



1 **PLATTE RIVER RECOVERY IMPLEMENTATION PROGRAM**

2 **Water Advisory Committee Meeting Minutes**

3 **Nebraska Game and Parks Commission – Lake McConaughy Visitors Center, NE**

4

5 **August 10, 2010**

6

7 **Attendance**

8 Cory Steinke – WAC Chair, CNPPID

9 Jerry Kenny – Executive Director PRRIP/ Headwaters Corp

10 Beorn Courtney – ED Office/Headwaters Corp

11 Laura Belanger – ED Office/Headwaters Corp

12 Steve Smith – ED Office/Headwaters Corp

13 Justin Brei – ED Office/Headwaters Corp

14 Doug Hallum – NDNR

15 Dennis Strauch – Pathfinder Irrigation District

16 Jeff Shafer - NPPD

17 Jon Altenhofen – Northern Colorado WCD

18 Mike Drain – CNPPID

19 Rich Holloway – Tri-Basin NRD

20 Pat Goltl – NDNR

21 Brock Merrill – Bureau of Reclamation

22 Jeff Runge – U.S. Fish and Wildlife Service

23 Greg Wingfield - U.S. Fish and Wildlife Service

24 Mahonri Williams – Bureau of Reclamation

25 Kent Miller – Twin Platte NRD

26 John Heaston – The Nature Conservancy

27 Tom Econopouly – U.S. Fish and Wildlife Service

28 Matt Hoobler – Wyoming SEO (by phone)

29

30 **Other Attendees**

31 Kevin Prior – Olsson Associates

32 Bill Hahn – Hahn Water Resources

33 Clint Carney - Olsson Associates

34 Ann Bleed - ABA

35 George Oamek – Honey Creek Resources

36 Jeff Bandy- AECOM

37 Eric Dove – Olsson Associates (by phone)

38 Matt McConville – HDR (by phone)

39

40 **Welcome and Administrative**

41 Introductions were made. There were no agenda modifications. **The May WAC Minutes were**
42 approved with no modifications.

43

44

**PRRIP Website Training**

Brei provided an introduction of the new Program website, both the public and password protected sites. He walked the committee through the various pages including: Program background, public calendar, land owner information, publications, document search feature (noting that if you don't log in you will only see public documents), river flow data, map viewer, and the password protected intranet. He reviewed the WAC internal site: calendar, meeting minutes, WAC library, and committee membership list.

Brei showed the WAC how to upload and edit documents. The website only shows the current version but it maintains previous versions of documents so they can be accessed. To edit a document you must first check it out (only one person can have a document checked out at a time). When the document is checked out, other users can see a read only version. **If you check something out, you must check it in on a timely basis so others can then check out the document.** The document is then edited on the server rather than on an individual's computer. **Please turn on tracked changes when editing a document.** When you are done editing, close the document and save it. You will then be asked if you want to check it in. Say yes and you may type in version comments. For problems, see the "How Do I..." drop down list and select "edit a document." Also talk to Monte McDonald from Riverside who developed this and has a contract for support services (monte.mcdonald@riverside.com), direct line (970) 498-1833) or Brei or Belanger if you have questions.

Brei reviewed how the website will be used for the next WAC meeting. The "Upcoming meeting items" document library will be used rather than emails. When information is available, you will be sent a notice to log on and download these. This will be helpful in sharing larger documents, which have been an issue in the past. Altenhofen noted that there could be some issues for some folks in getting permission to access and download documents.

Elm Creek Reservoir Pre-Feasibility Study Update

Kenny noted that the analysis is feasibility level and not pre-feasibility as the agenda stated. The project is on track with the J-2 Reservoir regarding scheduling. The reservoir was originally looked at for flood control but is large enough that it can accommodate other uses so the Program has contracted with CPNRD to have Olsson look at Elm Creek for Program purposes. Prior presented findings to date and noted that the work is ongoing. Prior and Carney reviewed reservoir, dam, and water supply options/configurations; ground water modeling; yields and costs. Dewatering system needs to be part of the reservoir design to protect the town and downstream uses. Current reservoir capital costs are estimated at around \$29.5M for 19,850 AF of beneficial storage. Altenhofen noted that pumping ground water would impact the Platte River and asked if Olsson had looked at this. Prior said that the water budget will be refined as the study moves forward and said the yields presented did not consider the net impacts on the river. Prior said that the more water supply capacity, the better the yield and cost/AF. Conversations regarding costs and if pumping as an acceptable means of supply will be among the next issues discussed with CPNRD and the Program. Prior also reviewed environmental permitting, noting that wetland impacts appear to be small. There could be extensive impacts to



