

5/14/2012

1 2 3 4 5	PLATTE RIVER RECOVERY IMPLEMENTATION PROGRAM Water Advisory Committee Meeting Minutes Lake McConaughy Visitors Center – Ogallala, NE May 8, 2012	
6	Masting A	
7 8	Meeting Attendees	
o 9	Water Advisory Committee (WAC)	Executive Director's Office (ED Office)
10	State of Wyoming	Jerry Kenny, Executive Director (ED)
11	Matt Hoobler – Alternate	Beorn Courtney
12	Matt Hooder – Alternate	Steve Smith
13	State of Colorado	Matthew Welsh
14	Suzanne Sellers - Member	Bruce Sackett (call-in)
15	Suzume Seners Triemser	Druce Suckett (earl in)
16	State of Nebraska	Contractors
17	Pat Goltl – Alternate	Bill Hahn – Hahn Water Resources
18		Greg Glunz – URS
19	U.S. Fish and Wildlife Service (USFWS)	Pat Engelbert – HDR
20	Tom Econopouly – Member	Erin Gleason – AECOM
21	Jeff Runge – Alternate	Mike Applegate – Applegate Group
22	Mike George	
23	Matt Rabbe	
24		
25	Bureau of Reclamation (BOR)	
26	Mahonri Williams – Member	
27	Brock Merrill – Alternate	
28		
29	Downstream Water Users	
30	Cory Steinke – Member (WAC Chair)	
31	Duane Woodward – Member	
32	Jeff Shafer – Member	
33	Mike Drain – Alternate	
34	Tyler Thulin	
35	Rich Holloway – (call-in)	
36		
37	Colorado Water Users	
38	Jon Altenhofen – Member	
39		
40	Environmental Groups	
41	Bill Taddicken – Member	
42	Duane Hovorka – Member (call-in)	
43	Larry Hutchinson – Alternate	
44	Greg Wingfield	
45		
46		
47		



- Welcome and Administrative: Cory Steinke, WAC Chair 48
- 49 Introductions were made. There were no agenda modifications. The February 2012 WAC
- 50 Minutes were approved with the modifications by Hallum in the current version.
- 51
- 52 Choke Point Update: Steve Smith, ED Office
- 53 Smith provided an update on the current capacity at National Weather Service (NWS) flood
- stage for the North Platte River at North Platte and the Platte River at Kearney gages. High flows 54
- 55 in 2011 caused temporary increases in capacity at both locations, but the increased capacity at
- both locations has since subsided. No modifications are planned for either rating table at this 56 time.
- 57
- 58
- 59 Root mass ripping of the phragmites is being planned for this year at North Platte with the
- 60 objective of loosening roots to allow future high flows to more effectively remove sediment and
- 61 increase hydraulic capacity. Based on a recommendation from Runge, the ED Office will
- 62 attempt to coordinate the timing of tillage operations with the USFWS to optimize flow
- 63 conditions.
- 64

65 Smith explained that engineering and institutional approaches are being considered to increase

- 66 hydraulic capacity at NWS flood stage closer to 3,000 cfs at North Platte. Engineering
- approaches include dredging, bank stabilization, a sediment collector, and jetties and/or dikes. 67
- Smith noted that some of these approaches may be cost prohibitive, and permits for in-channel 68
- 69 work may be difficult to obtain.
- 70

