Upper Colorado River Endangered Fish Recovery Program

Revised: November 5, 2012

August 7 – 8, 2012, Management Committee Meeting Summary
Cheyenne, Wyoming

CONVENE: 1:00 p.m.

1. Introductions, review/modify agenda and time allocations, and appoint a timekeeper

2. Approve March 21, 2012, April 20, 2012, and June 26, 2012 web meeting summaries and review previous meeting assignments – All three summaries were approved as written.

3. Technical Committee Reports

   a. Information and Education Committee – Randy Hampton reviewed recent activities. A press release was issued last week about Questar funding a PIT tag reader on the White River. Press is forthcoming on Fryingpan-Arkansas project's 50th anniversary. The Service's Leith Edgar is helping us use more social media. The Program was represented at several recent events (Tom Chart and Angela Kantola at the Grand Junction Farmer's Market in July; Debbie Felker and Justyn Hock at the Ute Water Festival; and the downtown Denver Aquarium for Endangered Species Day in May). The I&E Committee is discussing potentially repeating the public attitudes survey done several years ago. The recovery programs have a new promotional product of "stress" or "squeeze" fish – razorback sucker and Colorado pikeminnow for the San Juan and humpback chub and razorback sucker for the Upper Basin. The I&E Committee continues to work on the I&E section of the draft basinwide nonnative fish strategy, plotting a course for stronger outreach. John Shields noted that the Committee also has been editing the Program's talking points and he thinks this will be a really helpful document (Debbie e-mailed the final to the Management Committee today). With regard to "nonnative fish, our greatest challenge," Randy said the I&E Committee wanted to make sure that's truly a Program position before they focused messaging on this.

   b. Biology Committee – Harry Crockett said the Committee has discussed the draft White River flow recommendations and Jana Mohrman is working on revisions. Subcommittees and ad hoc groups are working on humpback chub genetics/captivity, Tusher Wash, and nonnative fish. Nonnative fish management consumes much Committee attention. The Program has been able to respond to emerging issues such as burbot below Flaming Gorge and smallmouth bass in the White River. Several Program activities were quickly modified to compensate for this year's low flows. The Committee has discussed the draft basinwide nonnative fish strategy (still in development) several times. Tentative plans for a mortality study at Tusher Wash are on hold because we didn't receive any responses to the request for proposals. Owners have NRCS funding for diversion structure rehabilitation; Harry said it will be helpful to know what their plans turn out to be.

4. Legislation and Congressional activities – Tom Pitts said that FY 2013 Program-related funding within Reclamation and Service appropriations bills may not come to a floor vote in light of the 6-month continuing resolution agreement. Brent Uilenberg said the FY12 capital appropriation for the Upper Colorado and San Juan programs was ~$5.7M. OMID construction won't likely be committed until after CY2013. If we go forward with an electrical fish barrier at Tusher Wash, we'd be wise to award that by the end of FY2013 to NRCS so it can be done in collaboration with rehabilitation of the diversion.

   John Shields said HR 6060 was introduced on June 29 and has 13 (of 14 members of the 4-state delegation) co-sponsors (achieved in ~24 hours), which is a clear testimony to the value of the annual briefing trips. Leslie recommended the group thank Rep. Gosar of Arizona (staff Jeremy Harrell) next year since he also co-sponsored the legislation (he's on the House Natural Resources Water and Power Subcommittee). More than two dozen letters of support were submitted on the legislation (Attachment 3). The bi-partisan support for this legislation has been restored and the bill was passed out of Committee by unanimous consent. Subcommittee staff is working on developing alternatives to meet the cut-go requirements (something within the jurisdiction of the Natural Resources Committee, probably within DOI mandatory spending, totaling ~$22M). Committee staff are pushing for floor time in the House on this bill in September. S. 1224 was introduced by Chairman Bingaman previously and efforts are underway to get him to bring that bill to mark-up (probably substituting the House-marked bill, although the Senate may object to the 7-year authorization limit). Tom Pitts said a Senate mini-omnibus bill is being discussed, and this may be the only way S. 1224 gets through the Senate. If passed, it would be rolled over to the House, and then hopefully passed under a suspension of rules (wherein cut-go would not have to be addressed). Tom Pitts said the outcome is still uncertain, but Leslie James said she's fairly optimistic (although we don't know that anything will be passed by October 1).

5. Nonnative Fish Update and Discussion of "Nonnative fish: our greatest challenge"? (The Information & Education Committee recently suggested that the Program be explicit that nonnative aquatic species are currently the greatest impediment to recovering the endangered fishes. Although the Service's annual Sufficient Progress memoranda, Program Work Plans, and the general Program discourse for the past several years reflects this fact, the Program has not stated it explicitly.) Pat Martinez gave an update on nonnative fish management (see Attachment 4). Committee discussion focused on: a) how/when to move forward with the basinwide strategy (the PDO's proposal was to provide the final draft to the Biology Committee by July 2013, but the Management Committee recommends it be finalized much sooner); and b) whether the Program would benefit by more formally acknowledging or otherwise formally recognizing nonnative fish as our current greatest challenge. In the Winter 2010 issue of *Swimming Upstream* we said "The threat posed by nonnative fish to endangered fishes continues to rise and is currently the biggest obstacle to endangered fish recovery." Reviewing the current Service draft of the Colorado pikeminnow recovery plan, Pat Martinez asked himself what factor could most likely unravel recovery and concluded that nonnative fish are the greatest threat (and our greatest challenge). Factors that can increase distribution or abundance of nonnative aquatic species in the Upper Colorado River Basin and critical habitat include illegal introductions, reservoir escapement, and low river flows. Pat presented a chart showing the increasing presence of invasive aquatic species by decade from 1980 to 2010. Pat reviewed extra

removal effort applied to emerging nonnative fish problems in 2012, including work aimed at northern pike near Rifle, burbot below Flaming Gorge, and smallmouth bass in the Dolores and White rivers. Smallmouth bass and northern pike are the species of greatest concern. Pat described the potential for the nonnative fish problem to escalate. Harry Crockett said he'd like to see the Biology Committee discuss "nonnative fish as our greatest challenge" concept and the data that back it up. Julie Lyke asked Harry what information he thinks is lacking to make this determination.

Pat reported that components of the Strategy still in development are the northern pike and smallmouth synthesis studies, isotope work, and electrofishing fleet standardization. Tom Pitts asked if we could finalize and implement the strategy now, and update it with the additional information later, especially if we believe nonnative fish management currently is our biggest challenge. Tom Chart said some activities outlined in the strategy already are being implemented. Robert Wigington said Brandon Albrecht has similar concerns; Robert suggested perhaps the additional components still in development could be action steps taken subsequently to finalizing the strategy. Tom Chart said he believes developing science-based removal targets is important; Tom Pitts suggested that, too, could be one of the next steps identified in a finalized strategy. Tom Pitts thought that finalizing the document would help define the most effective management tools. He compared this to how we moved forward to protect water when reduced flows were our greatest concern. Robert Wigington agreed, but noted that we didn't specifically "point fingers" at water, but just moved forward. Tom Pitts agreed, saying that while he does think nonnative fish are currently the greatest impediment to recovery, it likely would be counterproductive to specifically label it this way. Tom believes we can move forward to resolve the threat without having to debate whether it's the "greatest threat." Tom Chart agreed (though he, too, he agrees nonnative fish are our greatest threat/challenge). Dave Speas recommended pursuing peer review of the basinwide strategy. Pat said he thinks we could produce a more streamlined, action-item sort of strategy in a shortened timeframe. Melissa suggested decoupling the strategy from an action plan we update annually. Julie asked if we'll do anything different if the strategy is draft or final. Tom Pitts said we haven't yet come to agreement on how we're going to implement actions. Leslie suggested that we need targeted, rather than general messaging (i.e., stress the nonnative threat when addressing those issues). Tom Chart said one of the main points of the strategy is the need to focus on invasive species sources and prevention. Building on Tom Pitts' analogy, Brent said we knew some of the actions we'd take to provide water wouldn't be popular, but we moved forward, made a list of feasible projects, and began to take action. Brent said it seems like we're hesitating on nonnative fish management rather than take that same approach we took with water. John Shields said he thinks we've made the decision that we need to implement nonnative fish management actions; however, there has been resistance to some of those actions. Melissa suggested that the basinwide strategy is a more detailed discussion of the resolution the Program made some years ago. Tom Chart said he thinks Program partners do need to agree to a shift in how we address this problem (focusing on prevention, not just "brute force downstream of known sources"). The Committee agreed that *implementation* of the strategy comes by adding items to the RIPRAP, and that we need to get the strategy approved by the Biology, Management, and Implementation committees sooner rather than later. Committee discussed policy (shift to prevention) versus a technical document (comprehensive strategy) and whether or not peer review is needed. Harry said he thinks the policy shift to prevention will be fairly non-controversial, but implementation will be more

