Overview of Yampa/White Green Basin Implementation Plan and Roundtables Next Steps

Presented to the Water Resources Review Committee by Jeff Devere
7-22-2015

Basin Implementation Plan (BIP)

As noted in the BIP handout, the 8 goals and associated measurable outcomes are the same as in the last presentation to the committee. These are:

1. *Protect the YWG Basin from compact curtailment of existing decreed water uses and some increment of future uses.*
2. *Protect and encourage agriculture uses of water in the YWG Basin within the context of private property rights.*
3. *Improve agricultural water supplies to increase irrigated land and reduce shortages. The agricultural needs study of the YWG BRT identified an additional 14,805 acres of potential new agricultural production in the future.*
4. *Identify and address municipal and industrial (M&I) water shortages.*
5. *Quantify and protect environmental and recreational water uses at locations identified in the non-consumptive needs study of the YWG BRT.*
6. *Maintain and consider the existing natural range of water quality that is necessary for current and anticipated water uses.*
7. *Restore, maintain, and modernize water storage and distribution infrastructure.*
8. *Develop an integrated system of water use, storage, administration and delivery to reduce water shortages and meet environmental and recreational needs.*

Status of the Roundtable

The question of next steps has been the focus of recent roundtable discussions. The YWG BRT is holding a facilitated conversation on August 4th and 5th to discuss the key and somewhat controversial question of securing an equitable allocation of native flow and its relevance, or not, to compact matters and administration, and the next-steps in understanding non-consumptive flow or "how the system operate". Both these items will help the BRT be in a position to meet its goals and discuss the items outlined in the Conceptual Framework which someday may involve a project such as the Maybell pump back.

Recent Actions

An updated Agricultural Study which is attempting to refine our understanding of the return flow phenomena and the interrelationships between Ag, the environment, and other users in the system. The BRT is asking the question as to whether efficiency is always in everyone's best interest or does it create a set of unintended consequences.

The BRT discussed and made a motion on the 7 point "Conceptual Framework" in Water Plan. The YWG BRT considers the Conceptual Framework a guidance document that outlines major issues that any project or TMD would be required to address in order for negotiations to take place between a proponent and basin of origin(s).

Questions

Yampa/White Green Basin Implementation Plan (BIP)
Building on Goals and Measurable Outcomes

With no preference implied the Basin Roundtable (BRT) identified the following core goals and associated measurable outcomes for the Basin Implementation Plan (BIP) for the State Water Plan. The BIP is constructed to support and implement programs to meet the goals and measure outcomes.

Protect the YWG Basin from compact curtailment of existing decreed water uses and some increment of future uses.

- Secure an equitable allocation of native flow in the Yampa, White, and Green rivers to meet existing and future in-basin water demands including PBO depletion allowances.
- Maintain existing and future PBO depletion allowances for in-basin needs.
- Minimize and mitigate the risk of a Colorado River Compact shortage.
- Prevent pre-Compact water rights from being abandoned or placed on the Division 6 abandonment list.

Protect and encourage agriculture uses of water in the YWG Basin within the context of private property rights.

- Preserve current baseline of approximately 119,000 irrigated acres; expand by 12% by 2030.
- Encourage land use policies and community goals which enhance agriculture and agricultural water rights.

Improve agricultural water supplies to increase irrigated land and reduce shortages. The agricultural needs study of the YWG BRT identified an additional 14,805 acres of potential new agricultural production in the future.

- Reduce agricultural shortages basin-wide by 10 % by the year 2030.
- Preserve the current baseline of 119,000 irrigated acres and expand by 12% by 2030.

Identify and address municipal and industrial (M&I) water shortages.

- Reliably meet 100% of M&I demands in the YWG Basin through the year 2050 and beyond.

Quantify and protect environmental and recreational water uses at locations identified in the non-consumptive needs study of the YWG BRT.

- To the extent that non-consumptive needs can be specified and projects can be analyzed, there will be projects for non-consumptive attributes within the existing legal and water management context.
- Multi-purpose projects and methods will be researched and designed to meet the other goals enumerated here.
- The PBO and its depletion coverage for the Yampa River Basin for existing and future anticipated and unanticipated depletions will meet base flow targets in critical habitat areas and assist with endangered fish recovery.
- A new PBO is agreed upon for the White Basin that provides certainty for existing and future anticipated and unanticipated depletions and that assists with endangered fish recovery.
- The flow protection and any water leasing or re-operation of projects needed for native warm water fish, cottonwoods, and recreational boating on reaches with greater and overlapping flow alteration risks are integrated with the flow protection for endangered fish recovery and with projects to meet in-basin, consumptive needs. The flow needs of these non-consumptive attributes are otherwise met, including the avoidance or offset of the loss of minimum or

optimal boating days that are related to multi-purpose projects and unrelated to drier or wetter hydrology.

- The flow needs for all other non-consumptive attributes are quantified, integrated with projects to meet in-basin consumptive needs, and otherwise met through non-consumptive identified projects and processes (IPPs). Multi-purpose projects will be researched and designed to improve riparian or aquatic ecology and bank stability without changing the existing flow regime while voluntarily modernizing irrigation diversion systems and reducing bed load deposits.
- Similar projects will be researched and designed to improve recreational boating for existing flows while voluntarily modernizing irrigation systems.
- The economic values of the relatively natural flow regimes of the Yampa and White river systems are recognized and protected, along with the economic values of consumptive water use.
- Acres of restored riparian areas, degraded streams, and wetlands to restore natural water storage capacity and improve water quantity and quality for non-consumptive needs.
- Assess and quantify impact of IPP's on peak flows and ascertain whether further non-consumptive IPP's need to be identified.

Maintain and consider the existing natural range of water quality that is necessary for current and anticipated water uses.

- Consider and maintain the existing water quality necessary for current and future water uses when reviewing IPPs.
- Support the implementation of water quality monitoring programs to create quality-controlled baseline data for all sub-basins of the YWG Basin.

Restore, maintain, and modernize water storage and distribution infrastructure.

- Increased percentage of operable head gates.
- Where applicable, monitor the reduction in the loss of water through less wastage or seepage of water through leaky ditches, head gates, and storage ponds.
- Increased agricultural water storage in combination with multi-purpose opportunities when possible.
- Implement at least one project every year in the YWG Basin focusing on the restoration, maintenance, and modernization of existing water infrastructure.

Develop an integrated system of water use, storage, administration and delivery to reduce water shortages and meet environmental and recreational needs.

- Success in permitting and constructing in -basin storage projects.
- Reduction in consumptive shortages in drought scenarios.
- Reduction in identified non-consumptive shortages in drought scenarios.
- Administration and infrastructure improvements making decreed a mounts of water available to diversion structures with less need for seasonal gravel dams in the river.
- Reduce the potential incidence of severe low flows in order for water users to exercise their water rights.

For Further info please see:
Webinar on Colorado's Water Plan, recorded July 21, 2015:
https://m.youtube.com/watch?v=ItiwMkglAv0&feature=youtu.be
The webinar was hosted by the Colorado Foundation for Water Education.