



Board of Storey County Commissioners Agenda Action Report

Meeting date: 11/21/2023 10:00 AM -
BOCC Meeting

Estimate of Time Required: 1 min

Agenda Item Type: Discussion/Possible Action

- **Title:** Consideration and possible approval of the agenda for the November 21, 2023, meeting.
- **Recommended motion:** Approve or amend as necessary.
- **Prepared by:** Drema Smith

Department: **Contact Number:** 7758470968

- **Staff Summary:** See attached.
- **Supporting Materials:** See attached
- **Fiscal Impact:**
- **Legal review required:** False
- **Reviewed by:**

_____ Department Head

Department Name:

_____ County Manager

Other Agency Review: _____

- **Board Action:**

☐ Approved	☐ Approved with Modification
☐ Denied	☐ Continued



Board of Storey County Commissioners Agenda Action Report

**Meeting date: 11/21/2023 10:00 AM -
BOCC Meeting**

Estimate of Time Required: 5 minutes

Agenda Item Type: Discussion/Possible Action

- **Title:** Consideration and possible approval of the minutes from the September 5, 2023, meeting.
- **Recommended motion:** Approve or amend as necessary.
- **Prepared by:** Jim Hindle

Department: **Contact Number:** 17758470969

- **Staff Summary:** See attached.
- **Supporting Materials:** See attached
- **Fiscal Impact:** none
- **Legal review required:** False
- **Reviewed by:**

_____ Department Head

Department Name:

_____ County Manager

Other Agency Review: _____

- **Board Action:**

☐ Approved	☐ Approved with Modification
☐ Denied	☐ Continued



STOREY COUNTY BOARD OF COUNTY COMMISSIONERS MEETING

9/5/2023 10:00 AM
26 SOUTH B STREET, VIRGINIA CITY, NV

MEETING MINUTES

JAY CARMONA
CHAIRMAN

CLAY MITCHELL
VICE-CHAIRMAN

LANCE GILMAN
COMMISSIONER

ANNE LANGER
DISTRICT ATTORNEY

JIM HINDLE
CLERK & TREASURER

Roll Call: Commission Chairman Jay Carmona, Commission Vice-Chair Clay Mitchell, Commissioner Lance Gilman, Clerk & Treasurer Jim Hindle, County Manager Austin Osborne, Deputy District Attorney Keith Loomis

√ Assessor Jana Seddon
√ Justice of the Peace Eileen Herrington
√ Recorder Dru McPherson
√ Sheriff Mike Cullen
√ Comptroller Jennifer McCain
√ Business Development Manager Lara Mather
√ Community Development Director Pete Renaud
√ Community Relations Director Honey Coughlin
√ Emergency Management Director Adam Wilson
√ Fire Chief Jeremy Loncar

√ Human Resources Director Brandie Lopez
√ IT Director James Deane
√ Planning Manager Kathy Canfield
√ Public Works Director Jason Wierzbicki
□ Operations and Project Manager Mike Northan
√ Senior Center Director Stacy York
√ Tourism Director Todd Tuttle
Other:
√ Community Chest Executive Director, Erik Schoen

Total Attendance: 51

In-Person: 27

Zoom: 24

1. CALL TO ORDER REGULAR MEETING AT 10:00 A.M.

Commissioner Carmona called the meeting to order at 10:01 a.m.

2. PLEDGE OF ALLEGIANCE

3. PUBLIC COMMENT (No Action): Donnie Gilman said a deal has been in the works at TRIC for a large land purchase that has closed. He praised county leadership and staff for their assistance.

4. DISCUSSION/FOR POSSIBLE ACTION: Consideration and possible approval of the agenda for the September 5, 2023, meeting.

Public Comment: None

Motion: I, Commissioner Mitchell, move to approve today's agenda as presented. **Seconded by:** Lance Gilman. **Vote:** Motion passed unanimously.

5. DISCUSSION/FOR POSSIBLE ACTION: Consideration and possible approval of the minutes for the June 6, 2023, meeting.

Public Comment: None

Motion: I, Commissioner Mitchell, move to approve the minutes from our June 6, 2023, meeting as presented. **Seconded by:** Lance Gilman. **Vote:** Motion passed unanimously.

6. CONSENT AGENDA FOR POSSIBLE ACTION: I For Possible action, approval of business license first readings:

- A. Ace Rental and Sales. – Contractor / 5625 Manchester Ave. ~ St. Louis, MO
- B. Authentic Roofing LLC – Contractor / 1079 Spoonbill Dr. ~ Sparks, NV
- C. Copper Mountain Construction LLC – Contractor / 2449 Lawry Dr. Sparks, NV
- D. Crazy Calamities LLC – General / 355 N. F St. ~ Virginia City, NV
- E. New Mountain Excavating Inc. – Contractor / 7383 Windmill Dr. ~ Reno, NV
- F. Sstructures Inc. – Contractor / 5224 E Us Hwy 50 ~ Carson City, NV
- G. Sun Source Energy LLC – Contractor / 5580 W. Flamingo Rd. #101 ~ Las Vegas, NV
- H. SX VC LLC (Temp Vendor/Retail) – General / 5 N. C St. ~ Virginia City, NV
- I. TDC Management LLC – Out of County / 241 Ridge St. Ste 410 ~ Reno, NV
- J. TowerCo 2013, LLC – Out of County / 5000Valleystone Dr. Ste. 200 ~ Cary, NC
- K. Victory Glass, LLC – Contractor / 425 Western Rd. Ste. 109 ~ Reno, NV

II Consideration and possible approval of the modification to Policy 217 establishing the expectations of employees' attire when representing the county at meetings, conferences, and other gatherings.

Public Comment: None

Motion: I, Commissioner Mitchell, move to approve today's Consent agenda as presented. **Seconded by:** Lance Gilman. **Vote:** Motion passed unanimously.

7. DISCUSSION ONLY (No Action - No Public Comment): Committee/Staff Reports

Sheriff Mike Cullen

- Sheriff Cullen noted the death of former Storey County Deputy and Pyramid Lake Police Officer Anthony Francone, who was killed in the line of duty on Friday, Aug. 25, 2023, while attempting to stop a fleeing suspect. He served Storey County from 2006 to 2019. He was recognized for bravery and service and was an expert in accident investigations. His memorial was held Saturday, Sept. 9, 2023, at the Reno Aces ballfield in Reno.

Fire Chief Jeremy Loncar

- One engine is in Southern California.
- The fire season is looking better with the amount of moisture we recently received.
- The Volunteer Fire Department's Spaghetti Feed fundraiser will Sept. 9 at Station 72 in the Highlands. Doors open at 5 p.m. and dinner is served at 6 p.m.

Public Works Director Jason Wierzbicki, and for Mike Northan

- Public Works officials have met with NVEnergy over work at Station 72.
- The old Lockwood Sheriff's Substation is removed and the site is being prepared for a new building.

Business Development Director Lara Mather

- The Business Development Office said the deadline for Community Project Grant applications is 5 p.m. Sept. 20, 2023. For more information, call Honey Menefee at 775-847-0986, or email hcoughlin@gmail.com.
- I gave a tour on Aug. 23 to staff from Congressman Mark Amodei's Office.
- I completed a business coach course through UNR's Extended Studies Department.

Emergency Management Director Adam Wilson

- September is National Preparedness Month to prepare for natural, man-made and technological disasters.

Tourism Director Todd Tuttle

- The Motorcycle Roundup went smoothly.
- Dirty Cello performed at Piper's Opera House on Sept. 6. The VCTC is trying to increase activities there.
- There were 20 entries in the Labor Day Parade, including the Lt. Governor.
- Camel Races are Sept. 8-10. There are still local tickets for Friday's show. Saturday's VIP and shaded seating are sold out. Media are coming from all over the area. The Sunday show is selling out quickly. We will have the Camel Hump on Saturday. There will be a shuttle from the races to C Street.
- Comedian Kevin Farley will be at Piper's Opera House on Sept. 15.
- In October, or Hauntober, there will be magic shows on C Street, along with many other family-friendly events.

