



CITY OF FLAGSTAFF
WATER COMMISSION
March 21, 2019

SUMMARIZED MINUTES

MEMBERS PRESENT

John Malin
Ward Davis
Elizabeth Christy
Ben Ruddell

MEMBERS ABSENT

Malcolm Alter
Marie Jones, P&Z Rep

STAFF PRESENT

Brad Hill
Marion Lee
Chris Kirkendall
Ed Schenk
Tamara Lawless
Jim Huchel
Gary Miller
James Boyer
Dylan Lenzen

OTHERS PRESENT

Robert Vane
George Kladnik
Brian Bernard
Russ Wachter
Chad Meyer
Paul Turner

I. CALL TO ORDER

Chair, John Malin called the meeting to order at 4:00 p.m.

II. APPROVAL OF MINUTES – January 17, 2019

Moved by Elizabeth Christy and seconded by Ward Davis to approve the meeting minutes of January 17, 2019. Motion carried unanimously.

III. PUBLIC PARTICIPATION

Tamara Lawless, Water Conservation Manager announced April as Water Awareness Month. Staff will keep the Commission posted on the events planned.

Robert Vane, residents at 2201 E Forest Heights Drive request future updates on the following:

1. The Status on Red Gap
2. The status on the Water Rate Study

IV. NEW BUSINESS

A. City Hall lawn conversion design – Tamara Lawless/Ed Schenk

As a result of community input during a recent Water Infrastructure Finance Authority grant, the City Hall lawn was selected as a proposed site for a conversion project that would meet needs for water conservation, low impact development, and current community uses.

Staff presented an overview of the community charrettes that were utilized in the creation of conceptual drawings for this project, which had representation from the following groups:

- City of Flagstaff – Parks, Facilities, Water Conservation, Sustainability, Grants, Stormwater, Community Development
- Friends of the Rio de Flag
- TerraBIRDS

- Arboretum at Flagstaff
- U.S. Geological Survey
- Natural Channel Design
- Watershed Management Group

The group proposed a variety of ideas for the final design such as: preserving space for political activism, lowering irrigation needs for the site, creating pollinator habitat, embracing Flagstaff's natural ecosystem, and creating an opportunity for public education. Staff provided an overview of these conversations and presented the final conceptual designs.

Project Benefits

- ❖ Potential value of 64K annually (via WIFA grant report)
 - ▶ Lawn maintenance, irrigation costs
 - ▶ Greenhouse gas emissions savings
 - ▶ Flood risk reduction
 - ▶ Stormwater pollution reduction
- ❖ Demonstrate commitment to Water Conservation
- ❖ Increase in functional and aesthetic value of property

Ben Ruddell suggested to maybe add a Forest Fire Danger marker, display information on Water Updates and information on water conservation.

V. OLD BUSINESS

A. Biosolids Master Plan Update – Ryan Roberts Carollo Engineers

Russ Wachter, Brian Bernard and Chad Meyer with Carollo Engineering presented a status update on the Bio-Solids Master Plan being performed. This presentation is an informational item for the Water Commission.

The City of Flagstaff (City) operates two water reclamation plants (WRPs) that treat wastewater to a high standard of water quality - the Wildcat Hill Water Reclamation Plant (WHWRP) and the Rio De Flag Water Reclamation Plant (RDFWRP). The WHWRP is an end-of-the-line facility and is currently permitted as a 6 million gallons per day (mg) maximum monthly average day flow (MMADF) facility producing Class A reclaimed water. The RDFWRP is a satellite plant, and is currently permitted as a 4 mgd MMADF facility producing Class A+ reclaimed water. The Wildcat Hill WRP currently serves as the only regional solids handling facility treating biosolids for the City of Flagstaff.

The City of Flagstaff has identified the need to develop a comprehensive Master Plan for the management of biosolids generated by the City's wastewater treatment plants (WWTPs). The primary purpose of this study is to evaluate alternative technologies and biosolids management options, and to recommend a strategy that responds to the current and future challenges through to the year 2040.

As part of the Wastewater Biosolids Master Plan Project, the City is seeking to determine a long-term Plan to treat biosolids and their disposal needs. In addition, the Master plan will determine current and future liquids and solids capacity needs, and identify recommended immediate, mid-term, and long-term Capital improvements required.