difficult (both in terms of technically accomplishing the tasks and in terms of getting buy-in). >The Program Director's Office will finalize the basinwide strategy that Pat's been working on (the PDO will provide a more specific date - hopefully, in time to affect RIPRAP changes in 2013). Tom will brief the Implementation Committee about this in September and let them know that it represents a shift in policy toward prevention.

Similar to the way we addressed water needs, Brent suggested that the three state game agencies review the possible nonnative fish management tools and come up with a list of actions (and schedule) to implement. Tom Chart said he thinks that if we were to take that approach, he would prefer to have the discussion include state water folks also to allow for a full Recovery Program context. Angela noted that significant capital funds were available to implement water management activities, fish passage and screening, etc., but we mostly have only limited annual funds to implement nonnative fish management.

On a related note, Tom Chart suggested that the Recovery Program participate in CPW's planned reclamation of Miramonte Reservoir in the fall of 2013. Based on conversations with CPW this would likely entail a Recovery Program contribution of $30-$40K (potential sources include Section 7 funds or FY13 annual funds) for rotenone. Melissa said she generally supports the concept, but cautioned that we may be setting ourselves up for requests to help fund every rotenone project. Tom Chart agreed, but said he thinks that because this project represents rapid response to a proven problematic species (smallmouth bass) it fits nicely with our draft strategy. The Committee was comfortable with the concept; Tom Chart will bring a more specific proposal to the Committee as this develops.

ADJOURN: 4:30 p.m.

BBQ and Evening Social Event: The Committee enjoyed a barbecue hosted by John Shields at his home.

Wednesday, August 8
CONVENE: 9:00 a.m.

6. Northern Pike in the Little Snake River –Northern pike now occur in the Little Snake River from just upstream of CO/WY state line to an old diversion near Baggs. The Little Snake River Conservation District wants to remove the old diversion and begin using a new diversion that's been built with fish passage for warmwater native fishes and trout. However, this would give northern pike access to habitat upstream where they could reproduce and become a new source of pike to move downstream into endangered fish critical habitat. Wyoming Game and Fish would like to construct another barrier downstream of the new diversion (near the state line) that pike can't pass, but can't do so before the Conservancy District wants to remove the old diversion. Pat Martinez has learned that it would be helpful if the Program sent a letter to Wyoming Game and Fish that: a) expresses our concerns that pike could increase if they access habitat upstream and become a source of additional pike downstream in critical habitat; and b) encourages waiting to remove the old diversion until *after* the downstream barrier is in place. Tom Pitts suggested we also offer to help fund removal of the pike above the barrier and suggested the pike population be monitored. The Committee supported sending a letter; >the Program Director's office will draft it.

7. Procedure for review/approval of flow recommendations – Recent completion of the Price River position paper (which was something of a hybrid document rather than strictly a flow recommendation) shed light on the need to review the Program's process for approving/accepting flow recommendations. This has relevance for how the Program will approach pending White River flow recommendations as well as what might result from Park Service studies and/or review (per RIPRAP) of the need for instream flow filings or other flow protection mechanisms on the Yampa River). Prior to the meeting, the Program Director's office provided a brief synopsis of how past flow recommendations were handled.

   Robert Wigington and Tom Chart proposed a three-step process to clarify how we approve new or revised flow recommendations:

   1) The scientific basis for flow recommendations is approved by the Biology Committee, which can entail minority disapprovals.

   2) Implementation issues are reviewed by the Management Committee and they may be framed separately from reports on the scientific basis.

   3) The Program Director's Office (PDO) is responsible for shepherding both the scientific basis and implementation issues and for initiating, documenting, and finalizing all flow recommendations. The PDO may combine reports, develop the hydrologic basis, refer the scientific basis back for additional Biology Committee review, and revise the recommendations as needed.

   Tom Pitts suggested that if we're going to clarify this process, we should provide a bit more detail, recognize what's in the Blue Book (including Service responsibilities), the peer review/Biology Committee process, what happens in the case of a minority report, and that approval doesn't end the process, but begins a period of evaluation. Tom suggested that once we've added this detail, the Management or Implementation committee should formally adopt this as our procedure (Tom Chart suggested also including it in the RIPRAP text). Clayton said he would write these steps differently, including that the Program selects a group of outside experts to develop flow recommendations. John Shields suggested we could recognize that partners and outside experts may be involved without making it mandatory. Robert suggested that the third point can encompass this. >The Program Director's office will incorporate today's discussion and provide a revised draft (aiming for something clear and concise, maybe a page and a half in length) for Committee review and comment by September 14 (and we'll be able to tell the Implementation Committee we have a first draft in review).

8. Updates

   a. Hydrology and Reservoir/Unit operations – Jana Mohrman reviewed operations in this extremely dry year. (See Attachment 5). We'll consider carrying over water into 2013 in both Wolford and Elkhead reservoirs in case next year is also dry. Clayton commented that the Stewart Lake inlet was clogged with sediment last year and he understands that Reclamation will ask for more specificity on what needs to be studied at Stewart Lake in the Flaming Gorge Long Term Study Plan. Jana mentioned four fish kills discovered this year on the Price, Green, White, and Colorado rivers, likely due to

low flows, warm temperatures, and ash residue from fires. Jana said the Water Acquisition Committee has reviewed and commented on the White River flow recommendations (along with the Biology Committee), and a small group will be looking at some of revisions shortly. The final sediment study report is still in USGS editorial review. The 2011 high-flow photos are being stitched together; raw photos are already available on the internet. Michelle Garrison said depletion accounting for the Yampa and Colorado rivers will be based on 2005 consumptive use (irrigated acreage based on satellite images and some aerial photography). They are double-checking irrigated acreage, will have it verified by Water Commissioner (hopefully by Christmas), and then can run the model. Tom Pitts asked if there's a way we can help with this (e.g., provide some Section 7 funds for consulting assistance) since it's taking longer than anticipated. Michelle said CWCB needs to do the irrigated acreage work, but if they need help with the accounting after that, they'll let the Program know. Michelle thanked Tom and the Program for the offer of assistance. Jana said, modeling continues for flow protection efforts in Utah.

b. Green Mountain Reservoir Municipal Recreation Agreement (expiring this year) – Brent Uilenberg said the existing 5-year contract has delivered a significant amount of water and it's coming up for renewal at the end of December 2012. The Management Committee **strongly** encouraged renewing the contract. Tom Pitts said this is the same mechanism we're proposing to protect part of the 10,825 water. >He and other Committee members will contact Reclamation to encourage them to renew the contract.

