The Water Connection / UWP
June 7, 2016
Meeting Notes

Welcome/Introduction
Devon Buckels welcomed the group and started off with introductions around the room

Presentation:
Metro Wastewater Reclamation District's Innovative Integrated Plan

- Lisa Hollander, Governmental Affairs Officer, Metro Wastewater Reclamation District
- Jim McQuarrie, Chief Innovation Officer, Metro Wastewater Reclamation District

- Metro serves over 1.7 million people – largest wastewater treatment provider in Colorado
    - Two facilities – Robert W. Hite Facility (130 mgd capacity), Northern Treatment Plant (24 mgd capcity when started up later this year)
- Integrated Plan = Flexibility in meeting regulatory requirements – can identify highest priorities and use adaptive management approaches to sequence and optimize investments
- Metro's Plan: Facility Focused, Watershed Approach
    - Nutrient Focused
    - Implementing through permit, not because of an ordinance
- Priority Issues: Phosphorous and Nitrogen
- Approach and Structure
    - Environmentally Sustainable and Cost Effective
    - Adaptive Management
    - Synthesize the following activities
        - Infrastructure and Watershed Protection
        - Comprehensive Planning
        - Monitoring and Modeling
    - Consistent with EPA Watershed and Integrated Stormwater and Wastewater Planning Frameworks
- Intention: flexibility of integrated plan will result in innovation
    - Innovation requires: 1) Economics 2) Policy 3) Technology
- Over past 15 years, wastewater flows have stayed same, despite growing population
    - Positive: Increase in conservation practices
    - Negative: More concentrated flows
- Nutrient Removal:
    - Current Phosphorous Initiative at the RWHTF Plant includes enhanced biological phosphorous removal, watershed studies, and simultaneous reduction of nitrogen
    - 73% of Phosphorous in South Platte River is from urban sources
    - Nutrient regulations:
        - Barr Milton TMDL
        - Reg 85 (2017)

- Reg 31 (2025)
    - Cost-benefit of phosphorous removal: initially high return on investment but diminishing returns when get to trying to remove final couple 100 lbs
    - Phosphorous Removal: 2 Types
        - Chemical: expensive and not sustainable
        - Biological: algae has a lot of potential to be efficient and effective solution; also has potentially useful by product
            - Integrated Plan will provide space for innovative biological removal solutions
    - Case for Phosphorous Recovery:
        - Reduce impact on systems
        - Provide economic opportunity
        - More sustainable
- Innovative examples:
    - National Western Center: "recycling plant": Use wastewater heat for heating facility (following Vancouver examples)
    - Mango Industries in California: turn methane into bioplastics (similar plants in Sweden)

Partner Updates

Bill Battaglin – The Water Quality Assessment Workgroup met to discuss the next group of contaminants to be evaluated through the Water Quality Assessment Tool in Phase 2.

Stacey Eriksen: EPA has agreed to provide $30,000 toward Phase 2 of the Water Quality Assessment Tool.

Keith Wood: Keith announced the Natural Capital project which is being led by CSFS and distributed a survey to all meeting participants.

Dana Coelho – On behalf of the Advisory Committee and the UWP, Dana thanked Devon for her work over the last 3 years for the UWP. Dana presented Devon with a fabulous framed photo (taken by EPA staff Peter Ismert) of Maroon Bells.

Conclusion

Devon Buckels provided closing remarks and opened the floor for post-meeting discussions.