



STAFF REPORT

Report To: Open Space Advisory Committee

Meeting Date: October 15, 2018

Staff Contact: Ann Bollinger, Open Space Administrator
Curtis Horton, Deputy Public Works Director
Eddy Quaglieri P.E., Water Utility Manager

Agenda Title: For Possible Action: Review and discussion regarding the feasibility of water production improvements and to recommend to the Board of Supervisors pursuing a production well at the old Buzzy's Ranch, pending the viability of this project as determined by the soil boring and test wells productivity results.

Staff Summary: Carson City is in the process of evaluating the potential for a new City production well and transmission pipe line to be located on the old Buzzy's Ranch. This new well will provide a needed future water supply to augment existing water resources of the City's and will add to the City's ability to conjunctively use and further manage its water resources effectively. Additionally, due to its proposed location, this well will provide water resources for the adjacent open space as well as local wildlife.

Agenda Action: Formal Action/Motion

Time Requested: 10 minutes

Proposed Motion

I move to recommend to the Board of Supervisors pursuing a production well at the old Buzzy's Ranch, pending the viability of this project as determined by the soil boring and test wells productivity results.

Board's Strategic Goal

Sustainable Infrastructure

Previous Action

N/A

Background/Issues & Analysis

Process

Developing a new well is a multi-phase process that is initiated with a preliminary evaluation of the site(s) using existing hydro-geologic literature, lithologic and production data from nearby wells, as well as water quality data from the water produced by local wells. The next step in the process is to actually evaluate site-specific lithology by drilling a very small diameter borehole to determine the soil characteristics at depth. Based on the outcome of the site-specific soil investigation a determination can be made as to whether to proceed with the drilling of a new production well at that location.

Preliminary Evaluation

A preliminary evaluation of the project has been conducted to determine the best probable location for a new production well. This evaluation indicated that the best location for a new well would be on the east side of Buzzy's Ranch adjacent to the Carson River. Currently there are two wells located to the north along the river in Riverview Park (Wells Nos. 25 & 41), any new well would need to be located far enough away from existing wells to avoid or minimize well interference issues during the production season. The Carson River Park area and Silver Saddle Ranch area were both evaluated for a new well location based on existing information. These areas are would likely not have sufficient thickness of alluvial material to locate a new production well and also include a 100-foot seal that would be required due to the location near the river.

Soil Boring Investigation

- The soil boring investigation that we are proposing consists of the following steps:
- Truck mounted rig
- Borehole diameter: 5 to 6 inches
- Borehole depth: 250 feet
- Borings will be abandoned with natural cuttings and sealed with a minimum of 20 feet of concrete
- The footprint of each soil boring during the process will be approximately 300 feet by 300 feet, or about a quarter to a third of an acre
- Both the access and the site will be re-vegetated after completion of the boring

The process of drilling a soil boring to collect lithologic data is minimally invasive and would take less than a week per site to complete. Accessing the site would be the most invasive part of the process in that one would notice for a while a two-track path to the site from the trucks (see attached map). This however could be minimized by using existing access roads on the ranch.

Production Well

Once the data from the soil borings has been evaluated, the best probable location for a production well would be selected.

Summary of the Test Well and Production Well

This project is for the benefit of the residents of Carson City through the development of additional water supplies that can be used to serve the City, provide a water supply for the continued irrigation of the open space of Buzzy's Ranch, and for the benefit of any local wildlife. The next phase of the project is needed to determine if a viable production well can be located in this area. It is minimally invasive and of short duration, i.e., can be completed in less than a month's time.

Open Space Considerations

This area of the old Buzzy's Ranch (Jarrard Acquisition) was funded by the Quality of Life – Open Space budget and the State of Nevada Conservation and Resource Protection Grant Program (Question 1). Staff has been in contact with the State and the project has tentatively been approved. Since there is a non-revocable deed on the property, the State is willing to amend the deed in order to allow a production well for the benefit of the City. Additionally, partial grant funds would need to be returned to the State. The reimbursement amount would be calculated from the initial appraised value and the final area of disturbance (or non-conservation related area).

Applicable Statute, Code, Policy, Rule or Regulation

NRS 534 and NAC 534.440

Financial Information

Is there a fiscal impact? Yes No

If yes, account name/number:

Is it currently budgeted? Yes No

Explanation of Fiscal Impact: Paid for by Carson City Public Works

Alternatives