c. 10,825 Alternatives – (Deferred. Tom Pitts provided the following written update for the meeting summary.) Reclamation completed an EA and Finding of No Significant Impact (FONSI) on the 10825 alternative proposed by the water users earlier this year. The alternative includes two components: 1) conversion of a senior irrigation water right to provide inflow into Lake Granby to be used for release of 5,412.5 acre-feet per year; and 2) a contract for 5,412.5 acre-feet per year of water from Ruedi Reservoir. Implementation requires four contracts: 1) a contract with Reclamation for 5,412.5 acre-feet of Ruedi water; 2) a contract with Reclamation for 2,000 acre-feet of Ruedi water to provide an "insurance pool" to mitigate impacts of the Granby component on the HUP pool in Green Mountain Reservoir; 3) a contract involving Northern Colorado Water Conservancy District and a Grand Valley municipal entity to provide for release of water from Lake Granby and protection of that water by the State Engineer to the 15-Mile Reach, with Reclamation concurrence; and 4) a contract with Reclamation for "if and when" storage of water released from Lake Granby if it is not coincidently needed in the 15-Mile Reach (i.e., the water would be exchanged into Green Mountain Reservoir for later release to the 15-mile Reach, depending on space available in Green Mountain). All contracts are expected to be completed by December 2012.

d. Capital projects – Brent Uilenberg described capital projects (below). Reduced cost of OMID and Tusher Wash will leave a remaining ceiling of $12.5M without indexing. Brent noted the number of repairs/replacements we've had to make on our existing capital projects. At some point, we will need to build contingency funds into the annual budget for these items.

(i) Horsethief Native Fish Facility – Brent said this is essentially complete and was completed within budget. Mike Porras of Colorado Parks and Wildlife provided an excellent photo of the ponds:

(ii) OMID –Brent said the O&M contract (umbrella agreement) has been reviewed by the Solicitor and will be complete soon. The grant agreement contract that will put CWCB's $1.5M in place also is nearing completion. Brent anticipates issuing a construction contract in 2013. Brent discussed a preliminary draft report from ITRC which breaks down costs and incremental water savings. A new item not previously included is vibrated compaction of canals 1&2 where they are unlined. Brent recommends that we at least do a test section for this item. However, Brent thinks two other items may be too expensive to comfortably fit within our capital project cost ceiling: piping the MML and adding the Duck Pond Pump for the MML. If those two items were dropped, the total cost for OMID would decrease from ~$17M to ~$13M. Total water savings from the project would be 17,094 af (which Brent thinks is a very conservative estimate; we may well save twice this amount). Brent said the additional options he's not recommending could be added later if desire and funds were there. The Management Committee approved Brent's proposal (items 1-6 plus 9 in Table ES-1 of the preliminary draft report).

(iii) Price Stubb – Brent reported that actual repair costs will come in at $700K (previous estimates were $500K, but more material is needed than originally anticipated). These are capital costs that will count against our ceiling. A full assessment of damage could not be determined until crews began the work. Damage occurred below the 50 feet of grouting below the crest of the dam. Existing rocks are being replaced with larger, angular rocks with smaller angular rocks placed in between with a vibrating compactor. The work will be completed this fall.

(iv) Thunder Ranch levee reconstruction – This work was completed for $295K (estimate was $384K).

(v) Ouray wells – The wells have had chronic problems with deposition of iron and manganese. A consulting firm recommended quadrupling the BIRM filter capacity. Ouray was able to double it with existing funding, but more is needed,

along with a new electrical control panel/pump (and funding for both the panel/pump and additional filter capacity). Brent said one cause of the problem is operational errors. Both Ouray and at Horsethief must be operated to avoid over-pumping the wells and exposing well screens to oxygen.

(vi) San Juan Program projects – The hogback fish barrier is moving forward at $3 to $3.5M.

(vii) Potential hydropower at Elkhead Reservoir – Brent said Ray Tenney informed him that the River District is considering hydropower (although that now appears less likely). Our agreement stipulates that they have the right to do that, but must allow the Recovery Program to participate by paying a pro-rata share of the development. Should hydropower be added to Elkhead, Brent said he doesn't believe it would really be cost-effective for the Program to participate and would be very complicated from a regulatory perspective.

(viii) Tusher Wash – Brent said that after a conference call a few weeks ago, the group concluded that installing an electric fish barrier would be the best choice, and it could be constructed along with the NRCS dam rehabilitation. Smith-Root's proposal for e-barrier components (~$400K) plus Reclamation's estimate for installation (~$700K – coffer dam and concrete work) would total ~$1.1M. Brent supports this, noting that we've learned that in very dry years when you really need screening, not enough water is available to operate mechanical screens. Electric costs will be ~$1,300/month. Tom Chart said his office is working up a paper summarizing this proposal (including a monitoring component). An electrical barrier would be the first phase to preclude entrainment, and then we'll monitor to determine if that's adequate.

e. 5-year species status reviews and recovery plans, teams, and timeframes – Julie Lyke said the razorback sucker and bonytail 5-year reviews were signed by Region 6 yesterday and now go to Regions 2 and 8 for concurrence. Tom Chart said draft letters to four prospective Colorado pikeminnow team members are in the surname route. They've identified five prospective members for a humpback team, as well, but want to get the pikeminnow team established first. A draft CPM Recovery Plan is ready for the team to review. Tom needs to gather a sense from that team on their level of concern before he can develop a review timeline.

f. Section 7 Consultation (Kantola, 15 min)

(i) Review sufficient progress action items (See Attachment 6).
(ii) Updated consultation list – The full list through 6/30/12 can be found at http://www.coloradoriverrecovery.org/documents-publications/section-7-consultation/consultation-list.html

Upper Colorado River Endangered Fish Recovery Program Summary of Section 7 Consultations by State 1/1988 through 6/30/2012				
		HISTORIC DEPLETIONS Acre-feet/year	NEW DEPLETIONS Acre-feet/year	TOTALS Acre-feet/year
Colorado [1,2]	1170	1,915,682	206,458	2,122,140
Utah	227	517,670	95,800	613,470
Wyoming [2]	377	83,498	34,248	117,747
Regional [3,4]	238	(Regional)	(Regional)	0
TOTALS	**2,012**	**2,516,850**	**336,506**	**2,853,356**

(iii) Section 7 funds update – Angela Kantola said that through March 31, 2012, $687K was available in the NFWF-managed Section 7 funds account (quarterly report e-mailed to Management Committee on May 15, 2012). Approximately $151K of that amount now spent or obligated (Elkhead water lease, GJ Pipe site weir materials, recovery goals technical assistance) and another $57K in depletion payments have been deposited since the end of March, so the balance is now closer to $593K. Additional potential new expenditures include White River Management Plan consulting, continued standardization of the electrofishing fleet, recovery goals technical assistance, water rights consulting and geomorphology peer review. Other items (pending need and Committee approval) could include supplementing a small portion of the cost of the March 2013 Program-specific electrofishing training course, conducting a public attitudes survey about the Program, contributing to Colorado's reclamation of Miramonte Reservoir, a small payment to maintain razorback suckers in a former leased pond in Grand Junction during the remaining hot, dry period and then salvaging these fish from the pond, and helping Wyoming with pike removal from Little Snake River. The Committee already discussed Miramonte at the end of item #5, above. They had no objection to using ~$1K of Section 7 funds to maintain and salvage razorbacks in the former leased pond.

g. Green River floodplain oil & gas lawsuit – As part of floodplain restoration, the Program has a perpetual easement (signed in 2000) on the Lamb property near the confluence of the Green and White Rivers. The lease agreement allows the landowners to pursue energy development as long as it doesn't conflict with endangered fish activities. Some years ago, the Service gave Gasco a special use permit for energy exploration well on the floodplain provided they secured all the necessary permits. Gasco installed a well outside the bounds of the special use permit (they did not seek a 404 permit for the access road and well pad). EPA subsequently issued a cease and desist order. Gasco has filed a complaint challenging EPA's ruling. The Service has supported EPA's position (EPA is asking that the well be plugged and abandoned). Program office involvement will be to provide background information.