88 stream channels and adjacent riparian corridors.
89
90 Need to refine the yield and cost/yield (\$/AF) and select the options to be included in the Final
91 Project. **Altenhofen and Kenny asked to see the total costs, including O&M added up to**
92 **compare to reregulating reservoir budget. Olsson will provide this in their final report.**
93 Kenny said the permitting agencies said it may be less complicated if the reservoir has one
94 purpose and need (flows for wildlife enhancement) and then incidental additional benefits (flood
95 control and recreation). This is because for each stated purpose, alternatives need to be
96 evaluated. **The ED Office will work with Olsson on evaluating Dawson pumping impacts**
97 **and net depletions resulting from the project.**

98

99 **Wingfield introduced Tom Econopouly, the new U.S. Fish and Wildlife hydrologist**

100

101 **WAC Executive Session – Nebraska Ground Water Recharge Pre-Feasibility Study Update**
102 Shafer moved the WAC go into executive session to review the draft Nebraska Ground
103 Water Recharge Pre-Feasibility Study and draft RFP for Phase I of the Feasibility Study.
104 Williams seconded this. The motion carried and the committee entered executive session.
105 Wingfield motioned the group come out of Executive Session. Altenhofen seconded this.
106 The committee came out of executive session.

107

108 Altenhofen motioned that an RFP for Phase I of the Ground Water Recharge Feasibility
109 Study be brought to the Finance Committee, with edits to the draft RFP made to specify
110 that contractors itemize the budget for each RFP task. Hallum seconded the motion. The
111 motion carried.

112

113 **WAC comments on the Draft Pre-Feasibility Ground Water Recharge Study are due to the**
114 **ED Office on August 17th. The ED Office will then finalize the report.**

115

116 **Miscellaneous Water Action Plan Updates**

117 Courtney gave a brief status update on all the WAP projects. She reviewed the schedule from
118 the 2009 WAP update, noting that we are currently working on the five Tier I projects. The
119 CNPPID and Elm Creek reregulating reservoirs and Nebraska Ground Water Recharge have
120 been the main focus, but we are moving ahead on the others.

121

122 The CNPPID Reregulating Reservoir workgroup just decided that Elwood will not be pursued
123 for target flows operations but minimal improvements may be made to Plum Creek and Elwood
124 used for short duration high flows (SDHF). The Feasibility Study currently shows J-2 reservoir
125 storage ranging from between 13,638 to 15,787 AF. We are working on alternatives refinement
126 and combined operations modeling (hydrocycling mitigation, target flow operations and SDHF),
127 and preliminary permitting investigations. The final feasibility report is due in Feb 2011. Final
128 design and construction is scheduled to occur by the end of 2014. The Elm Creek reregulating
129 reservoir is on a similar schedule. The ED Office has been assuming that we'd move forward
130 with only one of these reregulating projects given the budget, but once costs are available, the



131 WAC can decide. Kenny noted that without the Program's support, the Elm Creek reregulating
132 reservoir will not move forward at this time.

133
134 Phase I of the Nebraska Ground Water Recharge feasibility study project would run through
135 early 2011. Phase II would be completed in the fall of 2011. Final Design and construction
136 could occur by the end of 2013. Courtney said that these schedules are aggressive but achievable
137 if all goes well.

138
139 Courtney then discussed other projects, noting that they don't have big construction components
140 (or construction that the Program is responsible for). Oamek is looking at the economics of Net
141 Controllable Conserved Water (NCCW) and the ED Office will start talking to CNPPID about a
142 leasing agreement in the fall. An agreement could be in place by spring 2011 at the earliest.
143 Altenhofen asked about the cost of NCCW, and if the Program is being required to pay for the
144 entire cost of implementing the conservation projects while only getting a small chunk of the
145 water. Kenny said that is correct. Oamek is looking at this so that we all understand the costs
146 better before we move ahead.

147
148 Based on earlier discussions with Mike Besson, Pathfinder construction is starting this month
149 and is scheduled through April 2012. The Program and Wyoming will start looking into a lease
150 agreement and getting it crafted later this fall. A final agreement wouldn't be signed until the
151 project is constructed. For Glendo, there may not be any water for the Program, but this is being
152 investigated. If there is water, a lease agreement could be drafted in 2011 with a final lease
153 agreement in 2012.

154
155 Altenhofen will be modeling Tamarack III this fall and early next year. The Program would
156 lease this water from Colorado. This project uses excess flows as a supply. Colorado Division
157 of Wildlife, which owns the land where much of the recharge is occurring, has given Colorado
158 the ability to drill another seven wells.

