



CITY OF FLAGSTAFF
WATER COMMISSION
June 20, 2019

SUMMARIZED MINUTES

MEMBERS PRESENT

John Malin
Ward Davis
Elizabeth Christy
Ben Ruddell
Malcolm Alter
Marie Jones, P&Z Rep

MEMBERS ABSENT

STAFF PRESENT

Brad Hill
Marion Lee
Erin Young
Brian Huntzinger
Lisa Deem

OTHERS PRESENT

Robert Vane
Jay Larson

I. CALL TO ORDER

Vice Chair, Ward Davis called the meeting to order at 4:00 p.m.

II. APPROVAL OF MINUTES – March 21, 2019

Moved by Elizabeth Christy and seconded by Malcolm Alter to approve the meeting minutes of March 21, 2019. Motion carried unanimously.

III. PUBLIC PARTICIPATION

Trevor Henry, Project Manager gave a brief update on the Rio de Flag Flood Control Project with the Army Corps of Engineers. In 2018 the Army Corps of Engineers received funding to complete the project plans. The City contributed funding too. The Army Corps and the City re-engaged the plans with the design consultants. The City and Army Corps agreed on a design schedule. The project plans are anticipated to be complete by the summer of 2020. The current cost of the project is approximately \$106M.

- ✓ In 2004 the Army Corps of Engineers and the City executed a project cooperation agreement. The PCA defines the Army Corps share at 65% and the City share at 35%
- ✓ The City's share is approximately \$36M.
- ✓ At the end of 2018, City council approved a stormwater fee increase that will be implemented beginning next month year.
- The Army Corps is anticipating construction beginning in the spring of 2021 provided their funding request is approved.
- This past March, City staff recommended, and the Council approved a public outreach contract to engage and inform property owners, stakeholders and the citizens about the project. We held a meeting with property owners on May 30th and it was well attended.

- Later tonight the City of Flagstaff will hold another public meeting for stakeholders and citizens. The intent is to convey the status the project plans and have staff from the Army Corps in attendance.
- The responsibility of the City as defined in the PCA is to acquire all the necessary ROW and provide Environment clearances. Staff is coordinating and working on that task. Site assessments and initial surveys are being schedule. Staff is also seeking permitted access where necessary.
- Trevor will set a time/date with Water Services staff to arrange a formalized presentation at a later date.

IV. NEW BUSINESS

A. Water Resources Master Plan – Draft - Erin Young

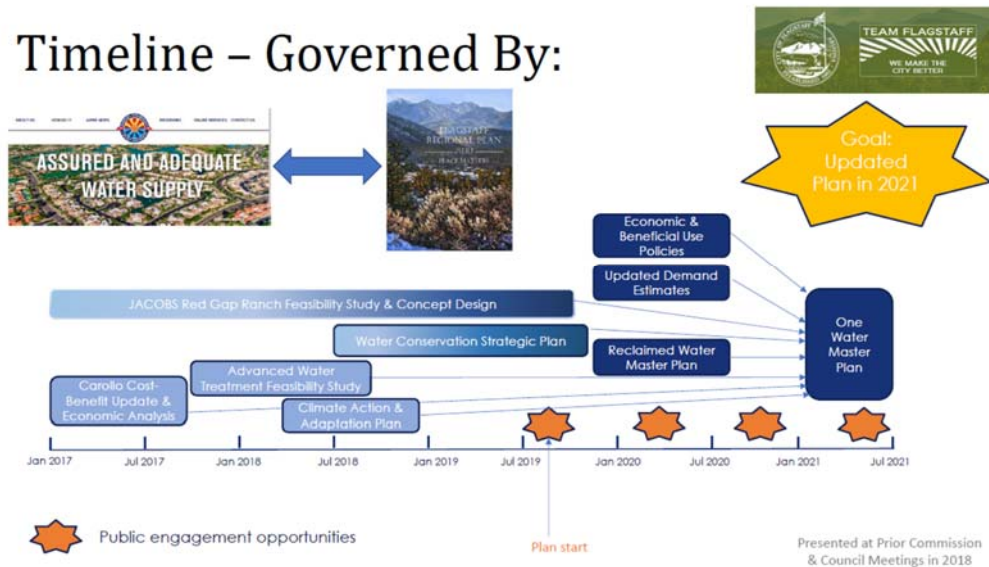
Erin Young, Water Resources Manager presented a powerpoint presentation on the Water Resources Master Plan. Staff have been collecting information in order to update its comprehensive water management strategy for Flagstaff and its citizens. The goal is to present water supply scenarios that meet future water demands and determine those that best fit with other considerations as well, which support goals and objectives adopted by Flagstaff City Council and the voter-approved Regional Plan. The Plan will be centered on water management strategies that align with Council and community priorities and values, namely those around water conservation, climate change adaptation and mitigation, strategic economic development, beneficial and intentional community water use, protection of environmental and natural resources, quality public infrastructure, community outreach, and town & gown.

