



GREELEY
WATER SUPPLY
2020

WORLD CLASS

Rocky Mountain Snow Melt



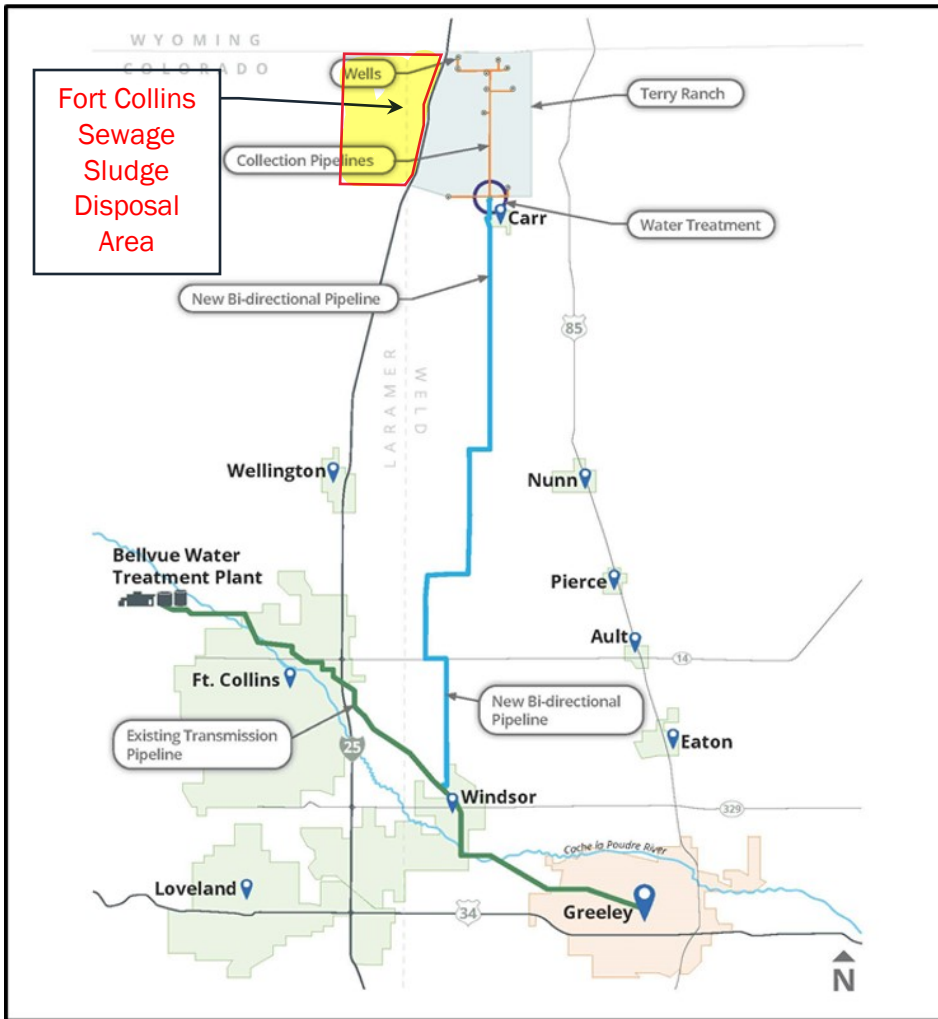
CACHE LA POUFRE RIVER



MILTON SEAMAN RESERVOIR ENLARGEMENT PROJECT

The Milton Seaman Reservoir Enlargement Project will:

- Enlarge an existing reservoir instead of building a new one, creating fewer negative environmental impacts.
- Rehabilitate an aging dam that will require repairs in the future.
- Is a gravity-fed project, no pumping needed, which requires no energy or greenhouse gas emissions.
- Milton Seaman is an alternate diversion point for many other City of Greeley water rights and provides a great deal of operational flexibility to accommodate maintenance issues on other reservoirs
- In cooperation with the City of Fort Collins, provide year-round flows on the North Fork of the Poudre where it often runs dry, leading to fishery and habitat improvements.
- Is the most cost-effective option to meet our water storage needs considering construction and long-term power and treatment costs.
- Enlargement can be staged: 20,000 acre-feet, 53,000 acre-feet and up.
- Allow existing Milton Seaman absolute water right decree to be completely recovered for 5,000 acre-feet.
- Allow Milton Seaman conditional enlargement water right decree to be perfected for 9,992 acre-feet.
- Allow Rockwell conditional decree to be perfected for 4,900 acre-ft
- Value of the above-mentioned water rights at current cash-in-lieu price is \$676,600,000.
- Value of 33,108 acre-feet of drought storage if enlarged to 53,000 acre-feet is \$1,125,400,000.
- Will help provide a safe, reliable water supply for future generations.