Assessor Jana Seddon

- I am proud of working with our team. I was presented with the 20-year plaque, and 20 years ago there was a different mentality. Now we work together. Trying to get two offices to work together in other counties is awful.

IT Director James Deane IT

- The IT Department is coordinating with the Abbi Agency on the web site.

HR Director Brandie Lopez

- There are a total of 207 county employees, with 165 full-time: 42 part-time. Of those, 120 are with the county and 45 are with the Fire District, including 7 that are grant funded; 42 that are part-time; 10 who are seasonal; and 7 employees are part of the planning board. She said there are 31 budgeted vacancies and the County is actively recruiting for 25.

Community Development Director Pete Renaud

- The Community Development Department added two new inspectors.

Stacy York Senior Center

- The Senior Center will hold flu shot clinics on Sept. 29 at the Virginia City Center, from 9 am. to 11 a.m.; and in Mark Twain on Oct. 17 from 4-6 p.m. A flu and Covid Clinic will be held from noon to 4 p.m. Oct. 4 at Piper's Opera House. The center does not have testing. People need to go to their doctor or a pharmacy.
- A Community Resource Fair will be held Oct. 4 from noon to 6 p.m. in Mark Twain.

Judge Eileen Herrington

- Thanked Anne Langer and Austin Osborne for helping develop the corrective action plan with Indigent Services and to finalize the Public Defender Services agreement with Carson City.

Deputy District Attorney Keith Loomis

- The District Attorney's Office plans to file a complaint for the revocation of the business license for the Bonanza Saloon.

District Attorney Langer

- The change in the indigent defense/public defender service was, a 55-month journey that took a lot of energy from a lot of people. I want to thank everyone. It could not have been done so quickly had everyone not worked as a team.

County Manager Austin Osborne

- We are looking for a representative to serve on the Cemetery Board, and for members of the Board of Appeals - one with engineering/contracting, another fire presentation experience, and one at-large. All interest in serving, please submit a letter to the County Manager.

- Thanks to the people who attended the town halls this summer.
- We are working on the Strategic Plan.

Community Chest Executive Director Erik Schoen

- Programs are full for the fall programming season but have space for before-and-after-school programs.
- We have a workforce program, and the library is a good location for a meeting.
- Because of the implementation of the hot lunch program, there is demand to expand it to the high school. Thanks to Stacy and the school district staff.

8. BOARD COMMENT (No Action - No Public Comment)

Commissioner Lance Gilman talked about a new deal that was coming to the Tahoe Reno Industrial Center and praised all the county staff over the years for their efforts into making the industrial park such a success.

Commissioner Jay Carmona praised both the staff and the industrial park. He also said the Virginia City Highlands potluck had 70 people at Pinion Park.

Commissioner Mitchell said September was preparedness month and asked that all start preparing now for winter.

9. DISCUSSION/FOR POSSIBLE ACTION: Review, receive public comment, and provide direction to staff and consultants on the draft Storey County RFP for a successor Solid Waste Collection Services Franchise Agreement in preparation for consideration of the final RFP at the 09/19/23 board meeting.

Joseph Sloan of Sloan Vasquez Consultants, said draft Request for Proposal draft changes involved mandatory service and exclusivity. Mandatory service was rejected, and residents can haul their trash to the landfill. Large commercial generators may handle their own waste. Companies can also haul away their own effluent.

County Manager Osborne noted a series of workshops was held in each Storey County community as well as a Zoom workshop, so intention on this item is for staff direction.

Mr. Sloan said that service is mandatory except for entities that may opt to serve themselves, such as Google, Tesla and other large waste generators who handle their own waste. He said service is only mandatory if a company seeks to hire a third party. He said recycling will be offered but is not mandatory. Recyclers can be hired to pick up items that will not end up in the landfill.

Commissioner Mitchell said he preferred recycling to be limited to the industrial park and be optional. Mr. Sloan said because of the costs of recycling is the same as for waste, and the fee would be 80 percent of what is proposed for garbage service.

Public Comment: Alexia Sober asked what type of things could be recycled? Mr. Sloan said he could not be specific at this point.

TRIC Project Manager Kris Thompson recommended that the recycling portion be totally non-exclusive.

George “Eddie” Lorton said, in Lyon County the charge for recycling is 4 percent, rather than 7 to 8 percent.

Commissioner Gilman said is in favor of the document on the table today. Commissioner Carmona would like more time to consider suggestions.

Additional Public Comment: None

Motion: I, Commissioner Mitchell, move to direct staff and the contractor to incorporate changes from this meeting in the draft RFP, complete the draft collection service agreement and bring both documents back to the board on Sept. 19, 2023, for consideration. **Seconded by:** Lance Gilman. **Vote:** Motion passed unanimously.

10. DISCUSSION/FOR POSSIBLE ACTION: Consideration and possible approval of Resolution No. 23-705, a resolution setting grade and salary range of employees fixed by ordinance or resolution per NRS 245.045 for appointed Storey County officials for the 2023-24 fiscal year and superseding prior year action by resolution for appointed Storey County employees with the addition of Schedule B for the intermittent/less than parttime employees of the county.

HR Manager Brandie Lopez said there was a correction in the chart. When employees were moved to the new salary schedule, they shared in the cost of the Public Employee Retirement System, and part-time employees - being on the same salary schedule - means they have to share the expense. Since part-time employees do not receive PERS benefits they should not share in the expense.

Commissioner Mitchell said this should be retroactive.

Comptroller McCain said it would not be a huge amount to make it retroactive but would be considerable work for the Comptroller’s Office. She said 42 part-time employees were impacted.

Public Comment: None

Motion: I Commissioner Mitchell, move to approve Resolution No. 23-705, a resolution setting grade and salary range of employees fixed by ordinance or resolution per NRS 245.045 for appointed Storey County officials for the 2023-24 fiscal year and superseding prior year action by resolution for appointed Storey County employees with the addition of Schedule B for the intermittent/less than parttime employees of the county. I further move to make this resolution retroactive to July 3, 2023. The schedule B addition is the updated version we were presented in the meeting. **Seconded by:** Lance Gilman. **Vote:** Motion passed unanimously.

- 11. DISCUSSION/FOR POSSIBLE ACTION:** Consideration and possible approval of the Schedule of Project Revenue and Net Revenue for the TRI Public-Private Partnership for fiscal years ending June 2021 and 2022 and the payment to Tahoe Reno Industrial Center, LLC in the amount of \$3,666,155.

Commissioner Gilman recused himself due to a pecuniary interest.

Comptroller Jennifer McCain said this is the audit for June 30, 2022. Our payment is \$7,310,000. This brings us whole through 3.7 million. The budget is \$3.5 million.

We have about \$43.8 million in vouchers as of June 30, 2022, after having paid \$11.9 million. There is \$31.9 million in vouchers due, which brings our total to \$28 million. \$8.7 million has been paid in the last 3 years. In 2002, the schedule of project revenue was \$600,000. This year, it was \$10.8 million.

Public Comment: None

Motion: I, : I, Commissioner , approve the Schedule of Project Revenue and Net Revenue for the TRI Public-Private Partnership for fiscal years ending June30, 2022. and the payment to Tahoe Reno Industrial Center, LLC in the amount of \$3,666,155. **Seconded by:** Jay Carmona. **Vote:** Motion passed 2 votes “Aye” to 0 votes “Nay”.

- 12. DISCUSSION/FOR POSSIBLE ACTION:** Tax Bill correction for 004-101-02 Flintstone Properties. NDOT landlocked this property when USA Pkwy interchange was constructed. Other parcels are owned by EP Minerals or Southern Pacific Railroad, so they have access from their contiguous parcels.

Assessor Jana Seddon said this property used to be a quarry and sits between the railroad and the interchange. Private property was cut off when the interchange was built. The road is a private road and access was never granted. The applicant has requested a tax bill correction.

Public Comment: None

Motion: I, Commissioner Mitchell, move to approve the correction of the tax bill for parcel 004-101-02 Flintstone Properties as listed in our packet. **Seconded by:** Lance Gilman. **Vote:** Motion passed unanimously.

