I water supply gap on the Front Range until 2050. A decision to move ahead with a roundtable-based dialogue, especially by the senior leadership of the State of Colorado, will provide a platform for convening a dialogue on the linkage between land use and water. (See Sterling Ranch decision in Douglas County.)
Collaboration and Reduced Competition	A new water supply project could undermine collaboration and increase competition for water if it is not pursued in a way that accommodates existing and future water needs on the West Slope.	A new water supply project could prompt water providers to work together to identify common water needs without the presence of perceived threats to the interests of specific providers. A new water supply project provides an opportunity for the State to support public or public/private partnerships to facilitate innovation, compromise, and hope.

Concerns / Challenges and Potential Benefits of Any New Supply Project and of a Flaming Gorge Project

Flaming Gorge Only

	Concerns and Challenges	Potential Benefits
Administration	The State Engineer may not have the authority to administer a project that begins outside of Colorado. It is not clear how the State Engineer would administer the Compact and how a Flaming Gorge project would influence that administration.	A cooperative agreement between Colorado and Wyoming could be developed to ensure administration authority in Colorado and cooperation and collaboration between the states. The Upper Basin Compact States may have an opportunity to collaborate on avoiding Lower Basin Compact administration. Project would provide a catalyst for discussion of compact issues.
Checks and Balances	A Flaming Gorge project may exist outside of the existing system of oversights and checks and balances in Colorado, including the conservancy district statute, water court, and 1041 permitting. This would severely limit the ability of Colorado stakeholders to voice an opinion and influence permitting decisions.	Federal and state permits would be required for a Flaming Gorge project. These permitting processes would offer opportunities for Colorado stakeholders to weigh in. A Roundtable-to-Roundtable process grounded in the Colorado Water for the 21st Century Act could provide checks and balances.
Water Rights	A Flaming Gorge project could significantly affect administration of Compact administration, depending on the seniority of the water right. It could significantly impact existing water rights, particularly on the West Slope.	A Flaming Gorge project may not have a very senior water right, but if it did, perhaps an agreement or administrative mechanism could be developed to provide some certainty to existing holders of water rights in Colorado (e.g., an agreement to only take water when water is clearly available).
Water Supply	There may not be enough water to develop a new project from the Colorado River. Developing a new supply project could jeopardize existing water supply projects by increasing the risk of Compact administration. Water supply is ultimately finite. At some point or during dry spells we will reach the point where there is no new water to develop from the Colorado Basin, and we may be close already. We need to start looking more at reducing demand for long term water solutions.	Water from a Flaming Gorge project would be fully consumable through reuse and could create up to 1.5 or 1.8 acre-feet of use for each acre-foot of water realized as yield by diversion from the Green River. Flaming Gorge project water could be used in conjunction with non-tributary groundwater supplies (e.g., the Denver Basin aquifers) as a means of providing alternative municipal water resources in dry years. A Flaming Gorge project could provide redundancy to other water supply sources if natural or man-made disasters (flood, wildfire, chemical spills, etc.) temporarily interrupt existing water supplies.

Concerns / Challenges and Potential Benefits of Any New Supply Project and of a Flaming Gorge Project

	Concerns and Challenges	Potential Benefits
CRSPA Reservoirs	CRSPA reservoirs were intended and built to provide for the Upper Basin's Compact obligations and as a "savings account" to protect against Compact administration. Developing a Flaming Gorge project diminishes the ability to use the Flaming Gorge Reservoir as a saving account and increases the risk of Compact administration and subsequent curtailment in Colorado.	The significant storage capacity of Flaming Gorge Reservoir would allow greater flexibility in project operations and may allow some degree of drought protection, depending on resolution of Compact administration concerns and issues. Further, the storage reserves in and capacity of Flaming Gorge Reservoir can provide greater flexibility in addressing endangered species issues that might arise from a Flaming Gorge project.
Additional Approvals	The Upper Colorado Basin Commission may have to agree before the Bureau of Reclamation can contract for a large new diversion out of a CRSPA reservoir.	The Upper Colorado Basin Commission may discuss a large, new diversion from a CRSPA reservoir but consensus may not be sought or required.
Environmental Impacts	A Flaming Gorge project could negatively affect flows and endangered fish in the Green River and in the Colorado Basin more generally. A project of this size may have environmental impacts that are too big and too geographically dispersed to be mitigated. Environmental impacts in the future could be compounded by water use for oil shale development and by climate change. Getting a federal permit for a project of this size and scope may be difficult.	The existing management practices under the Recovery Program for the endangered fish may be sufficient to protect the fish. A Flaming Gorge project may provide relief at the headwaters of the Colorado River by allowing for water to be exchanged with Flaming Gorge water, leaving more water in the Colorado at the headwaters. A Flaming Gorge project could also reduce the need for further diversions from the Colorado River and its tributaries within Colorado and their associated environmental impacts. A Flaming Gorge project could provide Front Range environmental benefits.
Impacts to Agriculture	A Flaming Gorge project would only temporarily alleviate pressure on agriculture. It would not permanently eliminate demand for agricultural water.	A Flaming Gorge project could significantly reduce the amount of agricultural buy-and-dry on the Front Range.
Energy	A Flaming Gorge project may require substantial energy to pump water from Wyoming to Colorado's Front Range. Although it may also create some energy, net energy use may be high.	A Flaming Gorge project could produce some hydropower to partially offset its energy impacts.
Climate Change	Climate change could reduce instream flows in the Green River in the future, which would affect water availability for a Flaming Gorge project. Climate change may increase the risk of Compact administration on the Colorado River making the project more unreliable.	Flaming Gorge Reservoir is located north of Colorado, which means this area may not be as hot and dry as a result of climatic change, so the Flaming Gorge Reservoir could be a more reliable source of water into the future.

