



PLATTE RIVER RECOVERY IMPLEMENTATION PROGRAM
Technical Advisory Committee Meeting Minutes
Executive Director's Office Conference Room – Kearney, NE
August 21, 2013

Meeting Participants

Technical Advisory Committee (TAC) Table

State of Wyoming

Mike Besson – Member (Chair)
Barry Lawrence – Alternate

State of Colorado

Suzanne Sellers – Member

State of Nebraska

Brandi Flyr – Alternate

U.S. Fish and Wildlife Service (Service)

Matt Rabbe – Member

Bureau of Reclamation (BOR)

Environmental Entities

Rich Walters – Member
Mary Harner – Alternate

Upper Platte Water Users

Colorado Water Users

Kevin Urie – Member (WebEx)

Downstream Water Users

Mark Czaplewski – Member
Jim Jenniges – Member
Mark Peyton – Member

Executive Director's Office (EDO)

Chad Smith
Jason Farnsworth
Dave Baasch
Jerry Kenny
Tim Tunnel
Justin Brei

Other Participants

Pat Engelbert (HDR)
Eliza Hines (FWS)
Jeff Runge (FWS)
Mike Fritz (NGPC)
Mike Drain (NPPD)



Welcome and Administrative

Besson and Smith called the meeting to order and asked for agenda modifications; none offered.

TAC Minutes

Smith asked the group if there were any changes to the June 26, 2013 TAC minutes. **Jenniges moved to approve the June 26, 2013 TAC minutes as final; Walters seconded the motion; all supported the motion.**

PRRIP Data Requests

None available.

Scientific Articles

Smith informed the group that he and Baasch attended the National Conference on Ecosystem Restoration where Smith presented information on FSM and the ISAC presented information on the ISAC's role with the Program. Both presentations were included in the meeting packet. Czaplowski asked if we received any specific feedback during the conference; Smith said one attendee suggested we consider including a female on the ISAC panel, but we received no other specific feedback.

Smith mentioned he included the Beunau et al. article in the meeting packet because it was related to terns and plovers and some research on the Missouri River. Smith also stated there were several additional recent publications that would be distributed prior to the next TAC meeting.

Farnsworth said Robb Jacobson (ISAC) invited him to attend a conference to discuss habitat creation and maintenance data that would feed into a tern and plover meta-population model.

Smith stated the ISAC members reviewed and provided feedback on the PRRIP Special Issue Proposal. Smith said David Galat (ISAC) stated he did not feel we could publish a 'Program Progress Report' type of document and that some of the Program documents likely are not publishable in a big journal. Hines asked if the publications would be based on the science behind the adaptive management program; Smith said it would be and stated items such as Program minimum habitat criteria may not be publishable in the special edition. Harner suggested we consider 5-6 publications in a special edition. Sellers asked if the EDO is prepared to deal with a potential onslaught of issues or 'bombs' if we moved forward with the special edition rather than publishing individually. Baasch stated so long as the data support conclusions of the research it would be unlikely reviewers would throw bombs at the Program. Hines said we should consider including stakeholders as authors so it is evident Program folks are buying in on the findings. Flyr stated each of the articles should be a finished study that we published.

Peyton asked how the review process in a special edition compares to publishing individual journals and asked if publication charges would be similar if we published the journals individually. Hines said the review process would be the same if published separately or in a special edition and Smith stated open access would cost \$3,000 per publication so total charges would be similar. Farnsworth stated the discussion of saving money on publication charges would need to be accompanied by another review process that Program folks would buy into because we continually hear if the research is not published in a journal it is not considered best available science. Jenniges and Rabbe



agreed the Program needs to look for ways to improve the independent peer review process so final products are accepted as final by the peer review panel and the Program. Smith pointed out that if the Program’s peer review process needed to be changed, the GC would be the body that would need to make that determination.