- 13. DISCUSSION ONLY:** Review and discussion of the final contract between Storey County and The Abbi Agency as approved during the July 18, 2023, Board of County Commissioner's meeting.

Business Development Director Lara Mather said this was be the final contract as approved by the Board on 7/18/23.

Public Comment: None

The contract will be submitted for the file.

- 14. DISCUSSION/FOR POSSIBLE ACTION:** Consideration and possible approval to accept a \$5,000 donation from NOVVA Data Centers for the purchase of school supplies for the Storey County Sheriff's Office "Stuff The Cop Car" event.

Ms. Mather said when the sheriff's office started this project, she reached out to her business contacts in the county to gauge interest in participating. NOVVA data centers has new facility at the industrial park, and they readily agreed to make a donation in support of the community.

Public Comment: None

Motion: I, Commissioner Mitchell, move to approve to accept a \$5,000 donation from NOVVA Data Centers for the purchase of school supplies for the Storey County Sheriff's Office "Stuff The Cop Car" event. **Seconded by:** Lance Gilman. **Vote:** Motion passed unanimously.

15. RECESS TO CONVENE AS THE STOREY COUNTY FIRE PROTECTION DISTRICT BOARD

- 16. DISCUSSION/FOR POSSIBLE ACTION:** Consideration and possible approval of Resolution No: 23-702, annually updating mitigation rates for the deployment of emergency and non-emergency services by the Storey County Fire Protection District for incidents outside of Storey County, large-scale hazardous materials incidents, motor vehicle accidents, and negligent or criminal fires.

Fire Chief Jeremy Loncar said this is for fees when we send crews out to assist other areas to recoup the cost that we incur.

Public Comment: None

Motion: I, Fire Commissioner Mitchell, move to approve Resolution No: 23-702, updating mitigation rates for the deployment of emergency and non-emergency services by the Storey County Fire Protection District for incidents outside of Storey County, large-scale hazardous materials incidents, special operating, and negligent or criminal fires. **Seconded by:** Lance Gilman. **Vote:** Motion passed unanimously.

17. RECESS TO CONVENE AS THE STOREY COUNTY HIGHWAY BOARD

18. DISCUSSION/FOR POSSIBLE ACTION: Report of Public Works Department regarding roads and highways in Storey County.

Public Works Director Jason Wierzbicki said he is almost finished with shouldering Lousetown, He said Six Mile Canyon Road was closed Sept 11-14 to add culvert pipe and take care of needed vegetation and tree work. The gas line under Electric Avenue is nearly complete. In Mark Twain, DOWL is working trying to come up with a drainage plan.

Public Comment: None

19. RECESS TO RECONVENE AS THE STOREY COUNTY BOARD OF COUNTY COMMISSIONERS

20. DISCUSSION/FOR POSSIBLE ACTION: Discussion and possible consideration of the board's position responding to the Nevada Governor's Office of Economic Development (GOED) requesting from Storey County a letter of acknowledgement regarding application to the Governor's Office of Economic Development for a Data Center Sales & Use Tax Abatement and a Data Center Personal Property Tax Abatement for Novva Reno, LLC ("Novva Tahoe-Reno, LLC") planned in Storey County. The tax abatements are subject to GOED approval per NRS 360 as a "standard partial abatement" for data centers under NRS 360.

Mr. Osborne said GOED sends letters on off-the-shelf abatements, and any county that meets a certain level gets abatements. They are not like the Gigafactory, if they meet criteria, they can receive abatements. Novva-Reno-Tahoe invested \$237 million and have a \$21 million request for a sales and use tax abatement to the Governor's office. This is a 75 percent abatement for 10 years, and the governor's office is asking for a letter of acknowledgement, not approval. We are invited to the meeting.

Public Comment: Hugh Gallagher said he doesn't understand the objectivity of the Governor's Office on Economic Development. He asked why different companies received different abatements.

Mr. Osborne said Novva received the data center abatement under SB1. Data centers receive a specific abatement according to the matrix.

Motion: I, Commissioner Mitchell, move to approve to direct county staff to submit a letter to the Governor's Office of Economic Development (GOED) acknowledging an application for a Data Center Sales & Use Tax Abatement and a Data Center Personal Property Tax Abatement for Novva Reno, LLC ("Novva Tahoe-Reno, LLC") planned in Storey County. The tax abatements are subject to GOED approval per NRS 360 as a "standard partial abatement" for data centers under NRS 360. **Seconded by:** Lance Gilman. **Vote:** Motion passed unanimously.

21. DISCUSSION/FOR POSSIBLE ACTION: Discussion and possible consideration of the board's position responding to the Nevada Governor's Office of Economic Development (GOED) requesting from Storey County a letter of acknowledgement regarding an application to GOED for Sales and Use Tax Abatement, Modified Business Tax Abatement, and Personal Property Tax Abatement for Symbia Fulfillment Services of NV, LLC. planned in Storey County. The tax abatements are subject to GOED approval per NRS 360 as a "standard partial abatement".

Mr. Osborne said this is a logistics company with a \$4 million commitment. It is about \$122,000 in sales and use tax abatement and \$89,000 in personal property tax abatement. No real property tax abatement.

Public Comment: None

Motion: I, Commissioner Mitchell, motion to direct county staff to submit a letter to GOED acknowledging an application for Sales and Use Tax Abatement, Modified Business Tax Abatement, and Personal Property Tax Abatement for Symbia Fulfillment Services of NV, LLC. planned in Storey County.. **Seconded by:** Lance Gilman. **Vote:** Motion passed unanimously.

22. DISCUSSION/FOR POSSIBLE ACTION: Discussion and possible action to authorize filing of Petition for Judicial Confirmation intended to identify the site where the Mark Twain Community Center is located as the property of Storey County.

Mr. Loomis said that they have not been able to locate the actual deed for the property on which the Community Center sits. It has not formally been dedicated to the county. This action will clear up any issues with and in the title.

Public Comment: None

Motion: I, Commissioner Mitchell, move to authorize the District Attorney's Office to file a Petition for Judicial Confirmation to establish that Storey County is the owner of the land on which the Mark Twain Community Center is located. **Seconded by:** Lance Gilman. **Vote:** Motion passed unanimously.

- 23. DISCUSSION/FOR POSSIBLE ACTION:** Discussion and Possible action to approve Resolution 23-704 declaring the intention of the Board of County Commissioners to lease a portion of its property at 1705 Peru Drive in the Tahoe Reno Industrial Center to the State of Nevada for the benefit of the Nevada Highway Patrol for no rent, setting a date and time for a public hearing on the proposed lease and authorizing publication of a notice of the hearing.

Mr. Loomis said this was a requirement under NRS tht we can do without having to go through an appraisal process. We have to set a date for public comment. The lease is in the hands of the Nevada Department of Transportation, which will then hold a public hearing.

Public Comment: None

Motion: I, Commissioner Mitchell, move to approve Resolution 23-704 the lease of a portion of the County Complex at 1705 Peru Drive to the State of Nevada for the benefit of the Nevada Highway Patrol, authorize publication of a notice of a time and date to hold a public hearing on the proposed lease and set the date and time for the public hearing at 10:30 a.m. on October 3, 2023. **Seconded by:** Lance Gilman. **Vote:** Motion passed unanimously.

- 24. DISCUSSION/FOR POSSIBLE ACTION:** For consideration and possible approval of business license second readings:

- A. Keeley Construction Group Inc. – Contractor / 500 S. Ewing Ave Ste. G ~ St Louis, MO
- B. Redwood Materials EPC, LLC – Contractor / 1201 Battery Blvd ~ McCarran, NV
- C. TNT Auction – General / 601 Britain Dr. ~ McCarran, NV
- D. Troomi Wireless Inc. – Out of County / 151 Southhall Lane Ste. 450 ~ Maitland, FL

Public Comment: None

Motion: I, Commissioner Mitchell, move to approve the second readings of business licenses listed under Item #24 as A-D. **Seconded by:** Lance Gilman. **Vote:** Motion passed unanimously.