9. FY13 Work Plan – Angela Kantola noted that FY 2013 is the second year of the two-year FY12-13 work plan and the budget appears very tight, with ~$50K not yet obligated (potentially a bit more if Reclamation determines that FY12 fish passage and screen costs

will be less than anticipated and can purchase additional PIT tags with those funds, thus reducing FY13 PIT tag costs). Final funding amounts won't be known until outcome of the legislation is determined and the October 2011 – September 2012 CPI is released (which is used to calculate the power revenue contribution to annual funds). Opportunities to fund contingency projects would appear minimal, but projects which might be considered if funds were available include: restoration of nonnative fish management projects to full budget to continue "expanded surge" begun in FY11; sediment monitoring (including development of a plan); floodplain site monitoring/management; FR-115 synthesis report; Lake Powell sampling; and chemical reclamation to eradicate nonnative fishes at Thunder Ranch and perhaps other locations, like Miramonte Reservoir.

10. Development of September 19, 2012, Implementation Committee agenda (Country Inn and Suites, the Program Director's office will set up a conference line and phone)
    - Approve March 5, 2012, conference call summary
    - Program Director's update (including low flow and nonnative fish management updates)
    - Update on Management Committee clarification of flow recommendation approval process
    - Recovery plans update
    - Review of sufficient progress items
    - Legislative/funding update
    - Capital projects update
    - FY 13 work plan update (second year of 2-year work plan)
    - Southern Rockies LCC update

11. Upcoming Management Committee tasks, schedule next meeting. The Committee scheduled a webinar for November 5 from 9 a.m. – 3 p.m. with an hour break for lunch.

ADJOURN: 12:00 p.m.

Attachment 1: Attendees
Colorado River Management Committee Meeting, August 7-8, 2012

Management Committee Voting Members:

Brent Uilenberg	Bureau of Reclamation
Rebecca Mitchell	State of Colorado
Tom Pitts	Upper Basin Water Users
John Shields	State of Wyoming
Julie Lyke	U.S. Fish and Wildlife Service
Melissa Trammell	National Park Service
Robert Wigington	The Nature Conservancy
Clayton Palmer	Western Area Power Administration
Leslie James	Colorado River Energy Distributors Association
Not represented	State of Utah

Nonvoting Member:

Tom Chart	Recovery Program Director, U.S. Fish and Wildlife Service

Recovery Program Staff:

Pat Martinez	U.S. Fish and Wildlife Service
Debbie Felker (via phone)	U.S. Fish and Wildlife Service
Angela Kantola	U.S. Fish and Wildlife Service

Others

Harry Crockett	Colorado Parks & Wildlife
Randy Hampton (via phone)	Colorado Parks & Wildlife
Jana Mohrman	U.S. Fish and Wildlife Service
Jerry Wilhite	Western Area Power Administration
Tyler Abbott	U.S. Fish and Wildlife Service
Dave Speas (via phone)	Bureau of Reclamation
Michelle Garrison	Colorado Water Conservation Board

Attachment 2

Meeting Assignments

1. The **Management Committee** will consider naming a floodplain site for Pat Nelson. *The Service's Grand Junction field office is considering what might be an appropriate location. We do have a memorial to Pat on the pikeminnow bench at Walter Walker SWA.*

2. **Tom Pitts** will work with **Clayton Palmer and Brent Uilenberg** and provide a list of additional Program contributions to be added to the Program's budget pie chart that appears in each year's briefing book. *In process.* For the 2012 *Program Highlights*, we used the $37.4M annualized estimate. By July 2012, **WAPA** will complete modeling and report actual power replacement costs going back to 2001. Subsequently, **WAPA** will provide annual power replacement cost for the previous year each January for inclusion in the *Program Highlights* pie charts. Those pie charts will include a footnote explaining the calculation and assumptions. **Program participants** will identify other significant costs that have not previously reported (e.g., the Granby component of 10,825 which is estimated at $16M, $1.25M contributed by Colorado for GVWM and $1.5M for OMID, CRWCD contributed property for OMID, etc.). **Tom Chart** will ask **Dave Campbell** to work with the SJCC to determine their additional costs not currently reported. *1/30/12: Tom Pitts provided additional costs to be included in the briefing book pie chart; need to follow up with documentation for the record. 3/21/12: Clayton will be asking modelers/analysts to look at economic impact of re-operation of Flaming Gorge Dam beginning in FY2001. Tom Pitts said P.L. 106-392 recognizes power replacement costs as non-reimbursable; is that the same thing as economic costs? John Shields asked why not include the ~7 years of "study flows" preceding 2001. Clayton will do both, since Flaming Gorge was originally reoperated in water year 1991 (a separate table for 2001 and forward will be included responding specifically to the P.L. 106-392). Clayton also will include analysis to show the year in which FG was reoperated under the new EIS (2006 to present). John said he and Robert were asked about retail power cost levels yesterday; Leslie doesn't believe that can be reported since each individual utility has a different amount of hydropower in their mix. Tom Pitts suggested setting up a work group of himself, Leslie, Clayton, Robert Wigington, Angela Kantola and/or Tom Chart; Tom Pitts will send out preliminary materials. 6/26/12: Work group held conference call 4/27/12; Argonne working on power replacement costs, water users working on their additional costs, San Juan also working on their additional costs. 6/22/12: Clayton provided the group a description of how they'll conduct the economic analysis of Flaming Gorge dam reoperation.*

3. **Brent Uilenberg** will modify the OMID scope of work to reflect the ITRC contract to design the SCADA system. The **PD's office** will post the revised SOW to the web. *Done.*

4. **Brent Uilenberg and Dave Speas** will discuss the possibility of using "activities to avoid jeopardy" funds on the Elkhead screen repair. *Reclamation will review available funding sources when this is billed in early CY 2013.*

5. The **Program Director's Office** will prepare a timeline for the recovery plans. *See item 8.e. in the meeting summary. A read on review time is needed from the soon-to-be-established Colorado pikeminnow team.*

6. The **Program Director's office** will post the final Price River position paper to the Program's website. *Pending.*

7. The **Program Director's office** will finalize the basinwide strategy that Pat's been working on (the PDO will provide a more specific date - hopefully, in time to affect RIPRAP changes in 2013). Tom will brief the Implementation Committee about this in September and let them know that it represents a shift in policy toward prevention.

8. **The Program Director's office** will draft a letter to Wyoming Game and Fish that: a) expresses our concerns that pike could increase if they access habitat upstream and become a source of additional pike downstream in critical habitat; b) encourages waiting to remove the old diversion until *after* the downstream barrier is in place; c) offers to help fund removal of the pike above the barrier; and d) asks how the pike population will be monitored.

9. The **Program Director's office** will incorporate today's discussion and provide a revised draft process for approving flow recommendations (aiming for something clear and concise, maybe a page and a half in length) for Committee review and comment by September 14 (and we'll be able to tell the Implementation Committee we have a first draft in review).

10. **Tom Pitts and other Committee members** will contact Reclamation to encourage them to renew the Green Mountain Reservoir Municipal Recreation Agreement expiring at the end of August.