Urie said he was not convinced we were prepared to spend staff time developing a special edition publication as he wasn’t aware the Program had envisioned publication was a requirement for information to be considered best available science. Urie suggested the TAC and ISAC spend time developing what the benefits would be for the Program to publish and have the TAC develop a recommendation for the GC to consider. Fritz stated he didn’t feel the Program should publish for publishing sake, but rather should publish to have a broader audience provide input to help improve the Program’s adaptive management process to make it more effective. Hines said she didn’t feel we were proposing to publish for publication sake, but that Program science should be published or peer reviewed to ensure scientific rigor. Jenniges said the Program solicits the best candidates to implement research and the reports and findings are reviewed by an independent peer review panel and the ISAC so if there are issues with research findings the Program would likely be aware of them before submitting the work for publication. Rabbe pointed out EDO staff have prepared a lot of presentations and ‘white papers’ that have not been peer reviewed and as such may not be considered best available science. Besson expressed concern that when it comes time to negotiate the second increment he wouldn’t want Program science to be dismissed because it wasn’t published. Farnsworth and others pointed out there are a lot of publications, even on the central Platte River, where the data doesn’t support the results and conclusions. Urie suggested the EDO, TAC and ISAC have further discussions about publishing Program science and approach the GC with a TAC recommendation and justification to pursue publication. Czaplewski agreed and suggested the Program look for ways to reduce publications charges if/where possible.

Whooping Crane Discussion Items

Baasch presented what he viewed as the ‘major’ changes (e.g., return transects, survey dates, etc.) that were made to the Program’s whooping Crane Monitoring Protocol and asked if there were any additional changes that were needed. Harner suggested we add pictures describing the difference between use sites and use locations; pictures were not included because after further review the protocol seems to clearly articulate what the difference is. Peyton asked if the Program had a summary document that outline what information was to be collected while out in the field. Baasch said there currently was no such document, but pointed out the datasheets contained all the information to be collected in the field so he didn’t feel an additional document was necessary; Peyton agreed. Czaplewski suggested we remove the strikethrough in the text of Big Question 10 so there wasn’t any confusion about what the Program’s Big Question 10 is; strikethrough removed. Baasch state the protocol states a toll free number will be available for the public to report whooping crane sightings and asked the TAC if the Program should establish a number or if it would cause confusion to have a Program number as well as the Whooper Watch line the Trust maintains. Baasch state the Trust plans to have calls forwarded to Trust staff so information would be obtained real time rather than having the public leave a message on an answering machine as occasionally was the case in the recent past. The TAC seemed to agree an additional toll free number was not necessary.



Urie moved the TAC recommend the GC support changes made to the WC monitoring protocol; Rabbe seconded the motion; all supported the motion.

Baasch informed the TAC he and Farnsworth discussed TAC supported changes to the whooping crane data analysis plan with Shay Howlin (WEST) and informed them she agreed with the changes and is doing so now. Once updated, the EDO will distribute an updated version of the analysis plan.

Baasch informed the TAC Rain Water Basin Joint Venture (RWBJV) has completed the habitat availability assessments for terns and plovers 2007-2012 and whooping crane assessments for 2009-2012. RWBJV is now working on the 2007 & 2008 whooping crane habitat availability assessments and will work on the 2013 tern and plover and whooping crane assessments soon.

Baasch informed the TAC Clayton Derby (WEST) revised the format for the whooping crane monitoring report for spring 2013 to make the report more useful for the Program. The spring 2013 whooping crane monitoring report will be available for TAC review in the next couple of weeks.

Baasch informed the TAC the Program plans to enter a contract with Texas Parks and Wildlife Department (TPWD) to collect video of the whooping crane capture and processing activities to promote whooping crane recovery and the partnership that has been established. Czaplewski asked if the Program or the tracking partnership team was entering into a contract with TPWD. Baasch stated the Program would enter into the contract with TPWD to have control of the information if something were to go wrong and because other organizations (e.g., USGS, USFWS, and CWS) didn't have a mechanism to do so.

Baasch informed the TAC the EDO conducted an in-depth review of the WEST report titled "Whooping Crane Emigrational Habitat Use in the Central Platte River during the Cooperative Agreement Period, 2001-2006" (Howlin et al., 2008). EDO staff drafted a document that highlights potential issues in the methods used that may have affected the results and conclusions of that analysis. The document has been sent to WEST to provide feedback on our review and will be provided to the TAC once their review is complete. While our document doesn't explicitly state the report is invalid, when combined, there seems to be enough issues that may warrant a Program decision that states the results of that analysis should not be used to inform Program management decisions. Besson asked if WEST was aware of the issues we pointed out in the document; Baasch said Shay Howlin (WEST) was made aware of our concerns and has incorporated our thoughts in the data analysis plan for the pending analysis. Jenniges suggested the TAC make a decision on the validity of the 2008 report once the TAC has a chance to review the document and stated if WEST agrees with the EDO assessment the document should be removed from Program files. Rabbe suggested the issues should be documented in the next report to document why the Program feels the 2008 report shouldn't be used to inform habitat management actions.