GREELEY WATER SUPPLY OUR FUTURE??

The Terry Ranch-Wingfoot Alternate



CITY OF FORT COLLINS SEWAGE SLUDGE DISPOSAL AREA UPSTREAM OF TERRY RANCH AT MEADOW SPRINGS RANCH. 2,355 METRIC DRY TONS OF SEWAGE SLUDGE APPLIED PER YEAR UPSTREAM OF GREELEY'S FUTURE WINGFOOT WATER SUPPLY AT TERRY RANCH

TERRY RANCH/WINGFOOT "ALTERNATE"

To Milton Seaman Reservoir Enlargement

The Terry Ranch-Wingfoot is a non-tributary, non-replenishing sandstone claystone aquifer in the Cheyenne Basin which is known as one of the major uranium districts in the Western United States. The selection of this alternate:

- Will make acquisition of the US Army Corps of Engineers Permit for enlargement of Milton Seaman Reservoir impossible.
- Will result in the loss of two valuable conditional water rights totaling 14,892 acre-feet. At the current cash-in-lieu price for water, this would be a loss of \$506,328,000 for Greeley Citizens.
- Will result in the loss of Milton Seaman Reservoir as an effective alternate diversion reservoir for many of Greeley's other water rights assuming Milton Seaman is enlarged to 53,000 acre-feet. At today's current cash-in-lieu price the loss of this drought storage would be \$1,125,000,000.
- Terry Ranch ground water will forever change the perception that Greeley has excellent drinking water.
- Terry Ranch delivery and quality is uncertain which is typical of groundwater sources. Water samples have shown various degrees of contaminants such as uranium, arsenic and manganese. These contaminants require special treatment to remove.
- The Terry Ranch Aquifer Storage and Recovery alternative requires that the Poudre Supply be treated twice, once before it is injected into the aquifer and again after it is extracted from the aquifer.
- Injection of treated Bellvue water may dissolve precipitated uranium ore bodies causing uranium levels to spike causing problems with treatment.
- Terry Ranch-Wingfoot Alternate is not an exclusive water right in the underground aquifer. The State Land Board Land, which checkerboards the Ranch, is vulnerable to others filing water rights. Other entities drawing water could result in significantly less annual capacity in order to comply with ground water extractions rules.
- Mining Permits involving extraction of water do not require the mining company to acquire a water right. This could further jeopardize the Terry Ranch Wingfoot Alternative.
- The proposed Terry Ranch Pipeline Route is very inefficient from a cost and energy standpoint.
- The Terry Ranch/Wingfoot/City of Greeley talking points has referred to the \$125,000,000 from Wingfoot as something that Wingfoot is contributing to the deal. It is not a gift; it is a loan with interest. The City would be better served by financing through the Colorado Water Conservation Board.
- The Terry Ranch/Wingfoot/City of Greeley talking points has referred to sharing risk with Wingfoot. The City of Greeley is assuming a tremendous risk by agreeing to a "default liquidated damages clause" which could cost the City as much as \$363,630,000. City default would be triggered by something that would lower the market value for the Wingfoot credit certificates. Obviously, the City could not pay \$363,630,000 immediately so the City would pay Wingfoot over a 15-year period at 10% interest.
- The City of Fort Collins applies their sewage sludge to the land upstream of the Terry Ranch aquifer. Currently Fort Collins applies 2,344 metric dry tons of sewage sludge per year to the property.
- This would be the largest transfer of wealth from the citizens of Greeley in its history. By assigning a value of \$34,000 per credit for 12,121 credits, we are transferring \$412,144,000 to Wingfoot.
- Why is the City of Greeley seriously considering this alternative to Milton Seaman Reservoir Enlargement?

Contact me at john@gauthiere-engineering.com for more information.