Biosolids Management – Outline of Carollo’s presentation

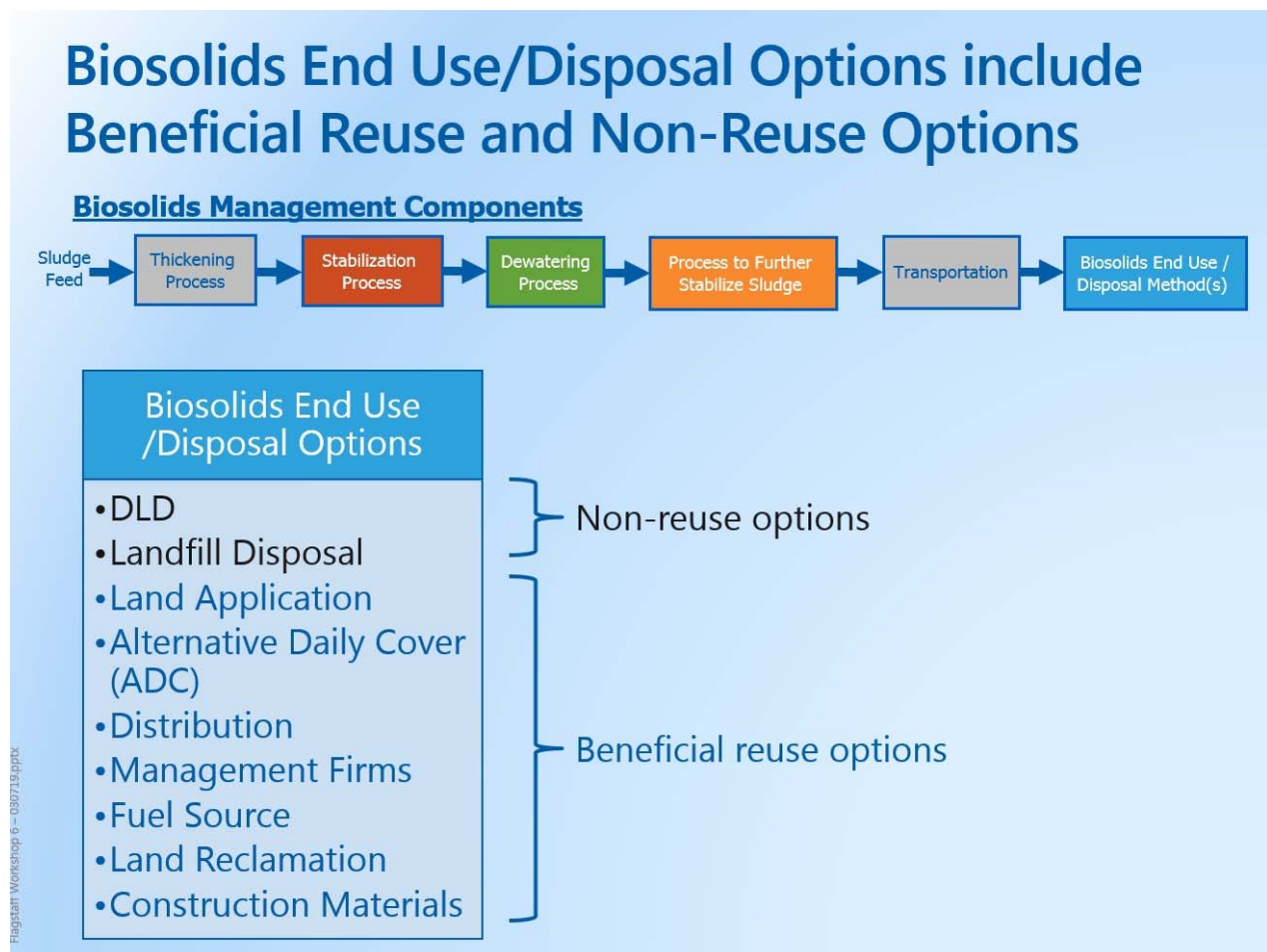
- Biosolids Use and Regulations Overview
- Current Biosolids Management Strategy
- Regional Biosolids Quality and Management Trends
- Biosolids End Use/Disposal Options
- Stabilization Treatment Process Options
- Biosolids Management Alternatives

List of Biosolids Management Alternatives and Methods

A large number of Biosolids Management Methods are available but there are only three end use alternatives; namely:

- Utilization on Land;
- Thermal Processes; and
- Disposal to Land.

Figure 1 shows the Biosolids End use disposal options that will be discussed:



Key considerations in the development of the Biosolids Master Plan are the City of Flagstaff and Coconino County region’s current and future infrastructure requirements, the current biosolids management program, the commitment to organics recycling, and program diversification requirements to ensure flexibility and sustainability over the longterm. The selected methods must be proven, cost effective, protective of human health, and respectful of the environment.

Primary work tasks remaining by Carollo Engineering include:

1. Current and Potential Future regulatory Requirements--*COMPLETED*
2. Existing Facilities Condition Assessment of Wildcat and Rio De Flag WRP-*COMPLETED*
3. Waste Flow and Loading Projections-*COMPLETED*
4. Evaluate Rio De Flag WRP process and treatment capacity evaluation-*COMPLETED*
5. Evaluate Wildcat Hill WRP process and treatment capacity evaluation-*COMPLETED*
6. Biosolids Disposal, Beneficial Use, and Treatment -Remaining
7. Alternatives Evaluation Workshop-Remaining
8. Biosolids and Wastewater Treatment Master Plan Workshops, provide additional outreach events: Added support for public meetings in the final report phases.-Remaining

The Biosolids Master Plan was presented to the Water Commission members to provide input and advice to the study. The Water Commission is not a decision-making body, rather it will make recommendations to the City Council for adoption at a later date.