71 Institutional approaches (flood-proofing and/or property buyouts) may help support the NWS to

- 72 increase the flood stage designation, which is currently 6.0 feet. Smith and Kenny met with local
- 73 NWS staff in North Platte on May 7, 2012, and NWS expressed a willingness to consider a flood
- 74 stage increase if drainage improvements were completed. NWS told Smith and Kenny that their
- 75 policy is to set flood stage according to stage when flow leaves the channel (i.e., not based on
- 76 high groundwater levels). River flows begin to go over-bank at a stage of about 6.5 feet based on
- 77 hydraulic modeling and NWS observations during 2011 high flows. If flood-proofing projects
- 78 prompt NWS to raise flood stage to 6.5 feet, then the capacity at North Platte would increase to
- 79 about 2,400 cfs. Therefore, some level of engineered projects would still be required to achieve a
- 80 capacity of 3,000 cfs.
- 81
- 82 Smith discussed engineering options to achieve higher capacity through the choke point:
- 83 Dredging approximately 100,000 cubic yards between Highway 83 and the UPRR bridge • 84 every 2 to 3 years to maintain 3,000 cfs flood stage capacity. Cost would be about \$500,000 each time dredging was completed. 85
- Jetties, in combination with some dredging, would increase flow velocity and result in 86 greater longevity for increased capacity. Cost estimates for dredging 150' pilot channel 87 88 from Highway 83 to UPRR and installing jetties would be about \$1.3M.
- Sediment collector may accomplish sediment removal without dredging. A demonstration 89 • 90 project on Fountain Creek has been successful in Colorado. Cost of that project was

91 92

about \$550,000 for installation and \$300,000 for a year of O&M including costs for hauling material off site.

93

94 Drain asked about whether the sediment collector would potentially cause backwater upstream of

- 95 the device and decrease capacity in another location. Smith said the device could be located
- 96 upstream of flooded areas to prevent those unwanted effects.
- 97

98 Smith explained flood-proofing projects recently discussed with NWS, City of North Platte, and 99 Lincoln County. Smith noted that engineering and permitting for the following projects would 100 cost about \$50,000:

- 101 • Re-connecting the 'State Channel' in the floodplain west and south of impacted 102 properties along North River Road to divert surface flows to the North Platte River and 103 away from impacted properties. Cost would be about \$20,000 for construction.
- 104 Installing a culvert and/or ground water pump outlet from Dr. Connell's property along the north bank of the North Platte River and just east of Highway 83 would minimize 105 flooding on Connell's property and help improve drainage of high ground water levels at 106 107 impacted properties along North River Road. Cost would be about \$26,000 for 108 construction.
- 109 • Installing about 12 driveway culverts along north side of North River Road west of 110 Highway 83 would allow the existing road ditch to work more effectively at draining 111 high ground water levels. Water would drain east down Hall School Road about two miles to Whitehorse Creek, where it would return to the North Platte River. Cost estimate 112 113 for these culverts would be approximately \$30,000.
- 114

115 NWS is considering developing an MOU with the Program about what the flood-proofing

116 actions (State Channel, Connell outlet, and North River Road culverts drainage to Whitehorse

117 Creek) would provide in terms of increasing minor flood stage to 6.5 feet, where the flow would

- be 2,400 cfs. 118 119
- 120 Another institutional option is to buy out potentially affected properties. Based on the Lincoln
- 121 County Assessor's website, Smith estimated total property values of potentially affected
- 122 properties at \$2.5M (\$2.9M with 20% markup). This would not be a cheap option, and the area
- 123 of buyout may need to be larger than estimated. Hoobler noted that these values do not include
- 124 structure removal. Runge thought that FEMA support may be available towards property buy 125 outs.
- 126
- 127 Altenhofen is encouraged by the discussion with the NWS, and thinks the expenditure of
- 128 \$150,000 would be worthwhile to see if the NWS flood stage could be elevated to 6.5 feet. Drain
- 129 expressed concerns about the NWS reducing the flood stage at a later date. FEMA funds were
- 130 dispersed to landowners in the area after 2011 flooding was declared a disaster by FEMA.
- 131 FEMA hazard funding, which requires a 25% local match, may be available for flood-proofing
- 132 efforts.
- 133

This document is a draft based on one person's notes of the meeting. The official meeting minutes may be different if corrections are made by the Water Advisory Committee before approval. **PRRIP WAC Meeting Minutes** Page 3 of 10