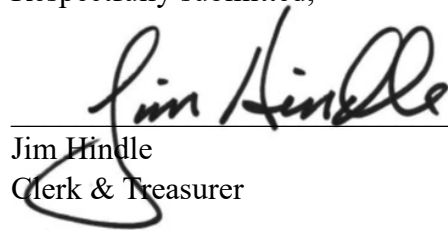
25. PUBLIC COMMENT (No Action)

- 26. ADJOURNMENT OF ALL ACTIVE AND RECESSED BOARDS ON THE AGENDA**
Commissioner Carmona adjourned the meeting at 1:07 p.m.

27. Call to Order Closed Session meeting pursuant to NRS 288.220 for the purpose of conferring with county management and legal counsel regarding potential labor negotiations with the Storey County Employees' Association Comstock Chapter, AFSCME Local 4041.

Call to Order Closed Session meeting pursuant to NRS 288.220 for the purpose of conferring with county management and legal counsel regarding potential labor negotiations with the Storey County Employees' Association Comstock Chapter, AFSCME Local 4041. This meeting will begin immediately following the general meeting of the Board of Storey County Commissioners

Respectfully submitted,



Jim Hindle
Clerk & Treasurer



Board of Storey County Commissioners Agenda Action Report

**Meeting date: 11/21/2023 10:00 AM -
BOCC Meeting**

Estimate of Time Required: 0-5

Agenda Item Type: Consent Agenda

- **Title:** For consideration and possible approval of business license first readings:
 - A. Gray Construction Inc. – Contractor / 10 Quality St. ~ Lexington, KY
 - B. JJ’s Chuckwagon LLC – Food Truck / 1005 Ruby Avenue ~ Silver Springs, NV
 - C. The Bug Guy Pest Control – 1706 Harvest Creek Way ~ Fernley, NV
 - D. XVIIIsions Productions – Home Based – 29 S. B St #3 ~ Virginia City, NV
- **Recommended motion:** None required (if approved as part of the Consent Agenda) I move to approve all first readings (if removed from consent agenda by request).
- **Prepared by:** Ashley Mead

Department: **Contact Number:** 775-847-0966

- **Staff Summary:** First readings of submitted business license applications are normally approved on the consent agenda. The applications are then submitted at the next Commissioner's meeting for approval.
- **Supporting Materials:** See attached
- **Fiscal Impact:** None
- **Legal review required:** False
- **Reviewed by:**

_____ Department Head

Department Name:

_____ County Manager

Other Agency Review: _____

- **Board Action:**

☐ Approved	☐ Approved with Modification
☐ Denied	☐ Continued

Storey County Community Development



110 Toll Road ~ Gold Hill Divide
P O Box 526 ~ Virginia City NV 89440

(775) 847-0966 ~ Fax (775) 847-0935
CommunityDevelopment@storeycounty.org

To: Jim Hindle, Clerk's office
Austin Osborne, County Manager

November 08, 2023
Via Email

Fr: Ashley Mead

Please add the following item(s) to the **November 21, 2023**

COMMISSIONERS Consent Agenda:

FIRST READINGS:

- A. Gray Construction Inc.** – Contractor / 10 Quality St. ~ Lexington, KY
- B. JJ's Chuckwagon LLC** – Food Truck / 1005 Ruby Avenue ~ Silver Springs, NV
- C. The Bug Guy Pest Control** – 1706 Harvest Creek Way ~ Fernley, NV
- D. XVIIIsions Productions** – Home Based – 29 S. B St #3 ~ Virginia City, NV

Ec: Community Development
Commissioner's Office

Planning Department
Comptroller's Office

Sheriff's Office



Board of Storey County Commissioners Agenda Action Report

Meeting date: 11/21/2023 10:00 AM -
BOCC Meeting

Estimate of Time Required: 0 min

Agenda Item Type: Consent Agenda

- **Title:** Approval of claims in the amount of \$6,131,259.61.
- **Recommended motion:** Approval of claims as submitted.
- **Prepared by:** Cory Y Wood

Department: **Contact Number:** 7758471133

- **Staff Summary:** Please find attached claims.
- **Supporting Materials:** See attached
- **Fiscal Impact:** N/A
- **Legal review required:** False
- **Reviewed by:**

_____ Department Head

Department Name:

_____ County Manager

Other Agency Review: _____

- **Board Action:**

☐ Approved	☐ Approved with Modification
☐ Denied	☐ Continued



STOREY COUNTY

Check Register

Packet: APPKT05903 - 2023-10-27 PERS 715 kc

By Check Number

Vendor Number	Vendor Name	Payment Date	Payment Type	Discount Amount	Payment Amount	Number
Bank Code: AP Bank-AP Bank						
405456	PUBLIC EMPLOYEES RETIREMENT B	10/27/2023	EFT	0.00	72,584.96	10468

Bank Code AP Bank Summary

Payment Type	Payable Count	Payment Count	Discount	Payment
Regular Checks	0	0	0.00	0.00
Manual Checks	0	0	0.00	0.00
Voided Checks	0	0	0.00	0.00
Bank Drafts	0	0	0.00	0.00
EFT's	2	1	0.00	72,584.96
	2	1	0.00	72,584.96

County Commissioners approval is reported in the
Board of County Commissioners Meeting Minutes

Kya 20231026
Processed & Submitted to Treasurer by Comptroller Admin Date

Approved By:

AMC 10.26.23
Comptroller Date

Danley 10/30/23
Treasurer Date

Fund Summary

Fund	Name	Period	Amount
999	Pooled Cash Account	10/2023	72,584.96
			<u>72,584.96</u>



STOREY COUNTY

Vendor History Report

By Vendor Name

Posting Date Range 10/13/2023 - 10/13/2023
Payment Date Range 10/13/2023 - 10/13/2023

Payable Number	Description	Units	Price	Post Date	1099	Payment Number	Payment Date	Amount	Shipping	Tax	Discount	Net	Payment
Item Description					Account Number	Account Name		Dist Amount					
Vendor Set: 01 - Storey County Vendors													
405424 - OPTUM BANK, MEMBER FDIC													
INV0018089	HSA Contributions	0.00	0.00	10/13/2023	DFT0001570	10/13/2023	14,569.99	0.00	0.00	0.00	0.00	14,569.99	14,569.99
								11,584.99	0.00	0.00	0.00	11,584.99	11,584.99
								10,439.99					
								520.00					
								187.50					
								137.50					
								210.00					
								90.00					
INV0018090	HSA Contributions			10/13/2023	DFT0001571	10/13/2023	2,825.00	0.00	0.00	0.00	0.00	2,825.00	2,825.00
								2,575.00					
								250.00					
INV0018091	HSA Contributions			10/13/2023	DFT0001572	10/13/2023	160.00	0.00	0.00	0.00	0.00	160.00	160.00
								160.00					
Vendors: (1) Total 01 - Storey County Vendors: 14,569.99 0.00 0.00 0.00 14,569.99 14,569.99													
Vendors: (1) Report Total: 14,569.99 0.00 0.00 0.00 14,569.99 14,569.99													

County Commissioners approval is reported in the
Board of County Commissioners Meeting Minutes

Processed & Submitted to Treasurer by Comptroller Admin 20231012 Date

Approved By:

10.12.23

Comptroller

Date

Treasurer

Date

10/16/23 - \$14,394.99 ✓
10/20/23 - \$175.00 ✓
\$14,569.99



STOREY COUNTY

Vendor History Report
By Vendor Name

Posting Date Range 10/27/2023 - 10/27/2023
Payment Date Range 10/27/2023 - 10/27/2023