Shoemaker Island Complex

Farnsworth informed the TAC the Program successfully obtained a 404 permit and we plan to construct 2 replicates of big/small - high/low tern and plover nesting islands at the Binfield Complex after the fall whooping crane migration season and prior to the 2014 nesting season. Farnsworth stated a portion of the 40-45 acre island that exists on Binfield will be developed into 2 tern and plover nesting islands and the remainder of the island will be maintained free of vegetation. Baasch added we planned to maintain the islands with pre-emergent herbicide and not flow.



Jenniges asked how long the Program planned to maintain the islands and how often we would rebuild the islands if they erode away; Farnsworth said our permit requires us to maintain the islands through 2016 and after that the Program would decide if we want to continue building or maintaining the islands or not.

Sediment Augmentation Pilot-Scale Management Action

Engelbert presented an update on the status of the sediment augmentation pilot study project. Sellers asked how much it costs to augment sediment with a dredge versus mechanically. Engelbert said it costs about \$1.85/ton to augment sediment with mechanical means and about \$5.75/ton to augment sediment with a dredge and pump as implemented to date. Engelbert stated the dredging contractor indicated if the dredged material was not sorted the cost of augmenting sediment via the dredging process would be reduced by about half. Jenniges asked if the \$5.75/ton included the cost of using a dozer to fully augment the sediment that was dredged into the channel; Engelbert said it did not. Sellers asked if there were any advantages to dredging rather than mechanically augmenting sediment. Engelbert mentioned dredging the material requires much less land as materials are obtained from deeper (25-30 feet deep) as compared to mechanically pushing 8-10 feet of material from the surface. For example, if the Program were to push 8-10 feet of material from the surface of the Cook Property, sediment augmentation would cover about 10 acres on an annual basis.

Rabbe asked if Engelbert knew how much additional flow would be required to transport the larger material if it was not sorted; Engelbert said he would have to look at the sediment discharge rating curves, but mentioned ~82% of the dredged material was being placed in the channel, but that some of the larger material likely would not be transported very quickly. Rabbe asked if flow conditions were normal when sediment was augmented and if there was a way to estimate how much flow would be needed to transport the dredged material. Engelbert said sand would likely accumulate due to the fact we are augmenting the average annual deficit in a 6-7 month timeframe. Baasch asked if it seemed reasonable to allow a sand and gravel mining contractor to mine the sellable material on Program lands at no cost to the Program and place the spoil material on the bank rather than in the pit so that the Program could use a dozer to move the material into the channel. Engelbert said it seemed reasonable to discuss this alternative with potential contractors.

Smith stated the Program would likely need to augment 150,000 tons (average annual deficit) of sediment in 2014 and needs to decide how to augment sediment in the future. If the Program wants to continue to dredge at Dyer we should decide soon so we don't have to pay de-mobilization and re-mobilization costs. Jenniges said the Program should investigate the option of having a sand and gravel mining contractor mine the sellable materials at no cost to the Program and have them place the spoil pile on the bank so we could push it into the channel with a dozer. Jenniges also said we should also look at augmenting sediment that currently exists as vegetated sandbars in the channel. Baasch mentioned there is also a lot of sediment tied up in vegetated sandbars just downstream of the Overton Bridge. Smith said EDO staff and the Sediment Augmentation contractor would investigate potential options and would discuss the options with the TAC at a future meeting.