159
160 Tier II projects aren't being addressed in much detail right now, but the ED Office has initiated
161 scoping the NE water management incentives project, for example. As time allows, the ED
162 Office is working Tier II projects but not at the expense of Tier I projects. In 2012, the ED
163 Office and WAC will begin working on these in earnest. The Program hasn't had detailed
164 discussions with the University of Nebraska at Lincoln since the last WAC meeting. Kenny said
165 that we are stepping back and are going to form a workgroup to look at this, hopefully sometime
166 this fall. **Altenhofen, Heaston, Hallum, Wingfield, and Drain agreed to be on the water**
167 **management incentives workgroup.** Altenhofen noted that USFWS is very interested in
168 making sure projects such as water management incentives, that don't rely on excess flows, are
169 included in the mix. Wingfield agreed with this. Altenhofen also said that he thinks there is
170 potential for deficit irrigation.

171
172 Kenny discussed an opportunity to acquire surface water on Dawson County Canal. The land
173 will continue to be irrigated by ground water. The consumptive use associated with the surface



174 water goes back to the river. Altenhofen asked about the impact of the pumping on the river and
175 the net effect of the acquisition on the river. He also wanted to know how historical return flows
176 are protected. Courtney said that in Nebraska, protecting the historical irrigation return flows in
177 a monthly pattern isn't the standard practice, but the ED Office and NPPD are working together
178 to understand the net impact on the river. Steinke said there is a statute that transferring a
179 surface water right not injure downstream users, but to retire a right, the law doesn't have this
180 requirement. Under the statutes this could be simple, but the Program might need to address it.
181 **Kenny will draft up a memo for the WAC regarding a proposal for evaluating the yield.**

182
183 **2011 Water Plan Budget**
184 Courtney told the group the ED Office has drafted Water Plan work plans and budgets for next
185 year, which they were provided prior to the meeting. Hopefully the GC will approve the budget
186 at their December meeting which means we need to get a draft in front of them at their
187 September meeting or a special October meeting to review the budget. Courtney walked the
188 group through the various Water Plan projects.

189
190 WP-1 Active Channel Improvements. There has been some component of channel work done
191 each year since the Program began. In 2010 we added a cost share to do some work beyond the
192 North Platte Choke Point. This project would continue in 2011. Kenny also noted that the
193 Program contributed \$400,000 to a cost sharing project for biomass clearing from North Platte to
194 Elm Creek. In 2011 and 2012, clearing work, managed by the weed management areas, would
195 occur from Chapman to Lake McConaughy at a cost of \$200,000 each year. Runge said that
196 there are habitat benefits to clearing but asked if there are also choke points below the North
197 Platte location. Kenny said that with phragmites, while there were definitely habitat benefits,
198 focusing on the conveyance issues throughout the river simplified the budgeting process and kept
199 it under the Water Plan. **Runge suggested that total costs and Program cost-share for**
200 **maintaining channel conveyance be documented which will assist with alternative**
201 **development (e.g., FSM, MCM) for the second increment. Wingfield asked if it would be**
202 **beneficial to have Rich Walters (Coordinator for the PVWMA) give an update on work**
203 **that's been done. The group thought that would be useful.** Kent Miller asked if recent high
204 South Platte flows were sufficient to clear out dead phragmites which had recently been sprayed.
205 He suggested that someone look at this as it is important to know whether we just need to spray
206 or if mechanical removal with high flows is sufficient. Wingfield asked about aerial
207 photography and Brei said that it was taken in June during high flows.

208
209 WP-4 Water Action Plan. Ongoing CNPPID Reregulating Reservoir and NE Ground Water
210 Recharge project work were put under this item. In 2011 we'll be partway through these
211 feasibility studies. Most of the ground water recharge budget is for land acquisition.

212
213 WP-5 Water Management Tool. As the Program needs to quantify yields and scores and as more
214 projects come online, interactions between projects increase. We've looked at available tools
215 including the OPStudy model, which has limitations and which no one can run, and COHYST is
216 a possibility. The tool to be used for scoring and better understanding project interactions over



217 the long-term is still an outstanding question, so in 2011 we should evaluate what options are
218 available and what modifications to existing tools would be necessary. This hasn't been critical
219 so far, but will become more so as projects advance.

220
221 WP-6 Feasibility Studies. Studies include Water Leasing, Water Management Incentives and
222 Ground Water Management.

223
224 WP-7 Water Acquisitions. The budget here is to have money available for acquisitions, leases,
225 water rights evaluations. No money has been spent on this to date. Courtney and Kenny said that
226 if opportunities arise or a project is at the point when this work needs to occur, this budget needs
227 to be available. Altenhofen asked Kenny about an opportunity the Program had regarding
228 potentially acquiring a ground water well. Kenny said discussions are ongoing but a price hasn't
229 been agreed upon. Merrill noted that he thought that because there have been no expenditures
230 under this line item that the Finance Committee (FC) and GC might scrutinize this. He
231 suggested trimming the budget back a bit.