Payable Number	Description	Units	Price	Post Date	1099	Payment Number	Payment Date	Account Name	Amount	Shipping	Tax	Discount	Net	Payment
Item Description					Account Number				Dist Amount					
Vendor Set: 01 - Storey County Vendors														
405424 - OPTUM BANK, MEMBER FDIC														
INV0018149	HSA Contributions	0.00	0.00	10/27/2023	DFT0001586		10/27/2023	Insurances	14,523.09	0.00	0.00	0.00	14,523.09	14,523.09
									11,538.09	0.00	0.00	0.00	11,538.09	11,538.09
									10,393.09					
									520.00					
									Rds-Ins					
									Wtr-Ins	187.50				
									Swr-Ins	137.50				
									VCTC-Ins	210.02				
									Pipers-Ins	89.98				
INV0018150	HSA Contributions			10/27/2023	DFT0001587		10/27/2023	Fire-Ins	2,825.00	0.00	0.00	0.00	2,825.00	2,825.00
		0.00	0.00						2,575.00					
									Fire-Ins	250.00				
INV0018151	HSA Contributions			10/27/2023	DFT0001588		10/27/2023	Insurances	160.00	0.00	0.00	0.00	160.00	160.00
		0.00	0.00						160.00					
Vendors: (1)														
Total 01 - Storey County Vendors:									14,523.09	0.00	0.00	0.00	14,523.09	14,523.09
Vendors: (1)									14,523.09	0.00	0.00	0.00	14,523.09	14,523.09
Report Total:														

County Commissioners approval is reported in the
Board of County Commissioners Meeting Minutes

Processed & Submitted to Treasurer by Comptroller Admin 20231026 Date

Approved By: [Signature]

Comptroller [Signature] 10.26.23 Date

Treasurer [Signature] 10/30/23 Date



STOREY COUNTY

Vendor History Report
By Vendor Name

Posting Date Range 10/27/2023 - 10/27/2023
Payment Date Range 10/27/2023 - 10/27/2023

Payable Number	Description	Units	Price	Post Date	1099 Account Number	Payment Number	Payment Date	Amount	Shipping	Tax	Discount	Net	Payment
Vendor Set: 01 - Storey County Vendors													
404300 - INTERNAL REVENUE SERVICE													
INV0018168	Medicare			10/27/2023	001-29503-000	DFT0001589	10/27/2023	78,497.24	0.00	0.00	0.00	78,497.24	78,497.24
								15,984.16	0.00	0.00	0.00	15,984.16	15,984.16
								15,984.16					
INV0018169	Social Security			10/27/2023	001-29505-000	DFT0001590	10/27/2023	1,943.42	0.00	0.00	0.00	1,943.42	1,943.42
								1,943.42					
INV0018170	Federal Income Tax w/h			10/27/2023	001-29501-000	DFT0001591	10/27/2023	60,569.66	0.00	0.00	0.00	60,569.66	60,569.66
								60,569.66					
								60,569.66					
Vendors: (1)								78,497.24	0.00	0.00	0.00	78,497.24	78,497.24
Total 01 - Storey County Vendors:								78,497.24	0.00	0.00	0.00	78,497.24	78,497.24
Vendors: (1)								78,497.24	0.00	0.00	0.00	78,497.24	78,497.24
Report Total:								78,497.24	0.00	0.00	0.00	78,497.24	78,497.24

County Commissioners approval is reported in the
Board of County Commissioners Meeting Minutes

Processed & Submitted to Treasurer by Comptroller Admin 20231026 Date

Approved By:

Comptroller [Signature] Date 10-26-23

Treasurer [Signature] Deputy [Signature] Date 10/30/23



STOREY COUNTY

Check Register

Packet: APPKT05902 - 2023-10-27 PR Payment kc

By Check Number

Vendor Number	Vendor Name	Payment Date	Payment Type	Discount Amount	Payment Amount	Number
Bank Code: AP Bank-AP Bank						
405456	PUBLIC EMPLOYEES RETIREMENT BC	10/27/2023	EFT	0.00	119,501.72	10465
404869	SCSO EMPLOYEES ASSOCIATIO	10/27/2023	EFT	0.00	396.00	10466
404639	VOYA INSTITUTIONAL TRUST COMP.	10/27/2023	EFT	0.00	8,580.48	10467
300003	AFLAC	10/27/2023	Regular	0.00	1,205.06	111972
300008	AFSCME LOCAL4041	10/27/2023	Regular	0.00	598.62	111973
405610	CALIFORNIA STATE DISBURSEMENT	10/27/2023	Regular	0.00	395.50	111974
405519	CIGNA HEALTH & LIFE INSURANCE C	10/27/2023	Regular	0.00	4,472.24	111975
300001	COLONIAL LIFE & ACCIDENT INS CO	10/27/2023	Regular	0.00	103.38	111976
404704	DVM INSURANCE AGENCY	10/27/2023	Regular	0.00	95.64	111977
406598	MICHIGAN STATE DISBURSEMENT L	10/27/2023	Regular	0.00	393.79	111978
300011	NEVADA STATE TREASURER	10/27/2023	Regular	0.00	4.00	111979
406600	NORTHWEST FIRE FIGHTER BENEFIT	10/27/2023	Regular	0.00	2,072.24	111980
103233	PUBLIC EMPLOY RETIREMENT SYSTEM	10/27/2023	Regular	0.00	378.97	111981
300010	STATE COLLECTION & DISBURSEMEI	10/27/2023	Regular	0.00	1,147.52	111982
300006	STOREY CO FIRE FIGHTERS ASSOC	10/27/2023	Regular	0.00	1,800.00	111983
300005	WASHINGTON NATIONAL INS	10/27/2023	Regular	0.00	1,402.37	111984

Bank Code AP Bank Summary

Payment Type	Payable Count	Payment Count	Discount	Payment
Regular Checks	19	13	0.00	14,069.33
Manual Checks	0	0	0.00	0.00
Voided Checks	0	0	0.00	0.00
Bank Drafts	0	0	0.00	0.00
EFT's	7	3	0.00	128,478.20
	26	16	0.00	142,547.53

County Commissioners approval is reported in the
Board of County Commissioners Meeting Minutes

Kya 20231026
Processed & Submitted to Treasurer by Comptroller Admin Date

Approved By:

[Signature] 10.26.23
Comptroller Date

[Signature] 10/30/23
Treasurer Date

Fund Summary

Fund	Name	Period	Amount
999	Pooled Cash Account	10/2023	142,547.53
			<u>142,547.53</u>



STOREY COUNTY

Payroll Check Register Report Summary

Pay Period: 10/9/2023-10/22/2023

Packet: PRPKT01872 - 2023-10-27 Payroll kc

Payroll Set: Storey County - 01

Type	Count	Amount
Regular Checks	3	3,089.24
Manual Checks	0	0.00
Reversals	0	0.00
Voided Checks	0	0.00
Direct Deposits	205	463,412.00
Total	208	466,501.24

County Commissioners approval is reported in the
Board of County Commissioners Meeting Minutes

Kya 20231025
Processed & Submitted to Treasurer by Comptroller Admin Date

Approved By:

C/MC 10-26-23
Comptroller Date

Debbie Gibson Deputy 10/30/23
Treasurer Date



STOREY COUNTY

Check Register

Packet: APPKT05888 - 2023-10-20 AP Payments cw

By Check Number

Vendor Number	Vendor DBA Name	Payment Date	Payment Type	Discount Amount	Payment Amount	Number
Bank Code: AP Bank-AP Bank						
406777	DOWL LLC	10/20/2023	EFT	0.00	60,249.95	10463
404671	PORTER GROUP LLC	10/20/2023	EFT	0.00	10,000.00	10464
405684	AFFORDABLE OFFICE FURNITURE AN	10/20/2023	Regular	0.00	10,693.00	111827
400481	ALLISON, MACKENZIE, LTD	10/20/2023	Regular	0.00	125.00	111828
403795	ALPINE LOCK INC	10/20/2023	Regular	0.00	401.00	111829
100135	ALSCO INC	10/20/2023	Regular	0.00	300.09	111830
406619	AMAZON BUSINESS	10/20/2023	Regular	0.00	294.12	111831
404980	HIGH SIERRA BUSINESS SYSTEMS IN	10/20/2023	Regular	0.00	3,503.14	111832
404420	ARCADIA PUBLISHING INC	10/20/2023	Regular	0.00	574.86	111833
406683	SIERRA MEAT CO	10/20/2023	Regular	0.00	234.00	111834
100073	AUTO & TRUCK ELECTRIC, INC	10/20/2023	Regular	0.00	729.00	111835
405332	BATTLE BORN DIGIAL MEDIA AND M	10/20/2023	Regular	0.00	425.55	111836
101605	SIERRA ELECTRONICS	10/20/2023	Regular	0.00	410.00	111837
405077	MACKAY MANSION	10/20/2023	Regular	0.00	826.50	111838
100471	MOUNDHOUSE TRUE VALUE HARDV	10/20/2023	Regular	0.00	427.77	111839
403671	WASHOE CLUB MUSEUM	10/20/2023	Regular	0.00	776.25	111840
100475	CAPITAL CITY AUTO PARTS	10/20/2023	Regular	0.00	335.96	111841
100486	CAPITOL REPORTERS	10/20/2023	Regular	0.00	4,708.70	111842
406995	CARSON CITY FINANCE DEPT	10/20/2023	Regular	0.00	85,463.89	111843
405831	CARSON NOW LLC	10/20/2023	Regular	0.00	200.00	111844
404216	CARSON VALLEY OIL CO	10/20/2023	Regular	0.00	4,282.15	111845
405519	CIGNA HEALTH & LIFE INSURANCE C	10/20/2023	Regular	0.00	20,148.13	111846
100505	CITY OF CARSON TREASURER	10/20/2023	Regular	0.00	20.00	111847
405134	CMC TIRE INC	10/20/2023	Regular	0.00	143.00	111848
404833	COMSTOCK FOUNDATION FOR HIST	10/20/2023	Regular	0.00	390.00	111849
403887	COMSTOCK GOLD MILL LLC	10/20/2023	Regular	0.00	17.00	111850
406406	COMSTOCK PROPANE	10/20/2023	Regular	0.00	1,011.26	111851
406992	CUDWORTH, EDNA	10/20/2023	Regular	0.00	171.82	111852
103220	ON THE SIDE GRAPHICS & SIGNS	10/20/2023	Regular	0.00	88.00	111853
100739	CUSTOM GLASS DISTRIBUTORS INC	10/20/2023	Regular	0.00	823.00	111854
404466	FIRST CHOICE COFFEE SRV	10/20/2023	Regular	0.00	470.35	111855
99652	COMSTOCK CHRONICLE	10/20/2023	Regular	0.00	2,955.75	111856
406010	DEITZ MEDIA & MARKETING, LLC	10/20/2023	Regular	0.00	23,654.47	111857
100717	DELTA FIRE SYSTEMS INC	10/20/2023	Regular	0.00	450.00	111858
406831	DREILING, DEREK CHARLES	10/20/2023	Regular	0.00	362.50	111859
405232	EBBERT, MARLINDA	10/20/2023	Regular	0.00	440.00	111860
404547	FACTORY MOTOR PARTS	10/20/2023	Regular	0.00	7.70	111861
405264	FIDELITY SECURITY LIFE INSURANCE	10/20/2023	Regular	0.00	222.85	111862
406497	FINDLEY, BRENDA K	10/20/2023	Regular	0.00	100.00	111863
406817	FOLEY, HELEN A	10/20/2023	Regular	0.00	4,000.00	111864
406947	FE SUPPLY COMPANY	10/20/2023	Regular	0.00	16,873.00	111865
100826	FOURTH WARD SCHOOL MUSEUM	10/20/2023	Regular	0.00	299.00	111866
406987	GARCIA-SUAREZ, ADRIAN	10/20/2023	Regular	0.00	120.00	111867
404640	GLADDING, EDWARD A.	10/20/2023	Regular	0.00	2,970.00	111868
100856	GRANITE CONSTRUCTION COMPAN'	10/20/2023	Regular	0.00	844.23	111869
103470	GREAT BASIN TERMITE & PEST CON	10/20/2023	Regular	0.00	135.00	111870
405784	LAKOTA HRM, LLC	10/20/2023	Regular	0.00	2,475.00	111871
102983	USABUEBOOK	10/20/2023	Regular	0.00	1,337.27	111872
100866	CHAMPION CHEVROLET	10/20/2023	Regular	0.00	33,863.25	111873
406603	HUSTLER HYDRAULICS LLC	10/20/2023	Regular	0.00	74.99	111874
100885	IRON MOUNTAIN	10/20/2023	Regular	0.00	967.82	111875
405726	IT1 CONSULTING, LLC	10/20/2023	Regular	0.00	4,511.23	111876
403834	IT1 SOURCE LLC	10/20/2023	Regular	0.00	17,819.69	111877
406978	JAY, TERRI	10/20/2023	Regular	0.00	300.00	111878

Check Register

Packet: APPKT05888-2023-10-20 AP Payments cw

Vendor Number	Vendor DBA Name	Payment Date	Payment Type	Discount Amount	Payment Amount	Number
103317	SILVER STATE INTERNATIONAL TRUCK	10/20/2023	Regular	0.00	373.48	111879
406428	J W WELDING SUPPLIES & TOOLS	10/20/2023	Regular	0.00	67.50	111880
406617	JOHN H BURROWS INC	10/20/2023	Regular	0.00	569.09	111881
406868	J-U-B ENGINEERS, INC	10/20/2023	Regular	0.00	15,449.00	111882
404956	KADLIC, JOHN J.	10/20/2023	Regular	0.00	1,750.00	111883
406630	KERR, ELI	10/20/2023	Regular	0.00	414.50	111884
406797	BATTLE BORN EMERGENCY TECH	10/20/2023	Regular	0.00	3,710.78	111885
406797	BATTLE BORN EMERGENCY TECH	10/20/2023	Regular	0.00	4,030.32	111886
406729	MR. BUBBLES LAUNDROMAT	10/20/2023	Regular	0.00	101.75	111887
405465	LEGAL & LIABILITY RISK MNGMNT IN	10/20/2023	Regular	0.00	350.00	111888
406984	LEACH, MICHAEL	10/20/2023	Regular	0.00	220.00	111889
101030	LIFE-ASSIST INC	10/20/2023	Regular	0.00	1,501.87	111890
404102	LIQUID BLUE EVENTS LLC	10/20/2023	Regular	0.00	500.00	111891
404102	LIQUID BLUE EVENTS LLC	10/20/2023	Regular	0.00	2,550.00	111892
404102	LIQUID BLUE EVENTS LLC	10/20/2023	Regular	0.00	2,400.00	111893
406650	LIVINGSTON, PAUL	10/20/2023	Regular	0.00	87.00	111894
405548	LUMOS & ASSOCIATES, INC	10/20/2023	Regular	0.00	15,896.00	111895
406988	MARTIN JR, KELSEY	10/20/2023	Regular	0.00	415.00	111896
406639	NV DISTRIBUTORS, LLC	10/20/2023	Regular	0.00	2,688.00	111897
405307	THE TOMBSTONE COWBOYS/HELLD	10/20/2023	Regular	0.00	1,355.00	111898
102857	MICHAEL HOHL MOTOR CO	10/20/2023	Regular	0.00	31.73	111899
101228	NEV ADMIN BLDG & GROUNDS	10/20/2023	Regular	0.00	12,858.28	111900
101226	NEV COMPTROLLER	10/20/2023	Regular	0.00	2,275,197.69	111901
403317	NEV DEPT PUBLIC SAFETY	10/20/2023	Regular	0.00	40.25	111902
404294	NEV DHCFP	10/20/2023	Regular	0.00	3,775.00	111903
101225	NEV DIV OF FORESTRY	10/20/2023	Regular	0.00	10,379.00	111904
101220	NEV DIV OF MINERALS	10/20/2023	Regular	0.00	1,370.00	111905
103075	NEV SECRETARY OF STATE	10/20/2023	Regular	0.00	45.00	111906
101269	NEVADA LEGAL SERVICE INC	10/20/2023	Regular	0.00	554.93	111907
102295	NTU TECHNOLOGIES INC	10/20/2023	Regular	0.00	4,338.40	111908
406983	NUSHART, DOUGLAS	10/20/2023	Regular	0.00	195.00	111909
403547	NUTRIEN AG SOLUTIONS, INC	10/20/2023	Regular	0.00	444.00	111910
402926	OFFSITE DATA DEPOT, LLC	10/20/2023	Regular	0.00	335.85	111911
406417	OOSOSHARP, LLC	10/20/2023	Regular	0.00	635.59	111912
404118	OPTUMINSIGHT INC	10/20/2023	Regular	0.00	367.50	111913
405127	O'REILLY AUTO PARTS	10/20/2023	Regular	0.00	2,618.62	111914
404870	LAW OFFICE OF JOAN OSBORNE	10/20/2023	Regular	0.00	12,600.00	111915
404746	OTIS ELEVATOR COMPANY	10/20/2023	Regular	0.00	1,236.50	111916
404556	OUTFRONT MEDIA LLC	10/20/2023	Regular	0.00	718.00	111917
405638	PAVELEK, MICHELLE A	10/20/2023	Regular	0.00	23.45	111918
406986	PEARSON, JEFFREY	10/20/2023	Regular	0.00	190.00	111919
403895	WAY IT WAS MUSEUM	10/20/2023	Regular	0.00	167.00	111920
404845	PILOT THOMAS LOGISTICS LLC	10/20/2023	Regular	0.00	986.60	111921
406800	SUMMIT COLLECTION SERIVCES	10/20/2023	Regular	0.00	579.09	111922
404837	PIPER'S OPERA HOUSE	10/20/2023	Regular	0.00	36.00	111923
403329	PROTECTION DEVICES INC	10/20/2023	Regular	0.00	584.70	111924
103221	PEBP	10/20/2023	Regular	0.00	2,312.12	111925
406993	EIGHT8 STUDIOS	10/20/2023	Regular	0.00	875.00	111926
406985	RADHAKRISH, RUSHANK ARUNKUM	10/20/2023	Regular	0.00	135.00	111927
404863	REFUSE, INC	10/20/2023	Regular	0.00	1,982.62	111928
406471	REVIZE LLC	10/20/2023	Regular	0.00	8,900.00	111929
405459	LINDA RITTER CONSULTING	10/20/2023	Regular	0.00	2,983.75	111930
403995	RMIN INC	10/20/2023	Regular	0.00	100.00	111931
406447	ROUDMAN, REBECCA	10/20/2023	Regular	0.00	1,600.00	111932
101568	SANI-HUT COMPANY INC	10/20/2023	Regular	0.00	186.08	111933
406536	SAPIENCE PRACTICE	10/20/2023	Regular	0.00	4,620.00	111934
406778	SILVER STATE ANALYTICAL LABORAT	10/20/2023	Regular	0.00	1,925.00	111935
406776	SHAKESPEARE UNLIMITED	10/20/2023	Regular	0.00	23,243.37	111936
405081	SHERMARK DISTRIBUTORS INC	10/20/2023	Regular	0.00	695.50	111937
404187	SAWDUST TRAILS	10/20/2023	Regular	0.00	31.00	111938
102980	SIERRA FIRE PROTECTION LL	10/20/2023	Regular	0.00	98.00	111939