Flow Consolidation

Farnsworth summarized the presentation Interfluve and EA gave at the 2013 AMP Reporting Session and discussed the feasibility and limited benefits we would observe if we were to consolidate flow on the Cottonwood Ranch Property. Farnsworth stated there was a flow breach upstream of Cottonwood Ranch that carries flow at ~2,700cfs and that it does not appear the Program would be able to obtain a permit to consolidate flows in this reach of river. Farnsworth stated our ability to consolidate flows through Cottonwood Ranch appear to be limited and the benefits would be fairly marginal (stage increase of ~2 inches), but consolidating flows is an FSM management action. Farnsworth said we need to know that if we don't consolidate flows, but implement all the other FSM management actions are folks going to say we didn't implement and test the FSM strategy. Rabbe agreed Cottonwood Ranch represented the Program's best option for consolidating flows within the system and given it doesn't seem possible to consolidate flows there it may be best to acknowledge flow consolidation is not a practical option and move on with other FSM management strategies. Czaplewski and others suggested the EDO draft a memo with a motion stating the TAC recommends the GC approve removing channel consolidation from consideration in the FSM management strategy.

EDO will draft a memo seek a TAC recommendation to the GC to allow the Program to proceed with the FSM management strategy without the flow consolidation management action.

Land Management Plans

Farnsworth stated the Johns Tract land management plan indicates that the Program would remove trees from the south western portion of the Johns Tract and asked the TAC if they felt we should proceed with that management action to increase the wet meadow area on the tract or not. The TAC discussed the possibility of removing the trees on the southwest portion of the Johns tract and decided the benefits would likely be minimal given there is already >640 acres of wet meadow habitat in the complex so it was not worth removing the trees. The TAC discussed the option of implementing a patch-burn grazing system at the Johns tract. The current plan is to burn each patch every 5 years. Jenniges and others supported implementing a patch-burn grazing system and suggested we adopt an integrated management plan and install exclosures to monitor changes in the vegetative community over time.

Farnsworth stated to date the Program's overall objective for managing grasslands has been to provide short stature vegetation for whooping cranes, but that recent discussions have indicated there is a strong interest in managing Program grasslands for other species. Jenniges stated his comments were not intended to hold up the 3 land management plans, but to stimulate a TAC discussion on what benefits wet meadows provide for whooping cranes.

Farnsworth stated current management practices such as burning grasslands in March and deferring haying until after July 15th each year to avoid the April 15 – July 15 dates stipulated in the migratory bird treaty act (MBTA) may actually result in a shift towards a cool season dominated landscape on Program lands. Farnsworth stated the EDO would like to discuss the option of managing a portion of Program lands within the April 15 – July 15 timeframe as all other conservation groups do to help promote warm-season grasses on Program properties. Rabbe stated the Service didn't have any flexibility in the dates stipulated in the migratory bird treaty act.



Farnsworth and Kenny said the EDO is fine with managing grasslands outside the MBTA period, but felt it was important to inform Program participants the grasslands will likely become more dominated by cool-season grasses and will be less diverse and contain fewer warm season grasses in the future. Peyton and others stated the Program could burn in March and graze the burned areas heavily early in the grazing season to help suppress cool season growth and development.

PRRIP FY2014 Budget

Smith went through preliminary budget estimates for line items included in the AMP portion of the FY2014 Program budget. Minutes only include line items that TAC participants had a conversation about.

WP-10 – Smith indicated the WP-10 line item budget was at \$0 because we don't plan to implement a short duration high (SDHF) or medium (SDMF) flow during 2014; Hines stated it didn't appear the environmental account would have enough water to implement a SDHF or SDMF during 2014.

H-2 – Line item budget increased slightly as the Program will need to take over some of the USGS financial responsibilities at the Overton and Cottonwood Ranch gages because of sequestration. The TAC members seemed to agree the Overton and Cottonwood Ranch gages were pretty important for the Program to maintain. Czaplewski asked if the Program should consider dropping the Cottonwood Ranch gages; Kenny stated there was a lot of research going on at Cottonwood Ranch so that gage seemed to be a pretty important gage to maintain. Czaplewski agreed, but stated if it came down to cutting research or monitoring the Program should probably look at dropping that gage from the budget first.