#### 134 Altenhofen made the motion to support the expenditure of \$150,000 for institutional

- initiatives. George agreed with Altenhofen. Steinke suggested that the Program demonstrate the 135
- mitigated effects of a flood at a stage of 6.5 feet by making a release. Econopouly asked what the 136
- 137 \$150,000 would get the Program. Steinke responded that the expenditure would hopefully
- 138 compel the NWS to raise the flood stage to 6.5 feet (2,400 cfs), but noted there are no
- 139 guarantees. Wingfield said the expenditure of \$150,000 was reasonable, and noted that a
- 140 workgroup would be useful for evaluating the need for more intensive engineering initiatives.
- 141 George seconded the motion of support made by Altenhofen to expend \$150,000 on flood-
- 142 **proofing efforts, unanimous support.** Drain requested that Kenny outline the risks to the GC
- 143 that there is no guarantee the flood-proofing projects would result in an increase in flood stage.
- 144 Kenny suggested that we use TC Engineering and SEH for this work; both firms previously
- 145 completed work for the Program and were selected through a competitive process at that time.
- 146
- 147 Runge inquired about the status of the Kearney choke point investigation. Kenny said the ED
- 148 Office has been unable to get a contractor to perform the vegetation removal, but the work is
- 149 budgeted for and planned for 2012. The workgroup will focus on the North Platte choke point,
- 150 but will also address the Kearney choke point.
- 151
- 152 A choke point workgroup was formed with the following WAC members: Econopouly,
- Taddackin, Steinke, Goltl, Shafer, and Kent Miller. 153
- 154

### 155 Hydroclimatic Indices: Jerry Kenny, ED

- Kenny discussed the potential use of hydroclimatic indices for providing longer-term predictions 156
- 157 of streamflow conditions in the South Platte, North Platte, and Central Platte basins. There are
- approximately one-half dozen hydroclimatic oscillations that are the driving force of our 158
- 159 weather. Indices include the Multivariate El Niño/Southern Oscillation, the Pacific Decadal
- 160 Oscillation, and the North Atlantic Oscillation, among others. The periodicity of these indices
- 161 allows for their use to generate forecasts. The indices have been used to predict spring runoff
- 162 based on observations in the fall with reasonable success in other river basins, although they tend
- 163 to be better predictors of extreme conditions.
- 164
- 165 Kenny requested input from the WAC regarding the level of interest in evaluating correlations 166 between available hydroclimatic indices and South Platte, North Platte, and Central Platte
- 167 streamflow conditions. The flood protection section of the Colorado Water Conservation Board
- 168 (CWCB) is considering pursuing a related investigation, and they have offered to expand the
- 169 scope of their project to include areas of interest to the Program for a one-time cost of \$25,000.
- 170 The end product would be a relatively simple tool that the Program could use in the fall to
- 171 predict runoff in the following spring. Separate relationships for the North Platte, South Platte,
- 172 and Central Platte would be developed if needed. The predictive tools may be useful for the
- 173 USFWS in determining how to manage EA releases.
- 174

### 175 The ED Office will post a white paper describing the use of hydroclimatic indices to the 176 **Program website for review by the WAC and will request feedback.** The white paper was

- 177 written by John Henz of Dewberry, who has developed similar predictive relationships for other 178 western river basins.
- 179