Flagstaff's need for developing additional water resource is forecasted for sometime in the 2030's. The timing of a new supply or supplies depends on several factors, such as the city's growth rate and type of non-residential growth, water use rates, and climate stresses on water supply systems. While the need is still 10-15 years away, developing water supply solutions can take decades for water suppliers, due to the due diligence process. The process begins with determining which of all solutions are most likely to be achievable to begin with. For solutions that remain as options for assessment, staff put together the information necessary in order to provide a very thorough recommendation to decision makers. Information required may include technical information such as assessments and challenges of the physical supply availability, the sustainability of supplies, operational costs and considerations, infrastructure timing and costs, and treatment needs. Other information essential for consideration includes an assessment of regulations that govern the supply and uses of the source water, water rights issues, and community support.

Water Services employs an integrated master planning approach for determining water utility needs, such as infrastructure, capital, energy, and water, which are based on several demand estimate models (i.e., population projections and land-use models based upon the Regional Plan). The Water Services Integrated Master Plan includes chapters on Water Resources, Water Policies, Water Infrastructure, Wastewater Infrastructure, Water Conservation, and Reclaimed Water. The policy is to update each chapter every 5 years, as a general rule, to inform those projects that support maintaining Flagstaff's 100-year Adequate Water Supply.

Staff requested for input from commissioners on whether the commission can dedicate time to review information derived from technical consulting reports, staff reports, and applicable outside information, such as research papers, outside of traditional demands of the commission, in order to provide technical review to staff on the topic of the Water Resources Master Plan. Staff would expect commissioners to collectively provide direction and recommendations on the Water Resources Master

Plan that staff will communicate with City Council. Staff would like the commission to communicate their findings and recommendations to City Council as well, when staff are speaking to the Water Resources Master Plan at Council meetings. An alternative would be for staff to establish an outside technical committee to fulfill the roll of technical review and discussion with staff in a more informal setting. The Water Commission discussed options of having a committee and being involved.



There were several comments on having a sub-committee:

- The sub-committee should consist people who know about water and the background
- The Water Commission should be involved on the policy but not at the technical level
- No strong thoughts about having a sub-committee

The Water Commission advised staff to come back with some options on the path forward on community engagement.

Public participation - Robert Vane indicated he has been tracking this topic for a while and suggest for the Water Commission be an advisory role or bring in a broader group. Mr. Vane requested clarification on what staff expects the Consultants to study. Brad said the Consultants will be looking into everything in detail. The task or work from the Steering Group is to develop a scope of work and will work together with the Consultants.

Marie Jones, P & Z Representative said she likes the idea of a steering committee. Staff suggested to bring this topic back next month and provide options to retool. Staff will also include a copy of the draft policy for more information.

B. Rate Study – Policy Topics – Brad Hill & Lisa Deem

City Water Policy calls for a formal rate study to be performed every three (3) years. The last rate study was completed in 2016. The first step in this process is to review the prior City Council rate direction and discuss any prior issues identified for review in the next rate study. This Report is to identify policy direction to be included in this rate study, establishing a clear vision to guide Council, staff and citizens on the options.

Staff provided an overview of the current policy, with consideration given to issues that were moved to this next study cycle. Once policy directives and objectives are determined, staff can move forward with a scope of work to embark on appropriate elements of a Rate Study.

Rates are based on the cost of service, a systematic approach to the allocation of costs to provide services and costs adopted by council as capital system improvements spread over customer classes in order to generate necessary revenue to maintain the service. Equitable rates are rates that are based on cost of service norms, and where the customer that is charged for the service is charged in proportion to the cost burden caused by that customer class of customers.

A fair and equitable rate structure, user fees, and capacity charges must reflect the actual cost of the operation, maintenance, repair and replacement of the Water Services infrastructure. Costs will be distributed according to the value to the user class, or as the Council ultimately decides.

Staff would like the Commission to identify policies and goals to aid in formulating an effective Scope of Services for the Rate Study.