TP-1 & WC-1 – Smith discussed these line item budgets together and informed the TAC the USGS tern and plover contract expired in 2013 so we would probably need to re-compete the work for 2014 and beyond. Smith informed the TAC that the Finance Committee directed the EDO to try to reduce the Program's budget where possible. The EDO has investigated and identified substantial cost savings (~\$100,000) if the EDO were to hire technicians to implement both the whooping crane and tern and plover monitoring protocols beginning in 2014. Smith stated the finance committee also discussed the option of having the EDO collect the data and have an outside organization complete the high-level analyses that would occur every 3-5 years. Peyton asked if the Program would continue to band terns and plovers and grid search nesting areas or if the Program would revert back to outside monitoring as was conducted prior to 2009. Baasch said his strong recommendation would be to continue monitoring from inside and outside the nesting colonies and to continue banding birds because the Program has an obligation to document banded birds for 2 years and because we get a lot better data from within the colony. Baasch said the crews missed at least 12 nests during 2013 from outside the colony. Peyton questioned whether grid searching was worth the additional 10% of data and asked if the Program intended to obtain a banding permit to band birds. Baasch stated the current plan would be to continue to contract USGS or another entity to provide 2 people to band birds each year. Peyton and Jenniges indicated they weren't concerned with who hired the technicians if the Program could save money. Hines asked if the Program would hire an outside organization to analyze and synthesize Program data annually. Smith stated data analyses would be conducted periodically (3-5 years) by an outside organization, but the annual synthesis of information would continue to be conducted by the EDO; Hines agreed.



Besson stated having the EDO hire additional technicians could have additional benefits in that the additional crew members could do other work for the Program when they are not monitoring birds. Kenny agreed and stated there are times during the year when monitoring does not occur where the technicians would be doing other work for the Program, but the only financially viable option would be to hire technicians to implement both protocols. Peyton asked if we would need 10 technicians to implement the whooping crane monitoring protocol; Baasch stated we would only have 8 technicians during this timeframe (10 minus the 2 LTPP banding technicians) and the protocol requires 8 people to have 4 ground crew members and 4 aerial flight crew members each day. Jenniges said the TAC and GC would need to see a detailed breakdown of the cost savings; Kenny said the EDO is at the preliminary stage of developing the budget and justification and that information would be presented to the various Program advisory committees during upcoming meetings.

WQ-1 – Czuplewski suggested the Program minimize the water quality monitoring efforts where possible given the data is not directly related to any of the Program Big Questions. Farnsworth said he discussed the water quality monitoring efforts and budget with the existing contractor (EA) and that the WQ-1 line item would be reduced substantially given 2013 is the last year of monitoring the Kearney Canal.

PD-3 – Smith stated the peer review budget increased slightly because the Program would need to identify an organization to select peer review panels as Atkin's organization seems to have broken down.

ISAC Discussion Items

Smith stated he did not have a final report from Atkins and that he had sent a couple of more potential candidates the morning of the meeting, but wanted to know if the TAC had any specific recommendations at this point or if they would rather wait until they see the final report. Smith informed the TAC Phillip Dixon (ISAC) spoke highly of Jennifer Hoeting. Smith also reminded the TAC John Pitlick was involved with the review of the Program's Geomorphology and Vegetation Monitoring Protocol, but stated this didn't necessarily mean he couldn't be considered a candidate for the ISAC.

Czuplewski stated he felt Robb Jacobson and Phillip Dixon (ISAC members) had served the Program well the past 4 years, but that the Program should probably replace them to maintain independence and obtain new ideas within the ISAC. Peyton agreed having new members would bring fresh ideas and perspective for the Program; the rest of the TAC seemed to agree. Fritz suggested we wait to make a final decision on whether to replace the existing candidates until we have a chance to review the CV's and know if acceptable replacement candidates are on the list. Hines suggested the Program could have the contractor identify additional candidates to replace an ISAC member if the Program doesn't feel the candidate we are looking for is on the current list of candidates; the TAC seemed to agree.

Peyton moved to support replacing Robb Jacobson and Phillip Dixon's role as ISAC members; Czuplewski seconded the motion; all approved.



Closing Business

In response to comments and feedback the EDO had received, Smith informed the TAC, we scheduled a special meeting on September 18 to discuss the initial assessments the EDO made on the Big Questions at the 2013 AMP Reporting Session. However, where several individuals would not be able to attend the meeting, we plan to initiate that discussion following the current TAC meeting. Smith stated we also planned to spend a considerable amount of time during the October ISAC meeting to finalize the 2012 State of the Platte Report.