Attachment 3 07/30/12

List of Support Letters for H.R. 6060

Governors

Governor Mead, Wyoming
Governor Herbert, Utah
Governor Martinez, New Mexico

Environmental Organizations

The Nature Conservancy

Power Organizations

Public Service Company of New Mexico
Arizona Public Service Company

State Water Organizations

Colorado Water Congress
Utah Water Users Association
Wyoming Water Association

Tribes

Jicarilla Apache Nation
Navajo Nation
Southern Ute Indian Tribe
Ute Mountain Ute Tribe

Water Organizations

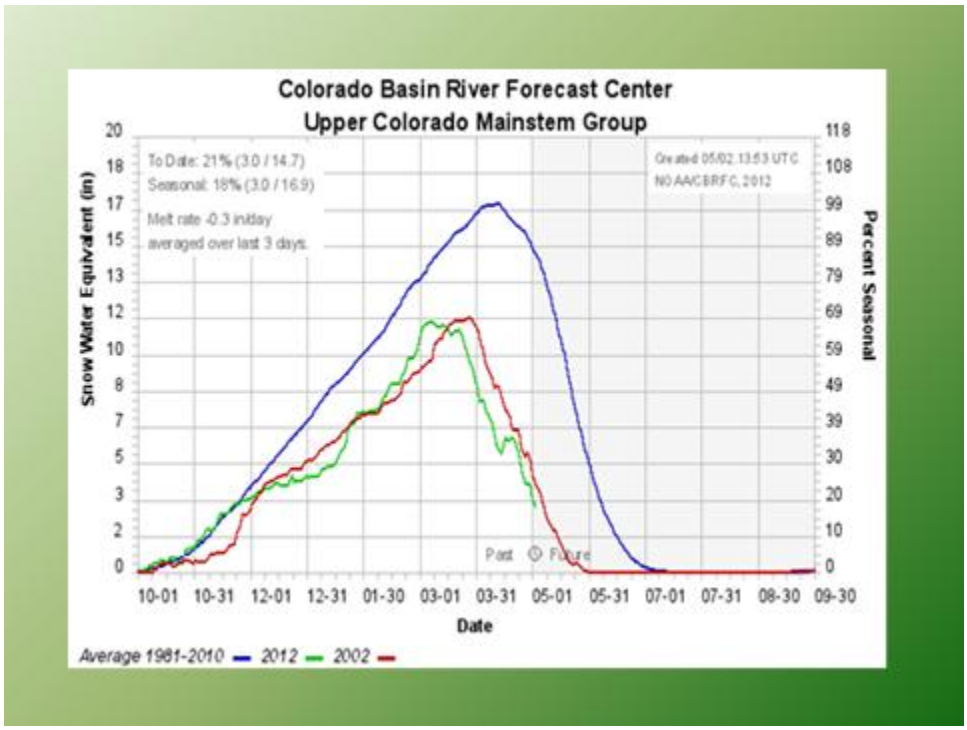
Central Utah Water Conservancy District
City of Aurora, Colorado
Colorado River Water Conservation District
Colorado Springs Utilities
Denver Water
Front Range Water Council
Grand Valley Water Users Association
Middle Rio Grande Water Conservancy District, Albuquerque, NM
Municipal Subdistrict, Northern Colorado Water Conservancy District
Northern Colorado Water Conservancy District
Pueblo Board of Water Works
Rock Springs/Green River/Sweetwater County Joint Powers Water Board
San Juan Water Commission
Southeastern Colorado Water Conservancy District
Southwestern Water Conservation District
Tri-County Water Conservancy District
Uncompahgre Valley Water Users Association
Upper Gunnison River Water Conservancy Distric

Attachment 3, Graphics from Nonnative Fish Update

UCRB rivers	1,216 miles	Presence of invasive aquatic species by decade			
		1980	1990	2000	2010
Colorado (Rifle- Fish Ladder)	47				
Colorado (Fish Ladder-Westwater)	66				
Colorado (West-water-Green Confl)	128				
Dolores (McPhee-San Miguel Confl)	125				
Dolores (**San Miguel** - Colo. Confl)	64				
Gunnison (Colo.-Uncompahgre R.)	56				
Green (Flaming Gorge-Yampa Confl)	65				
Green (Yampa-White Confl)	99				
Green (White- Colo. Confl)	246				
White (Kenney Res-Green Confl)	104				
Little Snake (Baggs, WY – Yampa Confl)	?				
Yampa (Stagecoach Res-Craig)	76				
Yampa (Craig-Green Confl)	140				

Nonnative, nonsalmonid sport fishes in the Upper Colorado River Basin							
Northern pike	**Channel catfish**	**Bluegill**	**Black crappie**	**Largemouth bass**	**Smallmouth bass**	**Yellow perch**	**Walleye**
Piscivory in rivers							
7	6	2	4	3	8	1	5
Invasiveness in riverine habitats							
6	8	2	4	3	7	1	5
Incidence of illegal transfer into ponds & reservoirs							
8	1	3	4	2	7	5	6
21	**15**	**7**	**12**	**8**	**22**	**7**	**16**