Policy Direction

- **Check-In with Existing Policies**
- **Prior Issues to be considered in upcoming Rate Study**
 - Conduct a New Cost of Service Study, Water, Wastewater, Reclaimed
 - Rate Structure Changes
 - Change Tiers for SF Residential? Consider Tiers for Non-Residential Use?
 - Off-peak reclaimed water rates. Is the discount commensurate with the benefits provided by the customer?
 - Cost allocations – Reclaimed vs. Wastewater Treatment
 - Seasonal Pricing
 - Outdoor Water Use rate structure
- **Other Issues for Consideration**
 - **Reclaimed Water Rates**
 - Based on Cost of Service or Policy (e.g, % of potable)
 - Tiered Rates
 - **Capacity vs. Impact Fees**
 - Requires weigh-in from City Attorney's Office
 - **Social & Business Equity**
 - Limited Income Allowance
 - Conservation incentive for small inefficient business/families vs. large efficient business/families
 - **Other??**

V. OLD BUSINESS

A. Back-up Generators Update – Brian Huntzinger

After City Council established policy of assuring 7.1mgd potable water supply during a catastrophic power loss scenario to the City of Flagstaff in January 2018, supplying surface water from Lake Mary was chosen as the best solution to meet the demand. Treated surface water from Lake Mary would be the largest supply for the least amount of generators. The Lake Mary Water Treatment Plant (LMWTP) has a design capacity of 8mgd (pumping capacity of 16mgd (built in redundancy)) with the Raw Water Pump Station (RWPS) having a surface water pumping capacity of 12mgd (also built in redundancy). The LMWTP is already staffed 12-24 hours per day, and is where Water Production personnel are based and monitor the City of Flagstaff's Water Production facilities. Four critical water production facilities were chosen for back-up power supply: The RWPS would be needed to supply water from Lake Mary; the LMWTP would be needed to treat and pump the water into town; lastly both

the Railroad Springs Booster Station (RSBS) and the North Reservoir Filtration Plant (NRFP) would then be needed to pump water from the distribution system into the Cheshire, Railroad Springs 1 & 2, and Paradise elevated storage tanks. In the spring of 2018, both the RWPS and the LMWTP electrical demands were determined at 600kw each. Additionally, both NRFP and RSBS electrical demands were determined at 300kw each. After learning of the 18 week lead time on generator purchasing, and due to the relatively dry winter of 2017-2018 and formidable fire season looming it was decided to rent 3 generators (2 800kw and 1 350kw) to get through the 3 summer/fire season months of 2018. As a long term solution though, five 350kw generators were chosen as a best solution due to the power requirements (600kw & 300kw), nimbleness and ability to be hauled by various vehicles, and capacity to be run in parallel (up to 9 at a time). To date three out of four critical water production facilities (RWPS, RSBS, and the NRFP), have been equipped with manual transfer switches (MTS) and custom length cam-lock end cables. MTS's were chosen instead of automatic transfer switches (ATS) due to cost difference and operation with portable generators to connect them to the facilities electrical system (ATS's are typically used with permanently installed generators). Three out of five Caterpillar C-13 generators have been ordered using FY19 funding and should arrive June, 2019. Empire/Caterpillar had the best pricing using Sourcewell (formerly National Joint Powers Alliance) contract compared with Gentech and Cummins. Empire/Caterpillar are also local with power-system specifically trained technicians available in town should issues arise with the generators.

Staff recommends to purchase two additional Caterpillar C-13 trailer-mounted diesel-powered generators and a manual transfer switch for the Lake Mary Water Treatment Plant with FY20 funding.

John Malin asked if fuel was stored for the generators. Brian said the Lake Mary Plant has a fuel truck to deliver fuel if needed. However, there is no agreement or contract to get fuel from Public Works though but staff is working on that.

Ben questioned if 7.1mgd potable water supply during a catastrophic power loss scenario is the right amount and can the City lend out the generators to local neighbors in a catastrophic event. Also, if staff looked into other things that need backup power? Brad indicated that the Wildcat Wastewater Plant has always had backup power; however, Rio de Flag does not so staff currently is looking into this.

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

2019 Report to the Water Commission was distributed.

Presentations at AZ Water Conference – These presentations are posted on the City website.

- ▶ Arizona Runs on Water / Brad Hill / University of Arizona's Water Resources Research Center's Annual Conference
- ▶ American Water Works – National Legislative Policy Fly-In / Brad Hill
- ▶ AZ Water Conference – Potable Reuse the Answer?: Case Study for an Arizona Community / Steve Camp & Katie Vanyo
- ▶ Skimming off the Bottom: Challenges of Running a Relief or Scalping Plant in a Small Community / Steve Camp & Jolene Hayes
- ▶ What is a Water Reclamation Manager's Role / Jim Huchel
- ▶ City of Flagstaff's Climate Action and Adaptation Plan – Our Path to Resiliency / Brad Hill & Jenny Neiman
- ▶ How to Best Assess Your WRF Secondary Treatment Capacity / Jim Huchel & Srikanth Grandhi (Carollo Engineers)

Water Commission Vacancies – There are three vacancies and the City Managers currently has five applicants this will be on the City Council Agenda August 27th.

Marie Jones, P&Z Rep requested clarification on the Stormwater charges and the Low Impact Development. Malcolm Alter, former Stormwater Manager will get with Marie to answer questions.

VII. ADJOURNMENT

Ben Ruddell moved to adjourned at 5:45 p.m. and seconded by Elizabeth Christy.