Smith said the TAC would need to schedule a meeting to discuss an updated version of the FY2014 budget. Farnsworth stated we would also need to have a meeting with a subset of interested TAC members to develop an *a priori* set of models we plan to test in the whooping crane habitat analysis. Smith said he would schedule a late October meeting to discuss the FY2014 Program budget and would schedule a workshop to develop *a priori* models to be tested in the whooping crane analysis.

Meeting adjourned at 2:00pm Central time.

Summary of Decisions from June 2013 TAC Meeting

1. The TAC approved the June 24, 2013 TAC minutes.
2. The TAC recommended the GC support changes made to the WC monitoring protocol.
3. The EDO will draft a memo with a motion to seek a TAC recommendation to the GC to allow the Program to proceed with the FSM management strategy without the flow consolidation management action.
4. Fall 2013 ISAC Meeting scheduled for October 1-3. A substantial part of that meeting will be focused on Big Question assessments and the 2012 State of the Platte Report.
5. The TAC recommended GC support to replace Robb Jacobson and Phillip Dixon as ISAC members.
6. The EDO will provide a budget showing how Headwaters hiring technicians would save the Program money if Headwaters were to implement both the whooping crane and tern and plover monitoring protocols beginning in 2014.
7. The EDO will schedule a TAC conference call/meeting to further discuss PRRIP FY2014 budget and whooping crane data analysis *a priori* models.



2012 State of the Platte Report Discussion Notes

- Smith – Downstream water users compiled an opinion paper on the EDO's 2012 Big Question assessments for the 2013 State of the Platte Report and the Service provided feedback through an opinion paper as well as through email communication, all of which was distributed to the TAC.
- Baasch – asked for clarification on the document(s) the Service comments were directed towards; Rabbe said Service comments were directed at the GC approved 2012 State of the Platte Report as well as the Districts opinion paper. Opinion papers were directed at different documents.
- Jenniges –Downstream water users opinion paper was directed at the presentations given at the 2013 AMP Reporting Session which was distributed to the TAC following the meeting. The opinion paper was written to bring to the Program's attention to areas where they feel there were discrepancies between Big Questions and Program hypotheses as well as where the Districts felt data supported a stronger assessment (i.e., one- or two-thumbs up or down).
- Runge – The Service defines suitable in-channel nesting habitat as sandbars where terns or plovers nest; Baasch indicated the Program currently views suitable nesting habitat as areas where terns and plovers are likely to nest successfully.
- Jenniges – Service comments weren't directed at height of sandbars, but rather were directed at implementing FSM strategy as a whole (Flow, Sediment, and Management) over the course of 8 years which in essence would add 8 years to the end of the Program's first increment so we could fully evaluate full implementation of FSM.
- Farnsworth – The EDO needs to know specifically what counts and doesn't count for evaluating full implementation of FSM as currently there are consolidated reaches in sediment balance that have experienced FSM magnitude and duration flows 3 out of the past 5 years. If evaluating full implementation of FSM means the entire system, Lexington to Chapman, needs to be in sediment balance and consolidated and the Program needs to release the water to test the FSM strategy then the EDO needs to know that so we know how to test the strategy.
- Rabbe – To date the system has not been in sediment balance when we experienced the high flow events so there still is a lot of uncertainty in whether or not the FSM strategy will work or not. FSM hypotheses are designed to test an altered condition when the Q1.5 is increased and high flows occur more frequently. May find out down the road creating suitable nesting islands conflicts with having a braided system for whooping cranes.
- Farnsworth – Seems there is some other benchmark for some period of time or level of manipulation before we can come to a conclusion which is not how the hypotheses are set up. Hypotheses are designed to test if flows of 5,000 to 8,000cfs on an annual or near annual basis in areas in sediment balance result in tern and plover nesting habitat. To date the EDO has been following ISAC guidance to learn as much as possible from conditions that exist on the Platte River. The Platte River experienced FSM level flows in 2007-2011 and has had channel reaches in sediment balance and that is the data the EDO has analyzed and used to support our conclusions.