232
233 WP-8 Water Plan Special Advisors. The ED Office has been relying pretty heavily upon special
234 advisors such as Oamek, Hahn and Bleed. The budget was bumped up in 2011. Miller asked
235 how much of the 2010 budget has been spent and Kenny said much of it. Courtney said that we
236 have some structural review scheduled for this fall and 2011

237
238 WP-9 Miscellaneous Water Studies. This is for items that are not anticipated but that we need to
239 address when they come up. For example, the 1-D model peer review came out of this budget.

241 **Flow Aspects of the Adaptive Management Plan Update**

242 Kenny told the group that the North Platte choke point is still a problem. In 2007, the flood stage
243 was at about 1,800 cfs. SEH was hired to look upstream of the Highway 83 bridge, and also did
244 some analysis downstream of the bridge. Vegetation was removed and some high flow events
245 opened up some channels. This didn't improve stage-discharge downstream of the bridge. SEH
246 did some preliminary modeling and the Program did some cost sharing to clear vegetation
247 between the bridge and CNPPID's diversion. This did not help the flood stage. The Flow
248 Routing Test last year showed the flood stage was around 1,600 cfs and now we're down to
249 about 1,550 cfs at flood stage. So we're losing ground. Based upon SEH's modeling it looks
250 like there's been significant build up of the streambed over time. This either needs to be flushed
251 out with high flows or removed mechanically. The problem could be the Highway 30 and
252 railway bridges and/or a combination of sediment building up behind CNPPID's diversion dam.
253 We need to better understand what is controlling this and how it can be improved upon. We
254 have a contract for 1-D Sediment Transport Model starting at CNPPID's diversion. The ED
255 Office would like to extend the model to go 10 miles further upstream. The plan is to do a
256 contract amendment of around \$25,000 to \$30,000 to get the contractor working on this now.
257 Kenny said there is enough approved budget to get things moving now, though the FC needs to
258 approve this. The current contractor said they could add this additional model portion in within
259 the original schedule so by the end of October. **Miller motioned that the WAC recommend**



260 **the FC approve the amendment to the 1-D Sediment Model contract. Wingfield seconded**
261 **it. The motion carried.** Kenny said that everything that's been done so far regarding the choke
262 point was necessary but it isn't enough. Steinke said that he would be interested to see if there's
263 any work that could be done this fall and winter prior to a 2011 SDHF event.

264
265 Smith gave an update on the flow related Adaptive Management Plan (AMP) activities. He
266 provided and overview of the AMP management objectives and desired channel morphology
267 characteristics. He said there are two strategies to get there: MCM (mechanical, creation and
268 maintenance) and FSM (Flow Sediment and Mechanical). An important component of FSM are
269 short duration high flows (5,000 to 8,000 cfs) for three day every two of three years. First
270 mechanically clear and remove vegetation and then use flows to maintain this. Sediment
271 augmentation is also important. Smith reviewed the FSM schedule. SDHFs are scheduled for
272 2011, 2013. In 2015 full FSM implementation occurs with the reregulating reservoir being
273 online. FSM related research and modeling is currently occurring. The Program is planning to
274 clear the vegetation in a test area near Elm Creek and then see if flows can keep the vegetation
275 from reestablishing. Permitting is holding this up.

276
277 **Additional Business**
278 **The next WAC meeting was scheduled for October 12, 2010, from 9:30 am – 3 pm**
279 **(mountain time) at the Lake McConaughy Visitors Center.** There is also a tentative
280 November 9 meeting scheduled. At this point nothing has been identified for this meeting, but
281 WAC members should continue to hold this date in their schedules.

282
283 There was no additional business.

284
285 **Action Items**

286
287 **General WAC**

- 288 • WAC comments on the Ground Water Pre-Feasibility Study are due to the ED Office on
289 August 17th.
- 290 • Rich Walters (Coordinator for the PVWMA) to give update on phragmites removal work
291 that's been done.

292
293 **ED Office**

- 294 • The ED Office will work with Olsson on evaluating Dawson pumping impacts and net
295 depletions resulting from the Elm Creek Reregulating Reservoir project.
- 296 • The ED Office will clarify budget requirements (contractors should itemize the budget by
297 task) in the Ground Water Feasibility Study Phase I RFP and then bring the RFP to the
298 Finance Committee (Smith).
- 299 • Total costs and Program cost-share for maintaining channel conveyance will be documented
300 which will assist with alternative development (e.g., FSM, MCM) for the second increment
- 301 • The ED Office will finalize the Nebraska Ground Water Recharge Project Pre-Feasibility



- 302 Study after incorporating WAC comments.
- 303 • Kenny will draft up a memo for the WAC regarding a proposal for evaluating the yield of the
- 304 Dawson County Canal surface water right being considered for purchase.