Check Register

Packet: APPKT05888-2023-10-20 AP Payments cw

Vendor Number	Vendor DBA Name	Payment Date	Payment Type	Discount Amount	Payment Amount	Number
404750	SIERRA NEVADA CONSTRUCTION II	10/20/2023	Regular	0.00	1,655,485.80	111940
406945	SILVER STATE JANITORIAL SERVICES	10/20/2023	Regular	0.00	480.00	111941
100732	SMITH POWER PRODUCTS INC	10/20/2023	Regular	0.00	79.15	111942
101658	SPB UTILITY SERVICES INC	10/20/2023	Regular	0.00	5,476.00	111943
101717	ST CO SCHOOL DISTRICT	10/20/2023	Regular	0.00	137,544.77	111944
405475	STAPLES BUSINESS ADVANTAGE	10/20/2023	Regular	0.00	488.85	111945
101229	STATE OF NEVADA	10/20/2023	Regular	0.00	705,603.28	111946
406932	LEHR	10/20/2023	Regular	0.00	7,405.81	111947
403892	PONDEROSA MINE TOURS	10/20/2023	Regular	0.00	1,526.00	111948
405416	SUNSHINE REPORTING & LITIGATION	10/20/2023	Regular	0.00	315.60	111949
405124	CHOLLAR MINE 1859 LLC	10/20/2023	Regular	0.00	1,281.00	111950
405997	THE DIVIDE LLC	10/20/2023	Regular	0.00	495.00	111951
405997	THE DIVIDE LLC	10/20/2023	Regular	0.00	40.00	111952
402935	PURE WATER SYSTEMS OF NEVADA	10/20/2023	Regular	0.00	49.95	111953
406738	UBEO BUSINESS SERVICES	10/20/2023	Regular	0.00	748.79	111954
102962	UNIFORMITY	10/20/2023	Regular	0.00	247.48	111955
403728	UNITED SITE SERVICES OF NEVADA,	10/20/2023	Regular	0.00	180.00	111956
406623	US FOODS INC	10/20/2023	Regular	0.00	9,951.62	111957
101845	US POSTOFFICE (VC)	10/20/2023	Regular	0.00	300.00	111958
404486	USA CASH SERVICES MGT INC	10/20/2023	Regular	0.00	482.00	111959
403983	VCTC	10/20/2023	Regular	0.00	50.00	111960
406991	VEGAS, MICHAEL L	10/20/2023	Regular	0.00	32.06	111961
406967	EVERBLOCK / VERSARE	10/20/2023	Regular	0.00	10,757.00	111962
403894	VIRGINIA & TRUCKEE RR CO, INC.	10/20/2023	Regular	0.00	2,350.00	111963
101899	GRAINGER	10/20/2023	Regular	0.00	96.55	111964
402820	WALKER & ASSOCIATES, INC.	10/20/2023	Regular	0.00	4,000.00	111965
405574	WASHOE COUNTY FORENSIC SCIENCE	10/20/2023	Regular	0.00	848.00	111966
101920	WESTERN NEVADA SUPPLY CO	10/20/2023	Regular	0.00	77.04	111967
405794	WHARTON CONCRETE FORMING SUPPLY	10/20/2023	Regular	0.00	125.00	111968
406773	WILEY, CINDY J	10/20/2023	Regular	0.00	919.29	111969
405184	UNIFORMS2YOU / RENO UNIFORMS	10/20/2023	Regular	0.00	273.96	111970
406966	ZORPRO LLC	10/20/2023	Regular	0.00	8,838.90	111971
404295	WELLS ONE COMMERCIAL CARD	10/20/2023	Bank Draft	0.00	28,034.51	DFT0001585

Bank Code AP Bank Summary

Payment Type	Payable Count	Payment Count	Discount	Payment
Regular Checks	246	145	0.00	5,243,751.10
Manual Checks	0	0	0.00	0.00
Voided Checks	0	0	0.00	0.00
Bank Drafts	35	1	0.00	28,034.51
EFT's	9	2	0.00	70,249.95
	290	148	0.00	5,342,035.56

County Commissioners approval is reported in the
Board of County Commissioners Meeting Minutes

Cory Y. Wood 10/19/23
Processed & Submitted to Treasurer by Comptroller Admin Date

Approved By:

[Signature] 11-7-23
Comptroller Date

[Signature] 10/19/23
Treasurer Date

Fund Summary

Fund	Name	Period	Amount
999	Pooled Cash Account	10/2023	5,342,035.56
			<u>5,342,035.56</u>



Board of Storey County Commissioners Agenda Action Report

Meeting date: 11/21/2023 10:00 AM -
BOCC Meeting

Estimate of Time Required: 1

Agenda Item Type: Consent Agenda

- **Title:** Annual Tax Roll Resolution.
- **Recommended motion:** Approval.
- **Prepared by:** Jana Seddon