Attachment 4, Hydrology Update Graphs

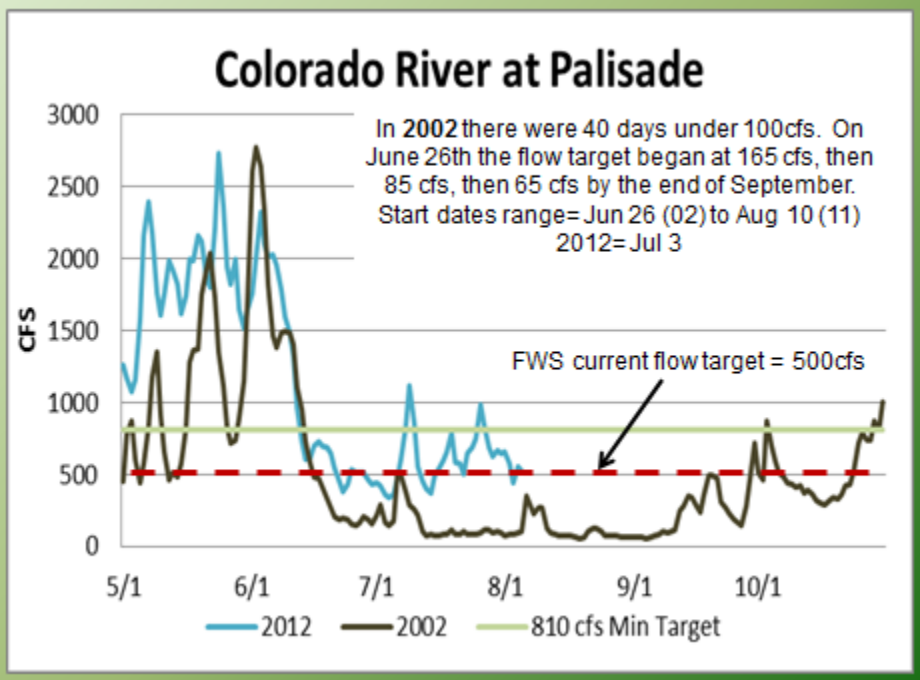


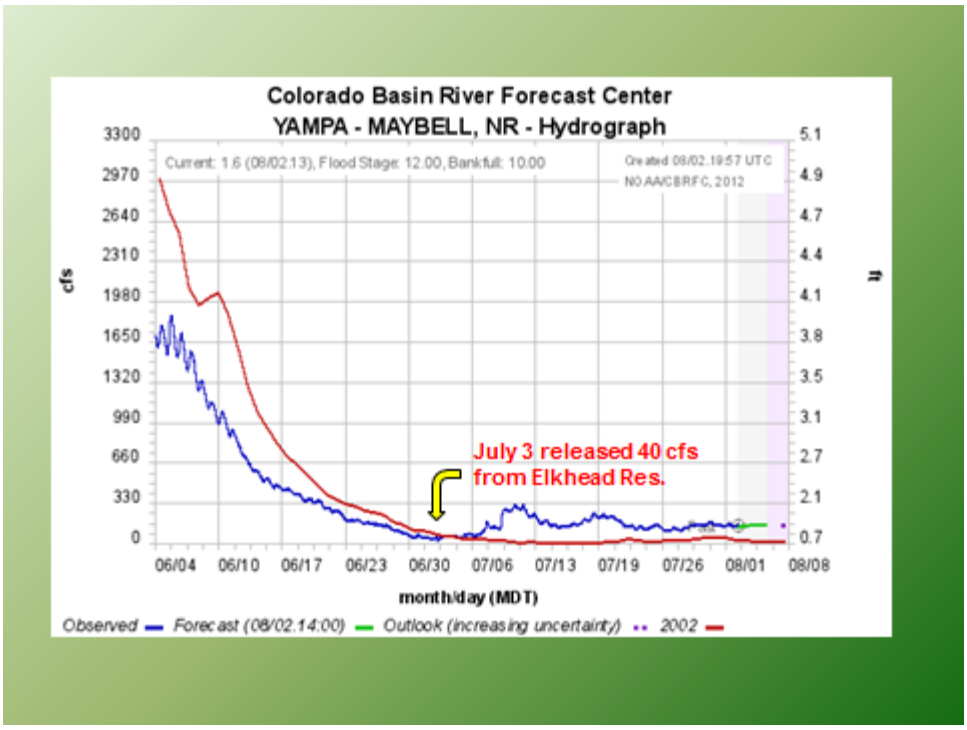
Available Fish Water for 15-Mile Reach

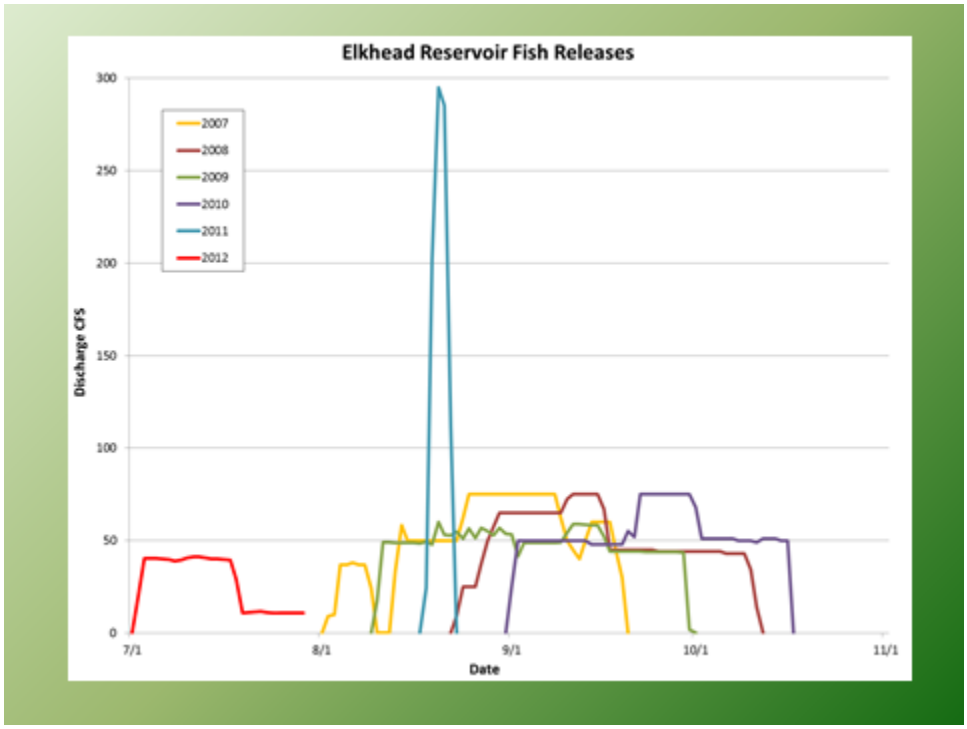
Without the Historic User Pool (HUP)
in Green Mountain Reservoir (66,000 acft)

	2002	2012	2013
Williams Fork	3,788	5,412	
Wolford	308	6,000	6,000
		(640) 5,412	
Ruedi	10,825	10,825	
		Wolford (4,772)	5,412
One 5 of 5 pool is only available in 4 out of 5 years, but not in a dry year			5,000
	~~5,000~~	~~5,000~~	~~5,000~~
Grandby			~~5,412~~
Total Acre-Feet	19,921	32,649	26,824

+ 12,728 in 2012
- 10,825 in 2013




Colorado Basin River Forecast Center
YAMPA - MAYBELL, NR - Hydrograph
Current: 1.6 (08/02.13), Flood Stage: 12.00, Bankfull: 10.00
Created 08/02.19:57 UTC
NOAA/CBRFC, 2012
cfs
ft
3300
2970
2640
2310
1980
1650
1320
990
660
330
0
5.1
4.9
4.7
4.4
4.1
3.8
3.5
3.1
2.7
2.1
0.7
July 3 released 40 cfs
from Elkhead Res.
06/04
06/10
06/17
06/23
06/30
07/06
07/13
07/19
07/26
08/01
08/08
month/day (MDT)
Observed
Forecast (08/02.14:00)
Outlook (increasing uncertainty)
2002


Elkhead Reservoir Fish Releases
2007
2008
2009
2010
2011
2012
Discharge CFS
300
250
200
150
100
50
0
7/1
8/1
9/1
10/1
11/1
Date

LTSP: Study Matrix and Timeline

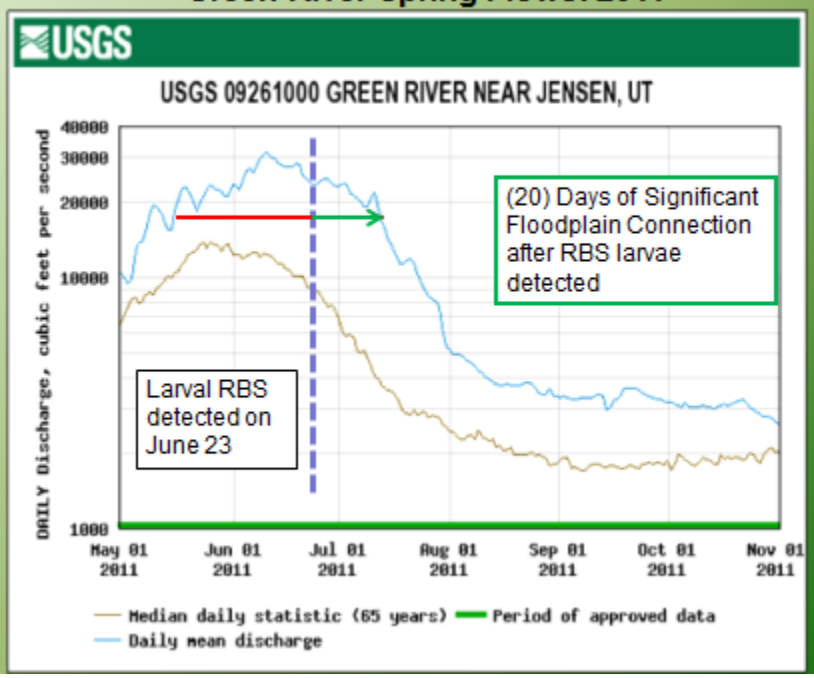
	Peak Flow (x) as Measured at Jensen, Utah	Proposed Study Wetlands [a, b]	Number of Days (x) Flow to Be Exceeded and Corresponding Hydrologic Conditions [c]		
			1 < x < 7	7 < x < 14	x > 14
3 years	8,300 ≤ x < 14,000 cfs	Stewart Lake (f), Above Brennan (f), Old Charley Wash (s)	Dry	Moderately dry	Moderately dry and average (below median)
3 years	14,000 ≤ x < 18,600 cfs	Same as previous plus Thunder Ranch (f), Bonanza Bridge (f), Johnson Bottom (s), Stirrup (s), Leota 7 (s)	Average (below median)	Average (below median)	Average (below median)
	18,600 ≤ x < 20,300 cfs	Same as previous	Average (above median)	Average (above median)	Average (above median)
3 years	20,300 ≤ x < 26,400 cfs	Same as previous plus Baeser Bend (s), Wyasket (s), additional Leota units (7a and 4), Sheppard Bottom (s)	Moderately wet	Moderately wet	Moderately wet
	x ≥ 26,400 cfs	Same as previous	Wet	Wet	Wet