180 Altenhofen asked whether the NWS uses hydroclimatic indices for weather and streamflow

- 181 predictions. Econopouly said the NWS typically limits forecasts to a period of 90 days and bases
- 182 them on historical statistics, which is much shorter than what was described by Kenny.
- 183 Altenhofen asked how the hydroclimatic indices predictions would complement the Natural
- 184 Resources Conservation Service (NRCS) streamflow predictions. Kenny noted that NRCS
- 185 forecasts are typically provided in the winter and spring, and suggested that NRCS forecasts
- 186 could be used to refine the earlier hydroclimatic predictions. Altenhofen asked how the new tools 187 would affect the current hydrologic condition assessments. The hydrologic condition
- assessments provided by the ED Office pertain to a much shorter time period than what would be 188
- 189 derived from the hydroclimatic indices. Altenhofen suggested that the Program consider using
- 190 the Browning Newsletter that provides quarterly predictions of weather and streamflow
- 191 forecasts.
- 192
- 193 Hutchinson inquired about the total project cost. Kenny indicated the total project cost would be
- 194 \$50,000, with \$25,000 being provided by CWCB and the remaining \$25,000 provided by the
- 195 Program to expand the original scope and the expenditure would require approval by the Finance
- 196 Committee (FC). Altenhofen asked whether the tools would need to be periodically updated.
- 197 Kenny stated that updates would not be required, and noted that the ED Office would download 198 the necessary indices information and provide summaries of forecasted conditions, similar to the
- 199 current approach for disseminating hydrologic condition information. Shafer expressed concerns
- 200 over hydroclimatic index methods being applied to the High Plains region. Kenny acknowledged
- 201 that the indices may be a better predictor for the North Platte and South Platte basins, but noted
- 202 longer term predictions for those areas would be beneficial for the Program. Drain expressed
- 203 support given the relatively low project cost. Kenny would like to provide the FC a summary of
- 204 the WAC's opinion on this matter for their consideration. Depending on the speed at which
- 205 CWCB advances the project, the WAC may need to vote via email in favor or against the
- 206 expenditure. Alternatively, voting will be conducted at the next WAC meeting in August.
- 207

### 208 WAP Project Updates: Beorn Courtney, ED Office

209 Courtney provided a brief update on WAP projects that are not being discussed in more detail 210 later in the meeting.

211

212 Wyoming expects to have 4,800 acre-feet available to the Program in 2012 from the Pathfinder

- 213 Municipal Account. Wyoming will re-evaluate and confirm the yield available for lease to the
- 214 Program before June 15<sup>th</sup>.
- 215
- 216 A Request for Proposal (RFP) has been issued for an independent engineering review of the pre-
- 217 feasibility study completed by Olsson Associates for the J-2 Regulating Reservoir project.
- Proposals are due on June 7<sup>th</sup>. The engineering review will be completed before the end of the 218
- year at the latest. Runge asked if the project completion date is still in line with earlier estimates. 219



- 220 Courtney stated that construction is still expected to be completed by 2015. The operating
- agreement is still being negotiated, and will hopefully be finalized at the GC meeting in June.
- Runge noted that it will be helpful to characterize time frames for the J-2 Reregulating Reservoir
- and chokepoint improvements for consideration at future EA planning meetings such as the
- target flow planning workshop on May 21, 2012. Steinke noted CNPPID's support for getting a secondary engineering review of the costs and proposed project design. Olsson has provided the
- secondary engineering review of the costs and proposed project design. Olsson has provided the
- final pre-feasibility report to the ED Office, which is being provided to firms interested in
- proposing on the project. The expected budget for the RFP is \$200,000.
- 228

# 229 <u>Groundwater Recharge Project Scoring</u>: Beorn Courtney, ED Office and Bill Hahn, ED Office 230 Special Advisor

- 231 The ED Office and Hahn have been evaluating the potential score of groundwater recharge
- 232 operations along with Phelps Canal, using information obtained during the feasibility study
- 233 demonstration project. The feasibility study showed that groundwater recharge operations will
- need to be coordinated based on observed groundwater levels. The ED Office and Hahn will
- continue to evaluate groundwater management projects that may be able to mitigate high
- 236 groundwater levels and improve the efficiency of recharge operations. Today, the ED Office is
- soliciting WAC input on moving forward with a fall 2012 recharge project.
- 238
- 239 The numerical model that was developed for the pre-feasibility study was calibrated using field
- 240 data from the demonstration project, and the revised model is being used to predict return flows
- 241 for preliminary project scoring. Hahn stated that the model has provided reasonable predictions
- and attributes the differences between model and observed levels to pumping conditions being
- imported from the COHYST model, and the cell size used in the model. The model is better a
- 244 predictor of water levels over a larger area than at a particular point such as a monitoring well.
- 245 While the timing and volume of return flows could be evaluated using the Alluvial Water
- Accounting System (AWAS) model, the numerical model also provides water level information
- that will be critical for evaluating operational thresholds to mitigate high groundwater levels.
- 248

