



TO: GOVERNANCE COMMITTEE
FROM: SCORING SUBCOMMITTEE
SUBJECT: SCORE RECOMMENDATION FOR THE NO-COST NET CONTROLLABLE
CONSERVED WATER PROJECT
DATE: FEBRUARY 23, 2016

Introduction

The Governance Committee (GC) formed an ad-hoc Scoring Subcommittee to advance discussions related to scoring of proposed Water Action Plan Projects (WAP) for the Platte River Recovery Implementation Program (Program) in 2009. In February 2016, the Scoring Subcommittee reconvened to determine a score for the No-Cost Net Controllable Conserved Water (NCCW) project. The Executive Director's Office (EDO) prepared the technical analysis to determine the project's score towards meeting the First Increment water objective of reducing shortages to U.S. Fish and Wildlife (USFWS) Service target flows by an average of 130,000 to 150,000 acre-feet per year (AFY)¹. This memorandum provides a summary of the score analysis results and the Scoring Subcommittee's recommendation to the GC regarding the project score.

Background

Project Overview

The No-Cost NCCW is an implemented WAP project for the Program that commenced in water year 2001. NCCW is water saved within the Central Nebraska Public Power and Irrigation District's (CNPPID) system through the implementation of a combination of conservation measures for canal distribution and delivery, on-farm changes in irrigation, and optimal reservoir operations. A portion of the yield generated from these activities resulting from a grant provided by the U.S. Bureau of Reclamation is added to the Program's EA each year at no cost². During the First Increment, 314 AF has been added to the EA each year, except for 2011 when the reservoir reached capacity and the EA was full.

NCCW for Purchase

In addition to the No-Cost NCCW, there was an option for the Program to purchase additional NCCW from the CNPPID (referred to as For-Purchase NCCW in this memorandum). The CNPPID's Federal Energy Regulatory Commission (FERC) license required the CNPPID to offer the For-Purchase NCCW to the Program. The CNPPID made offers to the Program in 2013; however, the GC chose not to acquire the For-Purchase NCCW³. The For-Purchase NCCW is not included in this scoring analysis.

¹ The three initial state projects are 80,000 AFY of this objective and WAP projects are 50,000 AFY to 70,000 AFY of this objective.

² The saved water from conservation activities is stored in Lake McConaughy (due to the conservation measures, the water does not need to be released and remains in storage).

³ See December 2013 GC meeting minutes.



Score Analysis

The EDO used the general score analysis methods accepted by the GC in 2010. The key assumptions are shown in **Table 1**.

Table 1. Key scoring assumptions.

Component	Data
Hydrology	OpStudy Adjusted Present Condition with Three State Projects (without pulse flows)
Analysis Period	1947-1994
Analysis Time Step	Monthly
Excesses/Shortages Calculation	@ Grand Island
Target Flows	Appendix A-5, Column 8 (in the Water Plan Reference Materials)
Routing	WMC Loss Model ⁴

To provide a range of alternatives and scores for the Scoring Subcommittee to evaluate, the EDO completed two score scenarios based on different release patterns from the EA in Lake McConaughy. Both release scenarios were evaluated with and without evaporative losses occurring while the No-Cost NCCW was stored in the EA. These two scenarios were taken from the alternatives evaluated in the Pathfinder Municipal Account Lease scoring analysis⁵, and include:

- **Shortage Distribution Release Pattern** – assumes the Program releases water from the EA to reduce shortages to target flows based on the monthly distribution of shortages.
- **Spring Release Pattern** – assumes the Program releases water from the EA to reduce shortages to targets flows during the spring season beginning in March, or the earliest shortage month after.

Evaporation losses were deducted from the No-Cost NCCW for each of the release pattern scenarios to evaluate the impact of losses while water was stored in the EA⁶.

Results & Recommendation

The No-Cost NCCW scores range from 243 AFY to 279 AFY, based on the two scenarios of release patterns and the assessment with and without evaporative losses while water is stored in the EA. **The Scoring Subcommittee recommends the GC assign a score for the No-Cost NCCW project of 260 AFY for the Program.** The 260 AFY score represents the rounded average score of all the scenarios. The Scoring Subcommittee came to a unanimous agreement to recommend this score to the GC during the February 2, 2016 conference call. The subcommittee noted that the assumptions used in the scoring analysis were appropriate for the No-Cost NCCW project; however, the subcommittee may choose to use different assumptions for future projects.

Enclosure: Scoring Subcommittee Conference Call Minutes – February 2, 2016

⁴ WMC Loss Model is referenced in the Water Management Study (2008) by Boyle Engineering Corporation.

⁵ See the memorandum entitled, “Pathfinder Municipal Account Recommended Score and Scoring Analysis,” from the EDO to the Scoring Subcommittee on January 23, 2014.