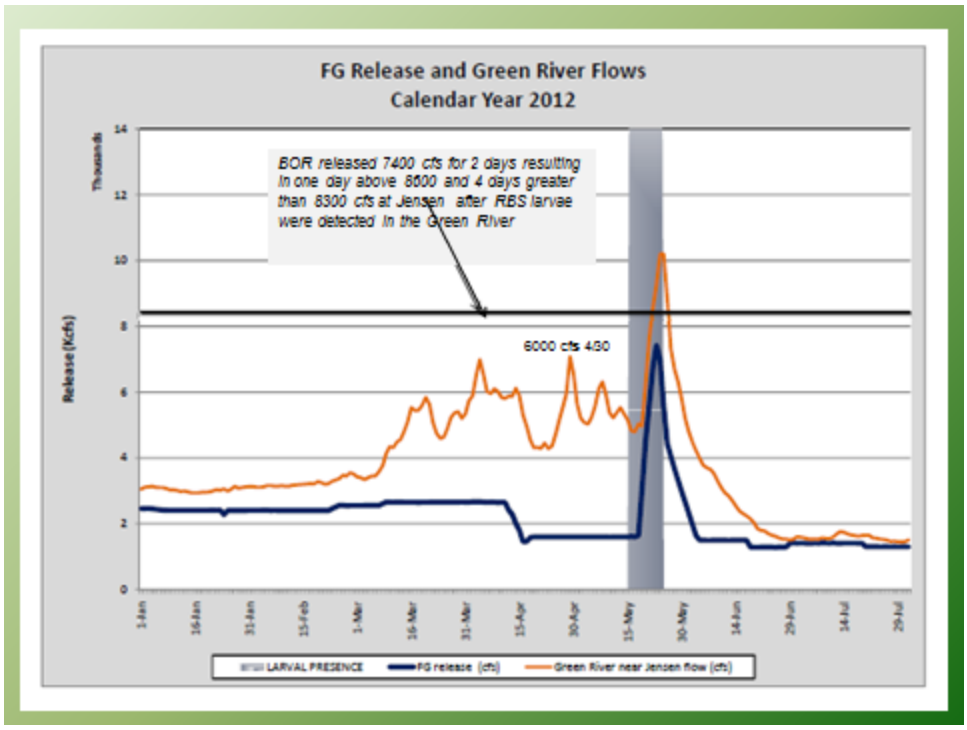
(a) f = flow-through wetland, s = single-breach wetland

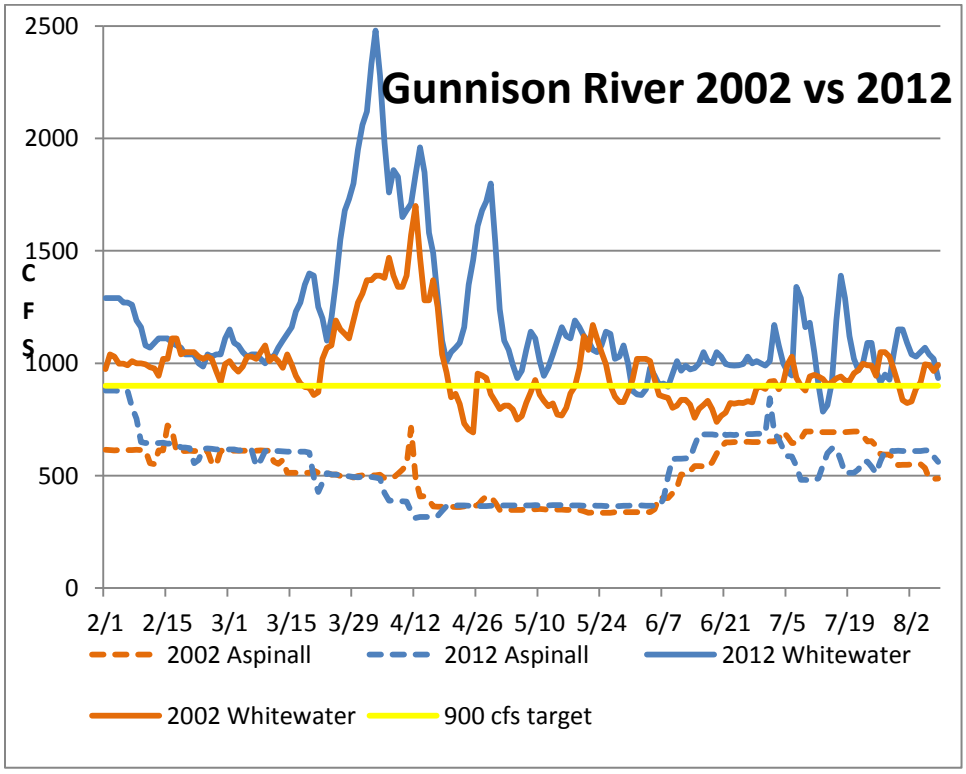
(b) Up to eight wetlands would be sampled in a given year with the three in the lowest flow category being sampled in all years.

(c) Refer to Table 1 for exceedance percentages and peak flow recommendations for each hydrologic condition. Note that the hydrologic conditions presented are the driest that could support a particular combination of peak flow magnitude and duration. For any combination, wetter hydrology could also support an experiment.

Green River Spring Flows: 2011




FG Release and Green River Flows
Calendar Year 2012
BOR released 7400 cfs for 2 days resulting in one day above 8600 and 4 days greater than 8300 cfs at Jensen after RBS larvae were detected in the Green River
6000 cfs 4/30
Release (Kcfs)
Thousands
LARVAL PRESENCE
FG release (cfs)
Green River near Jensen flow (cfs)


Gunnison River 2002 vs 2012
CFS
2500
2000
1500
1000
500
0
2/1 2/15 3/1 3/15 3/29 4/12 4/26 5/10 5/24 6/7 6/21 7/5 7/19 8/2
2002 Aspinall
2012 Aspinall
2012 Whitewater
2002 Whitewater
900 cfs target