249 The preliminary scoring analysis was based on recharge operations being conducted during the

- entire non-irrigation season from October through April. The recharged volumes were based on
- the availability of excesses to target flows, as determined using the OpStudy hydrology dataset at
- 252 Grand Island. Excesses are available more often in December and January than other non-
- 253 irrigation months. Hahn evaluated whether recharge operations could be timed to maximize
- accretions at times of shortages to excess flows. The analysis shows that water recharged in
- 255 January and February is more likely to accrue at times with shortages, but the "efficiency" only
- ranges from about 30% to 45% across all non-irrigation months. Drain suggested that water be
- 257 recharged whenever it is available since the range of monthly efficiency values is not very large.
- 258 Courtney noted that operations may be simplified by starting recharge in October so that an ice
- cap could be built up.
- 260
- Courtney reviewed scoring questions that have been identified by the ED Office. The preliminary scoring analyses have been based on the methods used for the J-2 Regulating



263 Reservoir, although at a monthly time-step instead of daily, resulting in a score of 1,840 acre-feet at Grand Island prior to any discounting. During the scoring of the J-2 Regulating Reservoir, 264 USFWS indicated that score discounts would be required for water projects that do not benefit 265 266 the entire Overton to Duncan reach. If recharge terminates at the Phelps Canal mile 9.7, then the 267 return flows accrue approximately 1.5 miles downstream of Overton, on average. Using the 268 Overton to Grand Island reach (downstream extent of the WMC Loss Model) results in about a 269 2% score reduction, or about 1.800 acre-feet on average. Extending recharge east will result in 270 further downstream returns but prorating to Duncan would result in a lower percentage score 271 reduction. It may be possible to limit score reductions by having Tri-Basin NRD use the return 272 flows that accrue below Overton for their offset requirements as opposed to WAP projects.

273

The ED Office completed a preliminary evaluation of the effects associated with diverting excess flows to groundwater recharge on the score of the J-2 project. Preferentially diverting flows to groundwater recharge may reduce the J-2 reservoir score by about 2% but an optimized scenario still needs to be modeled. As more WAP projects are implemented, it will be increasing difficult to assign scores to individual projects. The ED Office hopes that COHYST 2010 will allow for the scoring of multiple projects.

280

Drain does not believe scoring decisions are a responsibility of the WAC, and suggested that a
sub-committee of the GC be formed to address scoring questions identified by the ED Office.
Altenhofen noted that water leasing has similar scoring questions. The ED Office will request

- that the GC form a scoring sub-committee at their June meeting.
- 285

286 Steinke said that it would be easier for CNPPID to support recharge projects if groundwater 287 management projects were also in place to provide mitigation of high groundwater levels if 288 necessary. Monitoring wells installed for the demonstration project could be used to monitor 289 water levels. Wingfield asked about objectives for 2012 and Kenny said that sufficient 290 background information has been obtained through the feasibility study and demonstration 291 project, and it is time to start reducing shortages to target flows. If recharge operations are 292 extended from the Phelps Canal 9.7 mile return to the 13.2 mile return, then additional 293 monitoring wells may be required and Hahn may need to expand the area covered by the 294 numerical model.

295

296 Steinke noted that it will take time to obtain the necessary permanent permits from NDNR, and

297 expects that a one-year temporary permit will be required for 2012 recharge operations.

298 Woodward said that NDNR is working on implementing an expedited permitting process for

recharge projects that will hopefully be completed before fall 2012. Drain said that CNPPID's

300 concerns related to recharge could probably be addressed in the operating contract with the

- 301 Program. Kenny asked if diversions to recharge would be limited to excesses to target flows, or
- 302 would include EA releases. Drain believes the legal issues that encumbered the use of EA
- releases for recharge have been addressed, and believes the end use of EA releases will be as
- 304 directed by the EA Manager. Leased water from Pathfinder Reservoir could also be used for 305 recharge since it can be added to the EA.