Concerns / Challenges and Potential Benefits of Any New Supply Project and of a Flaming Gorge Project

	Concerns and Challenges	Potential Benefits
Statewide Benefits	The benefits of a Flaming Gorge project may not outweigh the negative impacts throughout the state. A Flaming Gorge project could have serious negative impacts on the important recreation economy important to this part of Colorado, Wyoming and Utah. A Flaming Gorge project is a temporary solution that could keep Colorado from having a conversation about a different, scalable project that could grow into the future and meet water demands incrementally over time.	A Flaming Gorge project has the capacity to provide statewide economic opportunities related to both consumptive and nonconsumptive water supply. An investigation of a Flaming Gorge project could uncover additional benefits and concerns that could apply to any new supply project.
Collaboration and Reduced Competition	A Flaming Gorge project could undermine collaboration and increase competition for water if it is not pursued in a way that accommodates existing and future water needs on the West Slope. A Flaming Gorge project could strain relations between Colorado, Utah and Wyoming, making future collaborations or cooperative administration of Compact obligations more difficult.	A Flaming Gorge project could prompt water providers to work together to identify common water needs without the presence of perceived threats to the interests of specific providers. Piping water in from outside of Colorado could help reduce competition and tensions related to conflicting goals between water providers. A Flaming Gorge project could represent a cooperative effort between Colorado and Wyoming. By providing water to entities in Wyoming along the pipeline route and delivery of water to Colorado's Front Range, substantial sharing of infrastructure costs could benefit project beneficiaries both in Wyoming and Colorado. A Flaming Gorge project provides an opportunity for the State to support public or public/private partnerships to facilitate innovation, compromise, and hope.

Appendices G – I

Appendix G: Flaming Gorge Task Force Assessment Report

Appendix H: Final WSRA Grant Application to CWCB

Appendix I: Final Scope of Work Approved by CWCB in September 2011

Appendix I

Basin Roundtable Project Exploration Committee: Flaming Gorge Project
Scope of Work
September 21, 2011

Task 1: Identification of Interests and Issues

- Prepare preliminary list of interests and issues based on SWSI 2010 analysis, Flaming Gorge Task Force Situation Assessment interviews, and public comment
- Send preliminary list of interests and issues to IBCC members and roundtable chairs and encourage roundtable discussion (in-person or via email) to identify interests and issues in advance of IBCC discussion
- Work with Director of the IBCC to schedule IBCC discussion to identify additional interests and issues
- Finalize preliminary list of interests and issues for first Project Exploration Committee meeting

Number of Meetings	Cost	Travel Pool for Non-RT Members	RT Member Travel Cost per Person	Deliverable
0	$500	$0	$0	Preliminary list of interests and issues