Attachment 5

Action Items from the 2012 Sufficient Progress Memo August 9, 2012

General – Upper Basin-wide				
#	Recommended Action Items	Lead	Due Date	Status
1	The Service will make a recommendation for how to ensure that all new petroleum pipelines have emergency shutoff valves and will investigate the use of the Pipeline Integrity Management Mapping Application (PIMMA) to address existing pipelines potentially needing shutoff valves (e.g., pipelines upstream of or near critical or other important habitat).	FWS	12/31/12	
2	The Program Director's office is working with the Nonnative Fish Subcommittee and signatories to the Nonnative Fish Stocking Procedures to address comments on the draft *Upper Colorado River Basin Nonnative and Invasive Aquatic Species Prevention and Control Strategy*. Following "internal" review by the Recovery Program's Biology and Management committees, the Program will seek external peer review prior to accepting the *Strategy* as final.	Program	Date TBD; will go to BC earlier than previously indicated.	A subgroup of the I&E Committee will refine comments on the I&E section of the *Strategy* and then have a conference call with the Nonnative Fish Subcommittee. Update of steps leading to completion will be provided to the Management and Biology committees in Autumn 2012. The Management Committee asked that the Program Director's office streamline the document somewhat and accelerate the schedule.
3	The Service recommends that the Recovery Program carefully review the applicability of proposed screens for nonnative fish on a case-by-case basis and scrutinize screen designs, including projected operation and maintenance costs in the future. And, that the Recovery Program fully recognizes that screens are only a component of a multi-faceted nonnative fish control strategy (e.g., one that adheres to the NNF Stocking Procedures, promotes compatible sportfisheries, and prevents new nonnative fish threats).	*Nonnative Fish Stocking Procedures* signatories	Ongoing	
4	Revised Integrated Stocking Plan needs to be completed.	PDO	12/31/12	Draft sent to *ad hoc* group 4/13/12; conference call held 5/9/12. Next draft to *ad hoc* group by mid-September.
5	The Program Director's Office will monitor results from ongoing humpback chub population estimates (Deso-Gray 2010-2011; Black Rocks and Westwater 2011-2012 and monitoring (Cataract Canyon annual CPUE; Yampa River information gathered through nonnative fish management projects). The Program Director's Office convened a panel to discuss humpback chub genetics and captivity and identify actions necessary to ensure the survival and recovery of humpback chub and an implementation plan for those actions in 2011. 200 age-0 Gila will be brought into captivity from Black Rocks/Westwater in 2012 (relates to broodstock development once fish are determined to be humpback chub).	PDO, Service, UDWR	Deso-Gray data reported annually; Black Rocks draft final report due 8/1/13; Westwater draft final report due FY13.	Results reviewed annually. Bringing age-0 *Gila* from Black Rocks into captivity planned for Autumn 2012.

Green River				
6	An RFP for a 2012-2013 mortality study and literature review is anticipated in April 2012. Meanwhile, Program participants are investigating the potential for an electrical barrier at the head of the canal as one option to reduce or eliminate entrainment (and thus, "take") of fish in the canal.	Tusher Wash *ad hoc* group.		No response to RFP (and so it's been dropped); Biology Committee discussed in July, will review options again in October; Tusher Wash *ad hoc* group continues to review and discuss options, with an electric barrier now looking like the most viable option.
7	Red Fleet Reservoir has been recommended for reclamation (rotenone). A microchemical analysis of otoliths from both the reservoir and the river is underway to better understand the contribution of walleye to critical habitat from this potential source population.	UDWR		Otoliths processed; draft report in review; data will be included in draft final C18/19 report due October 1, 2012 (although this deadline may have to slip due to PI illness).
Yampa River				
8	CWCB is scheduled to complete accounting of past depletions using the StateCU model by the spring of 2012. The depletion accounting report will include a discussion of the need for flow protection (which would require a peak flow recommendation). The Water Acquisition Committee will continue to discuss the need for a peak flow recommendation.	CWCB, WAC	~~June 2012~~	Depletion accounting for the Yampa and Colorado rivers will be based on 2005 consumptive use (irrigated acreage based on satellite images and some aerial photography). CWCB is double-checking irrigated acreage, will have it verified by the Water Commissioner (hopefully by Christmas), and then can run the model.
9	CSU will complete the programmatic synthesis of smallmouth bass removal efforts, providing a comprehensive evaluation of the Program's removal efforts as well as a thorough assessment of escapement from Elkhead Reservoir (draft final report due to Recovery Program 8/31/2012). The Recovery Program will review the final report on escapement from Elkhead Reservoir and determine appropriate adaptive-management response. CSU also is conducting a programmatic synthesis of northern pike removal efforts (2011-2012) to evaluate current removal efforts in the context of northern pike life history throughout the Yampa River drainage (draft final report due to Recovery Program 6/30/13).	CSU, Program, CPW	Draft final smallmouth bass synthesis report due 8/31/12.	The programmatic synthesis report will consist of three parts and each will be separately peer-reviewed. Part 1, Elkhead escapement has been peer reviewed. Part 2, Population Dynamics is due October 1, 2012, and Part 3 , Projection Tool, will follow shortly thereafter. The three parts will then be finalized in one document. The NNFSC continues to evaluate opportunities and priorities for applying appropriate responses to source populations.
10	Native fish conservation areas are being evaluated as part of the draft basinwide nonnative fish strategy. Subsequently, applicability to the Yampa River will be evaluated.	Program, CPW		See item #2 re: *Basinwide Strategy*.
11	CPW has detailed its ongoing and anticipated pike management actions throughout the drainage in its 2010 'Yampa River Basin Aquatic Wildlife Management Plan (CDOW 2010).' CPW will tabulate these activities for the Program Director's Office and, based upon Program Office feedback, will provide management objectives and actions for any waters within the drainage that CPW and the Program Office mutually agree are inadequately addressed by the 2010 Plan.	CPW		Pending. Tabulation complete and will go to PDO by September 1. Joint recommendations from PDO and CPW for how to address any inadequacies will be made at the NNF workshop.

	White River			
12	A working draft *Flow Recommendations for the Endangered Fish of the White River, Colorado and Utah* was sent to the Biology and Water Acquisition committees and GRUWAT on July 1, 2011. Conflicting comments were received. A revised draft is expected by midsummer 2012. Work on a PBO is anticipated subsequent to report approval.	PDO	Summer 2012.	Pending. Good progress is being made and TNC is helping with ?.
13	Program scheduled to begin specific effort to remove smallmouth bass in 2012. CPW will propose plans to removing bag limit for smallmouth bass (and possibly other nonnative sport fishes) in the 400 yards below Kenney Reservoir that still has limits in 2013. Recovery Program supports multi-agency effort to designate White River as native fish conservation area.	CPW, UDWR		White River smallmouth bass removal conducted by Service & CPW; additional electric seining also conducted. CPW has prepared an issue paper on the bag limit for Commission consideration in this regulation cycle.
	Colorado River			
14	Recovery Program participants will consider options and opportunities for meeting flow recommendations on a more consistent basis after completion of 10,825 agreements.	Program		All agreements are expected to be in place by December 31, 2012.
15	The CWCB will provide the depletion accounting for 2006-2010 for the Upper Colorado River using State CU in the spring of 2012. If the amount of consumptive use, location of use, and timing of use is not the same as in the past, they would then put that information into StateMod to show how those changes affect the river.	CWCB	~~June 2012~~	*See item #8.*
16	Completion of CFOPS Phase III should be out in draft in August 2012 and report completion anticipated by September 30, 2012.	Water users	September 30, 2012.	
17	In 2012, additional passes will be devoted in the reach of the Colorado River from Rifle to the Beavertail to remove invading northern pike. CPW will conduct a reconnaissance in floodplain & canal habitats to identify potential sources of this species. Sampling will also be conducted from Silt to Rifle to remove northern pike.	FWS, CPW	Service, CPW	Additional passes in progress. A critical new ramp was constructed that improves access.
	Gunnison River			
18	Every effort should be made to ensure that the Gunnison River remains a native fish stronghold. The topic of precluding new species introductions also will be addressed in the draft Nonnative Fish Strategy.	Program		See item #2 re: *Basinwide Strategy*.
	Dolores River			
19	The Nonnative Fish Subcommittee will review response options and propose action item(s) to be reviewed with the Dolores River Dialogue and Lower Dolores Working Group and potentially added to the RIPRAP in 2013.	NNFSC, others.	January 2013.	CPW is implementing emergency order removing all bag and possession limits on smallmouth bass in Miramonte Reservoir and has announced plans to rotenone the reservoir in late summer or fall of 2013.