⁶ Based on OpStudy modeling data. Please refer to the Pathfinder Municipal Account Lease scoring analysis for calculations regarding this table (see footnote above).



PLATTE RIVER RECOVERY IMPLEMENTATION PROGRAM
GC Scoring Subcommittee Meeting Minutes
Conference Call and WebEx Meeting
February 2, 2016

Meeting Attendees

Scoring Subcommittee

State of Colorado

Suzanne Sellers – Member

State of Wyoming

Bryan Clerkin – Member

State of Nebraska

n/a

U.S. Fish and Wildlife Service

Tom Econopouly – Member

U.S. Bureau of Reclamation

Brock Merrill – Member

Downstream Water Users

Mike Drain – Chair

Brian Barels – Member

Duane Woodward

Colorado Water Users

Jon Altenhofen – Member

Luke Shawcross

Upper Platte Water Users

n/a

Environmental Groups

n/a

Welcome and Administrative

Introductions were made. There were no agenda modifications. Drain volunteered to be chairman, as Besson (previous chair) retired. Econopouly made a motion to recommend Drain as chair to the Governance Committee (GC). Merrill seconded the motion. There was no opposition. New members on the committee include Clerkin for the State of Wyoming and Strauch for Upper Platte Water Users. Sellers motioned to recommend these new members of the



subcommittee to the GC. Econopouly seconded motion. There was no opposition. Environmental Groups have not chosen a member at this time.

Project Scoring Overview

Sartori gave a brief overview of the No-Cost Net Controllable Conserved Water (NCCW) project and the general scoring process accepted by the GC. Sartori reviewed the tables presented in the No-Cost NCCW score analysis draft memo (dated 01/06/16) and described the alternative scenarios evaluated in the analysis. The resulting scores ranged from 243 acre-feet per year (AFY) to 276 AFY, with an average score rounding to 260 AFY.

Econopouly asked for a comparison of WMC Loss Model transit losses and the Nebraska Department of Natural Resources (NDNR) transit losses, as it appears the NDNR method shows higher losses from Environmental Account (EA) water as it is routed to Grand Island. This is based on releases of the EA during the First Increment compared to average losses that would have been calculated using the WMC Loss Model. His concern is that the Program is not getting the anticipated yields from projects. Drain provided a brief overview of how the NDNR calculates transit losses, and noted the NDNR tracks water daily, but the WMC Loss Model is a monthly analysis. He thought the monthly analysis may capture daily gains, making the net monthly losses lower in the WMC Loss Model.

Altenhofen commented that the scoring process is completed using the historical period, so the WMC Loss Model is appropriate for that purpose. Drain agreed that the analysis parameters are conceptually accepted for the scoring analyses by the GC. He also thought Econopouly brought up a good point that may be more appropriately reviewed by the Water Advisory Committee (WAC) or other Program group, not necessarily the Scoring Subcommittee.

There was some discussion about whether losses were accounted for in the Three Initial State projects, then discussion on the best way to address Econopouly's question on transit losses in the system. Barels brought up that the river is different today than it was during the WMC Loss Model period (1975-2006), which may account for some of the difference. He noted that the model is not new and has been used during the First Increment to score other projects, and should be carried forward for consistency.

A question came up regarding documentation on the WMC Loss Model and Kenny stated the model was updated by Boyle in the Water Management Study. It originated from the Water Management Committee (WMC). Kenny suggested bringing the transit loss question to the WAC to request their feedback on the topic and solicit recommendations as to how to proceed in evaluating the issue. The group seemed to agree with this approach. Econopouly said he may bring it up at the WAC meeting following this call.

Drain asked Sartori if the No-Cost NCCW score scenarios allowed for carry-over water to occur, meaning some of the No-Cost NCCW would not be released in a given year. Sartori said no, the full 314 AF of No-Cost NCCW from Lake McConaughy is released each year for both of the



89 release pattern scenarios (spring release and shortage distribution release), and there is no carry-
90 over from year to year. Drain said he believes the spring release pattern is more consistent with
91 the original intent and thought process of scoring, which is to use water as soon as it is needed to
92 reduce shortages. This would provide a score on the higher end of the range in the memo. He
93 also commented that since modeled transit losses may be lower than operational transit losses as
94 discussed earlier, it may make sense to use the average score to represent a lower volume at
95 Grand Island. Drain said larger projects in the future may need more exact scores, but for the
96 purpose of this project, 260 AFY seems appropriate. Several members of the subcommittee
97 agreed with the sentiment. Altenhofen made a motion to recommend a score for the No-Cost
98 NCCW of 260 AFY to the GC. Econopouly seconded the motion. The motion was unanimously
99 supported by the Scoring Subcommittee. There were no dissenting votes.

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101 Sartori said the ED Office would prepare a memo describing the recommendation to the GC.
102 Additional projects are on the schedule to be scored in 2016 so the Scoring Subcommittee will
103 reconvene again soon.
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