



**CITY OF FLAGSTAFF  
WATER COMMISSION  
February 18, 2021  
Virtual Meeting  
SUMMARIZED MINUTES**

**MEMBERS PRESENT**

Ward Davis  
Ben Ruddell  
Timothy Bowers  
Miranda Sweet (Council Rep)  
Marie Jones (P&Z Rep)

**MEMBERS ABSENT**

Malcolm Alter  
Elizabeth Christy

**STAFF PRESENT**

Ryan Roberts  
Marion Lee  
Justin Emerick  
Erin Young  
Brian Huntzinger  
Tamara Lawless

**OTHERS PRESENT**

Jack Rathjen  
Robert Vane  
Jack Rathjen  
R McCandless  
Roderic Parnell  
William Case  
John Nauman  
Darrell Marks  
Nina Schmidt

**I. CALL TO ORDER**

Vice Chair, Ward Davis called the meeting to order at 4:01 p.m.

**II. PUBLIC PARTICIPATION**

Jack Rathjen, Flagstaff resident indicated that everyone is aware that Continental Country Club has filed for bankruptcy and they had a mandate to refill Lake Elaine. Mr. Rathjen would like to see if the Water Commission can recommend to City Council the use of discharge water to fill Lake Elaine during this period of time (February and March) with water that would normally go to the Rio de Flag and on to Doney Park. Discharge water has a special designation, its water that is not destined to go into the reclaimed system and not stored. Since Continental lakes are also designated a discharge site, why not fill up Lake Elaine for the benefit of Flagstaff residents.

**III. NEW BUSINESS**

**A. Woody Mountain Booster Station Sand Clarifier – Brian Huntzinger**

During the 1950's, the City of Flagstaff started its third major importation of potable water from groundwater wells in what is now the Woody Mountain Wellfield. The Woody Mountain Booster Station (WMBS) Sand Clarifier was built in 1959, incidentally, one year after the formation of what is now the Flagstaff Water Commission. With ten wells now in operation, the wellfield has a capacity slightly over 5 million gallons per day (mgd) or nearly half of the City of Flagstaff's 11mgd peak summertime consumption. With a very simple design applying velocity and gravity, the clarifier is very effective and reliable at removing sand and other impurities from groundwater at various flows (works just as well with one well running or many).

With a design life expectancy of only 20-30 years, the clarifier was overdue for rehabilitation. A Water Infrastructure Master Plan, completed in 2014 by engineering firm, NCS Engineers, found the clarifier

a top priority for repair. Additionally, about five years ago, the bottom of the clarifier (composed of mild coated steel) sheared or broke off due to the age and condition of the metal.

In the fall of 2020 with assistance from the contractor, PCL Construction, water production completed a significant rehabilitation of the WMBS Sand Clarifier. Without any original access to the clarifier other than a typical doorway, first an 8x8 foot opening was sawcut in the 6" thick concrete roof and removed using a crane. Next, all existing equipment (walkway & platform, drive, feedwell, arms, rakes, squeegee) were removed using the crane and custom anchors welded into the structural beams supporting the roof. After all the original equipment was removed new stainless-steel (grade 304) and aluminum equipment was installed. After most of the assembly was completed, the structural beams and influent piping were sand blasted and recoated. To cover the opening made in the roof and enable future maintenance, an engineered stainless-steel (grade 316) lid with gravity vent was installed. While not part of the original project, a new layer of "hot mopped" roofing was added and drain valves were replaced. With an initial project duration of 6 months the contractor was able to complete it in only half the time or roughly three months (September 8<sup>th</sup> through December 2<sup>nd</sup>, 2021). Cost of the clarifier overhaul was \$699,589.00; roofing was \$20,527.95; and drain valves replacement \$9,468.93; for a total project cost of \$729,585.88. The WMBS Sand Clarifier is now in great shape for another half century of service.

Ryan asked if the project had any impact to customers. Brian indicated there were no affects. Ryan thanked Water Production staff for delivering the project on time and under budget. A job well done.