306 Woodward stated that many canal companies are interested in conducting recharge operations 307 next fall as part of their depletion plan offsets. Altenhofen would like to continue discussions 308 about the Program leasing surplus accretions from NDNR. Goltl said that NDNR is still 309 summarizing 2011 recharge operations. Woodward viewed a Draft 2011 recharge summary at a 310 Platte Basin Habitat Enhancement Project (PBHEP) meeting last week. Woodward will send a 311 copy of the Draft summary to Kenny, but asked that the summary not be provided to the 312 entire WAC until finalized by NDNR. Goltl believes approximately 80,000 acre-feet and 313 120,000 acre-feet were recharged in the spring and fall, respectively, but river accretions values 314 are still being refined. 315 316 The WAC supports the development of an agreement with CNPPID for 2012 recharge operations and supports extending recharge to mile 13.2. CNPPID will file a temporary 317 318 recharge permit application with NDNR. The ED Office will work with Hahn to determine

319 if additional monitoring wells would be required and Hahn will evaluate whether the model

- 320 area needs to be expanded to the east.
- 321

# 322 Surplus Land and Water Leasing: Beorn Courtney and Matt Welsh, ED Office

323 Courtney explained that the 2012 start date for Nebraska Water Leasing identified in the 2009

- WAP Update was postponed until 2016 during the 2012 budget approval to ensure adequate
- 325 funding for the J-2 Regulating Reservoir. While the water leasing implementation date has been
- postponed, the ED Office has continued to work with the Water Leasing Workgroup to develop
- analysis methodologies. The methods that have been developed to date also apply to situations
- 328 where the Program must decide whether water associated with historically irrigated surplus lands 329 should be reserved for WAP projects. The GC is requesting input from the WAC on one surplus
- 330 land situation, which will be presented today.
- 331

332 Members of the Land Advisory Committee (LAC) and WAC have discussed the development of 333 a "decision tree" that could be used to expedite the evaluation of water associated with surplus

- 1333 a decision tree that could be used to expedite the evaluation of water associated with s 1334 land sales and other land transactions. Courtney explained the decision tree process and
- associated WAC hydrological review. A critical step of the decision tree requires input from the
- ssociated wAC hydrological review. A critical step of the decision tree requires input from the scoring sub-committee that will be requested at the June GC meeting, so no recommendation on
- 337 the decision tree process was requested from the WAC at this time.
- 338

Welsh provided an overview of the surplus land project at the Broadfoot-Newark property

- southeast of Kearney. The surplus land includes 117 acres that were historically irrigated using
- 341 groundwater. The PBHEP offset calculator indicates that if the parcel was retired from irrigation,
- then the average annual accretion to the Platte River would be 29.3 acre-feet/year, based on the
- 343 50-year depletion percentages from the COHYST model. If Central Platte NRD were interested
- in acquiring the water for their Water Bank, then they would base the transaction on the
- accretion value from the PBHEP calculator.
- 346
- In the process of evaluating water leasing projects that involve future groundwater irrigation, the
   Water Leasing Workgroup requested that the ED Office complete continuous long-term analyses



- 349 that showed the accretion to the river at an annual time step. The accretion from the surplus land 350 dry-up would increase over time and yield accrues downstream of Kearney so input on how to
- score the project is needed from the scoring sub-committee. The scoring questions will be 351 352 addressed with the GC scoring sub-committee.
- 353

354 The surplus land was appraised in April 2012, and the land value is \$2,400 more per acre when 355 water is included in the sale. Based on the yield of 0.25 acre-feet/acre (29.3 acre-feet/year  $\div$  117

356 acres) and a price difference of \$2,400, reserving the water for WAP projects would cost

357 approximately \$9,600/acre-foot, which does not include any price increases for score discounts.