Task 2: Exploration of Current State of Knowledge Regarding Interests and Issues

- **Logistics**
  - Work with roundtable chairs to ensure that roundtable representatives are identified
  - Convene and facilitate initial meeting of the Committee to finalize participants, develop operating protocols, and determine how to understand a "Flaming Gorge project"
  - Schedule all subsequent meetings, including securing venue, food, and materials as needed
  - Communicate all meeting times and locations to participants and interested parties via email
  - Ensure that all agendas allow for public participation
- **Facilitation of Up to Six Committee Meetings to:**
  - Discuss preliminary list of interests and issues; revise as necessary
  - Prioritize interests and issues for discussion; combine interests and issues as needed
  - Identify and discuss existing documents, reports, and studies that address interests and issues
  - Engage additional stakeholders and experts as needed to inform discussion of existing documents, reports, and studies
  - Engage IBCC in discussion of existing documents, reports, and studies, and work with roundtable representatives to engage full roundtables in this discussion
  - Ensure good-faith effort to incorporate feedback from IBCC, CWCB, roundtables, and the public
  - Seek agreement on 1) list of interests and issues, and 2) range of perspectives/conclusions in existing documents, reports, and studies

- **Coordination**
  - Confer as necessary with participants prior to meetings to ensure a focused and productive discussion
  - Work with IBCC director, CWCB staff, roundtable representatives on Committee, and roundtable chairs to ensure regular and meaningful dialogue between Committee and IBCC, IBCC New Supply Subcommittee, and roundtable discussions
  - Work with roundtable representatives on Committee and roundtable chairs to ensure opportunities for feedback at roundtable meetings
  - Ensure regular updates to IBCC, IBCC New Supply Subcommittee, and roundtables and updates from those entities to the Committee as needed
- **Documentation**
  - Prepare draft summaries of all meetings in a timely fashion and distribute to meeting participants to ensure accuracy
  - Finalize meeting summaries to reflect feedback from participants; distribute final meeting summaries to participants and interest parties via email
  - Prepare final report of this task for distribution to IBCC, CWCB, and roundtables including findings that apply to Flaming Gorge only, to any new supply project, and to any source of water (including conservation or IPPs)

Number of Meetings	**Cost**	**Travel Pool for Non-RT Members**	**RT Member Travel Cost per Person**	**Deliverable**
6	$30,000	$1000	$1000	Report of 1) interests and issues, and 2) range of perspectives/conclusions in existing documents, reports, and studies

Task 3: Exploration of What Would Be Needed to Address Interests and Issues

- **Logistics**
  - Schedule all meetings, including securing venue, food, and materials as needed
  - Communicate all meeting times and locations to participants and interested parties via email
  - Ensure that all agendas allow for public participation
- **Facilitation of Up to Six Committee Meetings to:**
  - Discuss what would be needed to address interests and issues (including additional studies, processes, collaborative discussions, etc.)
  - Engage additional stakeholders and experts as needed to inform discussion of additional work that is needed
  - Engage IBCC to identify additional work that is needed to address interests and issues, and work with roundtable representatives to engage full roundtables in this discussion
  - Ensure good-faith effort to incorporate feedback from IBCC, CWCB, roundtables, and the public

  - Identify pros and cons of using the Project Exploration Committee as the venue for discussions of specific projects
  - Seek agreement on additional work that is needed to address interests and issues above and beyond Task 2
  - Discuss ideas and options for next steps regarding the work of the Project Exploration Committee
  - Seek agreement on recommended next steps for the Committee
- **Coordination**
  - Confer as necessary with participants prior to meetings to ensure a focused and productive discussion
  - Work with IBCC director, CWCB staff, roundtable representatives on Committee, and roundtable chairs to ensure regular and meaningful dialogue between Committee and IBCC, IBCC New Supply Subcommittee, and roundtable discussions
  - Work with roundtable representatives on Committee and roundtable chairs to ensure opportunities for feedback at roundtable meetings
  - Ensure regular updates to IBCC, IBCC New Supply Subcommittee, and roundtables and updates from those entities to the Committee as needed
- **Documentation**
  - Prepare draft summaries of all meetings in a timely fashion and distribute to meeting participants to ensure accuracy
  - Finalize meeting summaries to reflect feedback from participants; distribute final meeting summaries to participants and interest parties via email
  - Prepare final report of this task for distribution to IBCC, CWCB, and roundtables including findings that apply to Flaming Gorge only, to any new supply project, and to any source of water (including conservation or IPPs)

Number of Meetings	**Cost**	**Travel Pool for Non-RT Members**	**RT Member Travel Cost per Person**	**Deliverables**
6	$30,000	$1000	$1000	1. Report of additional work that is needed to address interests and issues 2. Recommended next steps for Project Exploration Committee (including moving forward or not)

TIMELINE

Complete Task 1	Notice to Proceed + 30 days
Complete Task 2	June 1, 2012
Complete Task 3	December 31, 2012