## **B. Reclaimed Water Policy Discussion – Erin Young**

Erin Young, Water Resources Manager presented a powerpoint on the Reclaimed Water Policy. In consideration of a F.A.I.R. (Future Agenda Item Request) item raised by former Councilmember Whelan, City Council elected to revisit the City's 2014 Water Policies on reclaimed water. Tonight's agenda: 1. Notice of reclaimed water policy review with City Council on March 9<sup>th</sup> 2. Reclaimed water master plan overview 3. Community stakeholder committee update 4. Proposed next steps

The F.A.I.R. request was to change the approval process for all new and renewed Reclaimed Water Agreements. This requires policy and City Code be revised to shift renewal and authorization from the Water Services Director to City Council for all reclaimed agreements.

Flagstaff Water Services is soliciting comments and suggestions from the Commission prior to taking this update and discussion to City Council on March 9th.

Erin presented:

- Existing Reclaim Water Policies contained in Integrated Utilities Master Plan document dated 2014
- Overview of "One Water" approach to water management, respecting all water sources as equally valuable supplies in the community; review goals for water conservation; review ways to reuse 100% of reclaimed water. Taking these actions delay the need for Red Gap Ranch.
- Reclaimed water use today and water policies that govern how the City allocates reclaimed water
- Water policies that govern how the additional 2/3 of treated effluent water can be managed either as reclaimed water to customers or towards other supply management options

- Update on Reclaimed Water Master Plan & Community Stakeholder Committee on Reclaimed Water

Concurrent with the request from Council to revisit water policies on reclaimed water is the development of the Reclaimed Water Master Plan by Staff and our consultant, Brown & Caldwell. This effort will help define a path for how the City manages unallocated reclaimed water, meaning, water that is not currently allocated to a customer. A community stakeholder committee was assembled to define community values related to reclaimed water and complete a criterion ranking matrix based on those values. The expectation is for the group to make a recommendation on those top three alternatives that display the highest and best use of the supply. The Community Stakeholder Committee on Reclaimed Water (CSCRW) is scheduled to complete this work in February 2021.

Master Plan Background

Water Services first Reclaimed Water Master Plan

| 1                                 | 2a   | 2b  | 3a                                     | 3b  | 5   | 6                    |
|-----------------------------------|--|---|--|---|---|----------------------|
| Direct Reuse (Expand Purple Pipe) | Streambed Recharge with Advanced Treatment | Streambed Recharge without Advanced Treatment | Recharge Wells with Advanced Treatment | Recharge Wells without Advanced Treatment | Augmentation of ULM with Advanced Treatment | Direct Potable Reuse |

- Identify a set of scenarios in our water resources master plan to represent a plausible range of future conditions
- Seek a common near-term strategy that works across the scenarios
- Re-evaluate the scenarios and strategy decision points

Next Steps

1. Still processing what we have learned from the CSCRW
2. Discuss results and participation with Indigenous community
3. Plan for a follow-up meeting with CSCRW - summarize results of Phase I, clarify needs and share ideas for a Phase II effort
4. Refine our clarity on water reliability and resource sustainability
5. Phase II effort - continued work with CSCRW and define expanded outreach
6. Ultimately, determine most responsible and beneficial use of this significant resource
7. We are working on a timeline for a “Phase II” outreach effort
8. Come back to the CSCRW group, Water Commission, City Council when we’ve developed a plan

Comment: Rob Vane, a member of the Stakeholder Committee. Rob is concerned on going forward to Council on March 9<sup>th</sup> showing the actual scored results of the options presented. He indicated the Committee is still trying to finalize the values and some did not understand the 7 options. Mr. Vane recommended to have one more Stakeholder meeting to answer questions. He also added that Council asked for a recommendation from Water Services as to whether Council should take over the responsibility for renewing reclaimed water contracts, which was not mentioned in tonight’s presentation.

Erin indicated staff is not prepared to present on whether Council should take over renewing reclaimed water contracts on March 9<sup>th</sup> at this time.

Comment: Darrell Marks, Indigenous Community Member wants to see a timeline and what is the next step after Council presentation. Mr. Marks expressed the importance of the language request from the Indigenous community and relationship to water. Erin indicated that these topics will be discussed at the next meeting.

**IV. OLD BUSINESS - None**

**V. INFORMATIONAL ITEMS TO/FROM THE CHAIR, COMMISSION OR STAFF**

**VI. ADJOURNMENT**

Meeting adjourned at 5:00 p.m.