358

359 Drain said the water should be sold with the surplus land, and noted that water could be

360 purchased at another location at a later time if needed. Drain said that the GC has intentionally

361 postponed other WAP projects with much lower unit costs. Runge, George, and Hutchinson feel

- 362 the GC should consider retaining the water from the surplus since it would not require any
- 363 additional expenditures. George noted that the Program hasn't had the opportunity to buy other
- 364 water, and feels that reserving this water would start accretions to the river now while other
- 365 projects are pursued. George is not comfortable making a recommendation to sell the water with
- 366 the surplus land. Kenny noted that water is available to be purchased elsewhere, so that money 367 generated by the sale of the water near Minden could be used to purchase water closer to the

368 upstream end of the associated habitat reach. The Program recently purchased irrigated land

369 upstream near Elm Creek as part of a habitat acquisition. The WAC recommended the ED

370 Office provide the economic summary to the GC to assist with their decision.

371

### 372 Federal Depletions Plan Update: Matt Rabbe, USFWS

373 Rabbe reviewed the federal depletions plan packet that had been provided to the WAC prior to 374 the meeting. Hoobler said the first Wyoming project with a federal nexus will likely be initiated 375 in 2012.

376

### 377 Nebraska Depletion Plan Update: Pat Goltl, NDNR

378 Goltl provided a summary of the two documents that were provided to the WAC prior to the 379 meeting. The forecast of net effects assumes that the J-2 Regulating Reservoir will be online in

380 2014. NDNR is still developing robust accounting procedures that will be finalized in the next

couple of months. Altenhofen inquired whether the Program would be able to lease any of the 381

- 382 accretions in excess of post-1997 depletions. Woodward noted that Nebraska also needs to
- 383 achieve a fully-appropriated status, so there are not as many excesses as suggested in the NDNR
- 384 depletion plan reports.
- 385

### 386 Wyoming Depletion Plan Update: Matt Hoobler, Wyoming State Engineer's Office

- Hoobler reviewed the 2011 Wyoming Depletions Report that was provided to the WAC prior to 387
- 388 the meeting. Hoobler discussed municipal water sales for oil and gas development. Temporary
- 389 Water Use Agreements, which are essentially dry-up agreements, have been used to ensure no
- 390 expansion of water use. Municipalities have also been selling water for oil and gas operations.
- 391 Hoobler discussed laws against transporting water across state lines. The municipalities of Elk



- 392 Mountain and Saratoga have switched from surface water supplies to non-hydrologically
- 393 connected groundwater. The supply conversion now produces an accretion to the river.
- 394

### 395 Colorado Depletion Plan Update: Suzanne Sellers, CWCB & Jon Altenhofen, Northern

- 396 Colorado Water
- 397 Sellers reviewed the North Platte Annual Accounting that was provided to the WAC prior to the
- 398 meeting. The new industrial use water right for 108 acre-feet per year is scheduled to be
- 399 dismissed. Altenhofen reviewed the Colorado Plan for Future Depletions for the South Platte
- 400 basin that was provided during the meeting. Population growth has average 2% per year; the
- 401 original estimate was 1.5% per year. No changes to the calculation assumptions are proposed.
- 402 Runge asked whether Colorado would provide a summary of Tamarack I operations. Altenhofen
- 403 offered to provide a separate summary of Tamarack I accretions along with the 2012 summary 404
- next year. The trial for the Tamarack water rights case is schedule for July 2012.
- 405

### 406 Additional Business: Cory Steinke, WAC Chair

- 407 The draft 2012 meeting schedule was discussed. The next WAC meeting is scheduled for
- 408 August 14, 2012, from 9:30 am – 3 pm (Mountain Time) at the Lake McConaughy Visitors
- 409 Center. No changes were requested. 410

### 411 Action Items

- 412 General WAC
- 413 • Vote regarding support of expenditure of \$25,000 for hydroclimatic indices investigation 414 via email, if needed.
- 415 • CNPPID will file a temporary recharge permit application with NDNR.
- 416

### 417 ED Office

- 418 Attempt to coordinate the timing of tillage operations at the North Platte choke point with • 419 the USFWS so that EA releases may be timed to aid the phragmites removal effort.
  - Post hydroclimatic indices white paper to the Program website for review by the WAC.
  - Request the formation of a scoring sub-committee at the June GC meeting. •
- 422 • Coordinate with Hahn to determine if additional modeling and monitoring wells would be 423 required to expand Phelps Canal recharge operations to the return at mile 13.2.
- 424 • Provide the surplus land economic summary to the LAC and GC to assist with their 425 decision of whether to reserve the water for WAP projects.
- 426

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