- Jenniges – FSM management strategy was based on Lisa Fotherby's results and was hypothesized to create a braided river morphology over an 8-year period. It is unclear how a braided condition relates to tern and plover nesting habitat when islands heights were hypothesized to be raised by 0.4 feet and not 1.5 feet above 1,200cfs stage which is now considered suitable nesting habitat.
- Rabbe – The Program needs the capability to supply 5,000-8,000cfs flows over an 8 year period to test the FSM management strategy as it is unlikely the Platte River will experience FSM magnitude flows and sediment balance 2 out of 3 years over an 8 year period. Farnsworth stated the additional criterion of implementing the strategy 8 years in a row is what the EDO needs to know in order to evaluate the strategy.
- Besson – does the Program need to augment sediment and provide FSM magnitude and duration flows for 8 consecutive years? Rabbe said he wasn't sure how long the experiment would need to be implemented to be 100% certain the FSM strategy wouldn't work.
- Smith – the Program is implementing FSM proof of concept research at the Elm Creek and Shoemaker Island complexes. If the drought breaks and we get FSM magnitude and duration flows and are in sediment balance in these reaches, is the research valid for testing the FSM management strategy? Rabbe said if the Program adds sediment every year and the system is in sediment balance and we observe FSM magnitude and duration flows, the Program would be a lot closer to fully testing the FSM management strategy. If the Program had augmented and stock piled sediment in the channel and maintained vegetation in the channel for 3 years prior to 2011 flow event than more than the average annual deficit of 150,000 tons of sediment would have been available to be transported during the high flow event. Baasch said the Cottonwood Ranch, Younkin, Rowe, Dippel, and Alda Farms tern and plover nesting islands were all free of vegetation and transported by the 2011 flow in a reach that was in sediment balance and no new suitable tern and plover nesting islands were created.
- Farnsworth – if the Program is evaluating success or failure based on what we did at a specific site rather than on physical conditions within given reaches of river, it will be tough to evaluate the strategy. For example, it will be impossible to link sediment augmentation at Cottonwood Ranch to sandbar height at Rowe Sanctuary. The thing the Program can evaluate is whether a location was in sediment balance and the results of what happened with flow. Downstream of Kearney was in sediment balance, is consolidated, and experienced FSM level flows 2 to 3 times over the past several years and we feel we learned a lot, but if that is not enough to go to the next step we specifically need to know the actions, sequence, and scale that would allow us to check the box and move on.
- Runge – the Platte experienced one of the worst droughts on record during the early 2000's and invasive species took over a lot of the channels and it took 2010 and 2011 flows to remove the vegetation from the channels and set the stage to test the FSM management strategy.
- Rabbe – the Service is ok with a one-thumbs down assessment on Big Question 1, but isn't 100% convinced the FSM management strategy will not result in the creation of suitable tern and plover nesting habitat. The Service will develop a document describing exactly what they feel needs to happen to fully evaluate the FSM management strategy.



- Farnsworth and Kenny – defining the sideboards will be very helpful because the Program is implementing FSM proof of concept research at Elm Creek and Shoemaker Island complexes and thought we learned a lot, but now find out what we learned doesn't count.
- Besson – it seems the Service feels the Program needs to have the J2 re-regulating reservoir completed to supply sufficient flows and augment sediment for 5-8 years before we can fully evaluate the FSM management strategy. Runge stated peer review may indicate data collected during the short duration medium flow could be scaled up to represent results of a SDHF.
- Smith – if the discussion about peer review is related to the EDO's assessment of the Big Questions and organizations disagree with EDO assessments, the GC specifically said the ISAC does the peer review of the State of the Platte Report. The State of the Platte Report is a synthesis of a lot of research and information collected during the course of the first increment and the ISAC agreed with the EDO assessments. The synthesis of information in the State of the Platte Report would be difficult to review by individuals outside Program committees as they would have no clue what is going on. However, there are several pieces (Endnotes in the State of the Platte Report) that go into assessing each of the Big Questions that could be peer reviewed if the GC decided to take a peer review approach.
- Runge – integral parts of the synthesis of information used to assess Big Question 1 could be included in a publication. For example, minimum habitat criteria are a foundational part of the Program habitat availability assessment that would need to be published along with habitat availability assessment methods and results. Farnsworth asked how he proposed the Program publish or have someone outside the Program peer review the Program's minimum habitat criteria when the criteria were developed on distributions of datasets and Program participant decisions. Runge said we could peer review if the rationale is sound and if methods used to assess habitat availability are appropriate. Jenniges said we can't peer review what the Program has already agreed should be considered minimum habitat criteria for the central Platte River.
- Smith – the EDO has been tasked with synthesizing Program data and analyses into an annual State of the Platte Report to be delivered to the GC to help them make decisions. The Down Stream Water users feel one or two of the EDO assessments for the 2013 State of the Platte Report aren't strong enough and the Service disagrees with the assessment because it is their opinion the FSM management strategy has not been fully implemented. Baasch said though it appears the Downstream Water Users feel a couple of the assessments could be a little stronger and the Service disagrees, it doesn't appear there isn't TAC consensus on the EDO's Big Question assessments for the 2013 State of the Platte Report. Rabbe and Jenniges seemed to agree and indicated they didn't see any fatal flaws with the EDO's Big Question assessments. Rabbe said he would have a lot of reservation about going to a 2 thumbs down on Big Question 1 assessment without further exploring how the FSM management strategy as a whole was originally envisioned. Jenniges said a 2 thumbs down on Big Question 1 wouldn't necessarily mean the FSM management strategy doesn't work, but rather that it doesn't appear to work as fully envisioned (i.e., build tern and plover nesting habitat and create and/or maintain whooping crane habitat). The AMP has two sets of hypothesis, those which link management actions with physical processes and those that link changes in those processes to habitat (use by birds).