Ward Davis expressed concern of sludge contamination and some unknowns on the quality. Carollo said this was not part of their presentation and they are aware of the concerns. Ward indicated that regulations might drive some changes in the future and may come back before the Water Commission.

B. FY 20 Capital Improvement Program – Ryan Roberts/Chris Kirkendall

Every year the Water Services Division updates the Capital Improvements Plan. Engineering staff presented the FY20 CIP Plan in January and is requesting approval from the Water Commission at this time. This will be presented to City Council during the budget process in April 2019.

Projects are selected based on need. Need includes regulatory requirements, capacity, maintenance, and anticipated growth. The CIP requires changes during the year based on management directives.

Moved by John Malin and seconded by Ben Ruddell to recommend to Council to approve the FY 20 Capital Improvement Program. All approved.

Table 1 Water Services Capital Improvement Program 2020 Summary

ACCT#	Description	FY2020
202-08-370-3177-0-4421	Water Reserve for Improvements	\$ 300,000
202-08-370-3157-0-4463	Annual Water Line Replacement Program	\$ -
202-08-370-3434-0-4463	Fir Avenue WL Replacement	\$ 800,000
202-08-370-3436-0-4463	Milton WL Replacement	\$ 400,000
202-08-370-3437-0-4463	Phoenix Ave Culvert Bridge WL Replacement	\$ 150,000
202-08-370-3427-0-4463	Lonetree WL Landscaping	\$ 150,000
202-08-370-3170-0-4461	Annual Radio Read Meter Replacement	\$ 400,000
202-08-370-3165-0-4461	Water Vault and Compound Meter Annual Improvements	\$ 150,000
202-08-370-3372-0-4421	LMWTP Sedimentation Basins \$3M Bond=\$260K annual	\$ 260,000
203-08-370-3156-0-4463	Rio De Flag Waterline Relocations \$4M Bond=\$400K annual	\$ 400,000
202-08-370-3439-0-4421	Water Resources Master Plan	\$ 150,000
202-08-370-3408-0-4431	Lake Mary Land Acquisition	\$ 3,000,000
202-08-370-3430-0-4421	Water Efficiency Upgrades	\$ 100,000
203-08-375-3235-0-4421	Sewer Reserve for Improvements	\$ 300,000
203-08-375-3286-0-4463	Rio De Flag Sewerline Relocations \$4M Bond=\$400K annual	\$ 400,000
203-08-375-3220-0-4421	Annual Sewerline Replacement Program	\$ -
203-08-375-3366-0-4466	Wildcat Gas Conveyance System Improvements	\$ 150,000
203-08-375-3417-0-4463	Westside Interceptor Improvements Phase 2 Thompson Kaibab	\$ 900,000
203-08-375-3411-0-4421	Wildcat Third Digester Design only	\$ 700,000
203-08-375-3410-0-4421	Sewer Rate Study	\$ 50,000
203-08-375-3412-0-4463	Fort Tuthill Sewer Oversizing Reimbursement	\$ 760,000
203-08-375-3441-0-4421	Flagstaff Interceptor Improvements-Design	\$ 200,000
203-08-375-3440-0-4463	First Avenue Rte 66 Sewer Replacement-Spruce Ave Wash	\$ 340,000
203-08-375-3442-0-4463	RDF WRP Concrete Degradation	\$ 500,000
203-08-375-3443-0-4421	WHWRP Primary Pump Station Design Improvements	\$ 100,000
203-08-375-3444-0-4421	WHWRP Solids Expansion Design - Conceptual Design	\$ 250,000
204-08-380-3415-0-4421	Reclaim Master Plan	\$ 50,000
204-08-380-3381-0-4421	RW System Improvements 8" Bottleneck-Design Portion	\$ 100,000
206-08-385-3238-0-4421	Spot Drainage Improvements	\$ 75,000
206-08-385-3238-0-4421	Phoenix Ave Culvert Construction	\$ 650,000
206-08-385-3238-0-4421	Wildwood Drainage Project	\$ 400,000
206-08-385-3238-0-4421	Rio De Flag Project	\$ 520,000
	TOTAL	\$ 12,705,000
	Water	\$ 6,260,000
	Wastewater	\$ 4,650,000
	Reclaim	\$ 150,000
	Stormwater	\$ 1,645,000
		\$12,705,000

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

Brad announced that three appointments open on the Water Commission. Applications are available on-line or to visit the City Clerk's office.

VII. ADJOURNMENT

Ben Ruddell moved to adjourned at 5:35 p.m. and seconded by Elizabeth Christy.