



MEMORANDUM

To: Nederland Board of Trustees
From: Jason Morrison & Chris Pelletier
Date: April 9, 2014
Re: Staff Report -- Public Works

Collections, Distribution, and Water Treatment Plant

This year we are rebuilding the raw water intake structure, which will assure us that water



will continue to flow to our settling ponds even in drought years. New valves at this structure will give us control of water flow, which we have never had. Additionally, with the funds we will save on construction, we are planning to install an infiltration gallery. This will give us the option to take stream water that is filtered through the ground and send it directly to the pump station. The advantage of this is the water will have some natural pretreatment prior to coming to the water plant. We will also have the option to bypass the ponds for future maintenance or expansion. Water currently is allowed to settle out in the ponds and to collect organics and other contaminants which cause us to use more chemicals.

At the water plant, we are planning to install a coagulation system, which will enhance the effectiveness of the coagulant we add and provide better dosing for water treatment. We will save money on chemicals and extend the life of our filters, which have a projected lifespan of ten years. Each filter costs a thousand dollars and we have 80. This will also help to better remove organics.

We have recently purchased equipment to more closely monitor contaminants in the water and to help us to provide better quality water. Until now, previous operators simply relied on a gut reaction to spring runoff and watching for a change of color. We are now able to more closely monitor specific constituents and track them as they increase, again trying to make the best water possible.



The extra testing requires a level of skill the Town has not had previously, sometimes taking hours to complete and keeping documentation of our efforts helps create a history for future treatment.

We are remodeling the water testing lab to take better care of our equipment and to provide an atmosphere for tracking water quality. The current lab/office is not really usable and more like an office from an episode of “Barney Miller”. We are working to develop operators who respect our equipment and care about the job they are doing. This is a serious effort to produce top quality water.

Wastewater Treatment Plant

We are busy at the waste water plant, constantly monitoring and making adjustments for process control. New equipment and employee training makes this possible. Phosphorus



testing is of particular importance in order to comply with the Town’s IGA with the City of Boulder. By maintaining proper levels, Boulder will help fund equipment and chemical purchases related to testing.

We will be doing research on different upgrades to the waste water plant, such as grit separators and sludge digesters, necessary for streamlining operations. Removing sludge from the remaining pond will be a priority this year since it probably has not been done in a very long time.

This spring we will be busy improving drainage around the site, and planting trees and grass. We also plan to create a xeriscape garden as an example to residents of ways to landscape with very little water. While our department’s goals are ambitious, we are eager to move forward making improvements to the town.

Streets and Drainage

The recent heavy wet snows have kept us busy and have been difficult on residents. The small but frequent storms have made road maintenance extremely difficult. We have not really enough snow to plow in most cases, but had just enough to make roads too wet to grade. When added up, this equals fast growing potholes. We have been working to clear ice from drainage ditches in order to open them to snowmelt and try to keep water off the roads. The usual bad spots are bad, but for the most part things are pretty good. This time of year, it is a constant battle to keep on top of potholes. We have begun repairing the Visitors Center lot; this is being done over two mornings with the crew coming in at 4 a.m. both days to minimize impact on citizens and businesses. When this is complete we will have the lot swept, repainted, and then complete any other small items in the lot.

Summer project planning is complete and preparation has begun. The largest project will be improvements to School Road. We will be widening shoulders for better snow removal and sight distance, making it safer for the traveling public year round. Upgrading all signs to MUTCD standards (Manual for Uniform Traffic Control Devices, the federal standard to which all municipalities must comply) and repainting the center line. We will begin work after receiving and incorporating as needed any results and recommendations

of the assessment being conducted by our local ecologist, who is reviewing this area to identify any environmental impacts of the project. The other most noticeable project will be the upgrading of street signs in Old Town and portions of Big Springs. There are several other small projects scheduled that we believe will benefit the town as a whole.

Parks

Repairs have been pushed back at Chipeta Park due to snow on the field but will begin at the end of this week into next week. These are the repairs and cleaning of Chipeta Park following the recent Frozen Dead Guy Days. An insurance claim is to be filed with the organizer's insurance company just in case repairs exceed the damage deposit amount. Town project engineer Mark Weritz and Public Works Manager Jason Morrison met with a local excavator to discuss grading and reseeding of the performance space and Guercio



Ball Field. We chose to work with McCollum Excavating of their extensive knowledge of getting vegetation to grow where it normally would not while keeping what is best for the environment as a top concern. With their yard in Mid-Gilpin, mobilization should be quick and easy allowing them to focus on the very small window to complete the work by the 4th of July.

(left) Current condition of the performance space

Other Items

New windows have been installed at the Visitors Center. The new roof and skylights were completed earlier this year. With these two projects complete, we can now focus on improving the bathroom facilities and making those more water friendly and durable.

The Water Treatment Plant fuels mitigation project is about to start up for the year in conjunction with Saws & Slaws. Without all of their hard work, this project would be next to impossible to complete with Town staff alone. Thanks to Alan Brewer for helping to facilitate this.