- Rabbe – the Program is 5 years from being able to release 5,000cfs of flow for 5 days or 8,000cfs for 3 days so the Program should explore other uses of flow in the meantime. Farnsworth asked Rabbe if the Program had to release all the water in order to implement the FSM management strategy; Rabbe said not necessarily. Farnsworth said he hadn't heard of the 5,000cfs for 5 days or 8,000cfs for 3 day criteria and asked where those numbers came from; Rabbe said those numbers were an estimate of the amount of water in the environmental account.
- Jenniges – Smith would like to have consensus on the State of the Platte Report, but if there are concerns or comments on the report those documents could be posted on the Program website. Hines said the Program should probably have consensus on the science, but not necessarily on the policy implications. Smith said if Program participants feel the EDO messed something up with the analyses or assessments, we need to know. Baasch said that gets back to recent Service comments on the assessment of Big Question 8 in the 2012 State of the Platte Report where the Program made a decision we would use the results of analyses of forage fish data to assess the Big Question and not handle tern chicks multiple times in order to further evaluate whether or not forage fish limits tern productivity on the central Platte. Runge asked if the fish data aren't related to the birds, how we would assess the question; Jenniges said the data indicates there are millions of fish in the river and 100 terns so the Program made a determination there is no indication forage fish limits productivity. Runge suggested if the forage fish data analyses and results were published he would be comfortable with agreeing with the EDO assessment. Runge said another approach would be to publish results that indicate fledge rates have not dropped below some critical level that would limit terns on the central Platte; Baasch said a lot of factors (e.g., predation, etc.) influence fledge rates so it would be tough to use fledge rates to determine if forage fish limit productivity. Jenniges questioned whether a weight of evidence approach would be sufficient for the Program to make decisions or whether we needed to establish a cause and effect relationship to make a decision. Rabbe said he would be more comfortable with the assessment if we included a combination of fish numbers and fledge ratios in the assessment.
- Besson – should ask the ISAC to provide their insight on Program research that should be published or peer reviewed to support EDO conclusions in the 2013 State of the Platte Report.
- Hines – need to have a discussion at some point on the Program's peer review process and documents to be peer reviewed; group seemed to agree. Jenniges stated it is very important to frame the question for peer reviewers so we receive the feedback the Program needs; Hines and others agreed.

Summary of Next Steps

1. As during the TAC meeting earlier in the day, there was additional discussion about whether or not Program research and conclusions could be considered 'best available science' if it was not published. The GC will be asked to make a determination on whether they want to spend money and EDO staff time publishing Program research or not.
2. The ISAC will be asked to provide their insight and a GC recommendation on Program research and conclusions that should be published.



3. The ISAC will be asked to review the 2013 State of the Platte Report and provide a recommendation for the GC.
4. Need to discuss the Program's peer review process and Program documents to be peer reviewed at a later meeting.