Department: **Contact Number:** 775-847-0961

- **Staff Summary:** This is the annual Tax Roll Resolution, to allow the Assessor to post the 2024-25 tax roll on the Storey County website pursuant to NRS 361.300.
- **Supporting Materials:** See attached
- **Fiscal Impact:**
- **Legal review required:** False
- **Reviewed by:**

_____ Department Head

Department Name:

_____ County Manager

Other Agency Review: _____

- **Board Action:**

☐ Approved	☐ Approved with Modification
☐ Denied	☐ Continued

STOREY COUNTY RESOLUTION # 23-713

A RESOLUTION REQUIRING THE COUNTY ASSESSOR TO PREPARE A LIST OF ALL TAXPAYERS ON THE SECURED ROLL IN STOREY COUNTY AND THE TOTAL VALUATION OF PROPERTY ON WHICH THEY SEVERALLY PAY TAXES

WHEREAS, pursuant to NRS 361.300, each board of county commissioners shall by resolution, before December 1 of any fiscal year in which assessment is made, require the county assessor to prepare a list of all taxpayers on the secured roll in the County and the total valuation of property on which they severally pay taxes and direct the county assessor to cause, on or before January 1 of the fiscal year in which assessment is made, such list and valuations to be: printed and delivered by the county assessor or mailed by him or her to each taxpayer in the county; or published once in a newspaper of general circulation in the county; or published on an internet website that is maintained by the county assessor or, if the county assessor does not maintain an internet website, on an internet website that is maintained by the county; and to cause such list and valuations to be posted in a public area of the public libraries and branch libraries located in the county, to be posted at the office of the county assessor; and, if the list and valuations are printed and delivered or mailed to each taxpayer in the county or published in a newspaper of general circulation in the county, then the list and valuations must be published on an internet website that is maintained by the county assessor or, if the county assessor does not maintain an internet website, on an internet website that is maintained by the county. The county assessor shall further be directed, in a county whose population is less than 100,000, to make not fewer than 10 copies of such list and valuations available to the public free of charge during normal business hours at the main administrative office of the county for at least 60 days after the date on which the list and valuations are made available to the public as provided above; and if the county assessor publishes the list and valuations on an Internet website that is maintained by the county assessor or the county, to provide notice in a newspaper of general circulation in the county, which:

1. Indicates that the list and valuations have been made available to the public on the Internet website maintained by the county assessor or the county;
2. Provides the address of the internet website on which the list and valuations may be accessed or retrieved; and
3. Is displayed in the format used for advertisements and printed in at least 10-point bold type or font.

NOW, THEREFORE, be it resolved by the Board of County Commissioners of Storey County as follows: That the County Assessor prepare a list of all taxpayers on the secured roll in the County and the total valuation of property on which they severally pay taxes and cause such list and valuations to be printed and delivered by the County Assessor or mailed by her on or before January 1, 2024, to each taxpayer in the County; or published once on or before January 1, 2024, in a newspaper of general circulation in the County; or published on the Storey County website; and to cause such list and valuations to be posted in a public area of the public libraries and branch libraries located in Storey County, to be posted at the office of the County Assessor; and if the list and valuations are printed and delivered or mailed or published in a newspaper of general circulation, to be published on the Storey County website. The Assessor is further directed to make not fewer than 10 copies of such list and valuations available to the public free of charge during normal business hours at the main administrative office of the County, i.e., the Storey County Courthouse located at 26 S. B Street in Virginia City, Nevada for at least 60 days after the date on which the list and valuations are made available to the public; and if the county assessor

publishes the list and valuations on the Storey County website, to provide notice in a newspaper of general circulation in the County, on or before January 1, 2024 which:

1. Indicates that the list and valuations have been made available to the public on the Internet website maintained by Storey County;
2. Provides the address of the Internet website on which the list and valuations may be accessed or retrieved; and
3. Is displayed in the format used for advertisements and printed in at least 10-point bold type or font.

ADOPTED this ____ day of _____ 2023

BOARD OF COMMISSIONERS OF STOREY COUNTY

By: _ _ _ _ _

Jay Carmona, Chairman

ATTEST:

Jim Hindle, County Clerk/Treasurer

NRS 361.300 Time and manner for completion of secured tax roll; list of taxpayers and valuations; notice of assessed valuation.

1. On or before January 1 of each year, the county assessor shall transmit to the county clerk, post at the front door of the courthouse and publish in a newspaper published in the county a notice to the effect that the secured tax roll is completed and open for inspection by interested persons of the county. A notice issued pursuant to this subsection must include a statement that the secured tax roll is available for inspection as specified in paragraph (b) of subsection 3. The statement published in the newspaper must be displayed in the format used for advertisements and printed in at least 10-point bold type or font.

2. If the county assessor fails to complete the assessment roll in the manner and at the time specified in this section, the board of county commissioners shall not allow the county assessor a salary or other compensation for any day after January 1 during which the roll is not completed, unless excused by the board of county commissioners.

3. Except as otherwise provided in subsection 4, each board of county commissioners shall by resolution, before December 1 of any fiscal year in which assessment is made, require the county assessor to prepare a list of all the taxpayers on the secured roll in the county and the total valuation of property on which they severally pay taxes and direct the county assessor:

(a) To cause, on or before January 1 of the fiscal year in which assessment is made, such list and valuations to be:

- (1) Printed and delivered by the county assessor or mailed by him or her to each taxpayer in the county;
- (2) Published once in a newspaper of general circulation in the county; or

(3) Published on an Internet website that is maintained by the county assessor or, if the county assessor does not maintain an Internet website, on an Internet website that is maintained by the county; and

(b) To cause, on or before January 1 of the fiscal year in which assessment is made, such list and valuations to be:

- (1) Posted in a public area of the public libraries and branch libraries located in the county;
- (2) Posted at the office of the county assessor; and

(3) If the list and valuations are printed and delivered or mailed pursuant to subparagraph (1) of paragraph (a) or published in a newspaper of general circulation pursuant to subparagraph (2) of paragraph (a), published on an Internet website that is maintained by the county assessor or, if the county assessor does not maintain an Internet website, on an Internet website that is maintained by the county;

(c) In a county whose population is less than 100,000, to make not fewer than 10 copies of such list and valuations available to the public free of charge during normal business hours at the main administrative office of the county for at least 60 days after the date on which the list and valuations are made available to the public pursuant to paragraph (b); and

(d) If the county assessor publishes the list and valuations on an Internet website that is maintained by the county assessor or the county pursuant to subparagraph (3) of paragraph (a), to provide notice in a newspaper of general circulation in the county, on or before January 1 of the fiscal year in which assessment is made, which:

(1) Indicates that the list and valuations have been made available to the public on the Internet website maintained by the county assessor or the county;

(2) Provides the address of the Internet website on which the list and valuations may be accessed or retrieved; and

(3) Is displayed in the format used for advertisements and printed in at least 10-point bold type or font.

4. A board of county commissioners may, in the resolution required by subsection 3, authorize the county assessor not to deliver or mail the list, as provided in subparagraph (1) of paragraph (a) of subsection 3, to taxpayers whose property is assessed at \$1,000 or less and direct the county assessor to mail to each such taxpayer a statement of the amount of his or her assessment. Failure by a taxpayer to receive such a mailed statement does not invalidate any assessment.

5. The several boards of county commissioners in the State may allow the bill contracted with their approval by the county assessor under this section on a claim to be allowed and paid as are other claims against the county.

6. Whenever:

(a) Any property on the secured tax roll is appraised or reappraised pursuant to [NRS 361.260](#), the county assessor shall, on or before December 18 of the fiscal year in which the appraisal or reappraisal is made, deliver or mail to each owner of such property a written notice stating the assessed valuation of the property as determined from the appraisal or reappraisal. A notice issued pursuant to this paragraph must include a statement that the secured tax roll will be available for inspection on or before January 1 as specified in paragraph (b) of subsection 3 and subparagraph (3) of paragraph (a) of subsection 3, if applicable, and must specify the locations at which the secured tax roll will be available for inspection, including the address of the Internet website on which the secured tax roll may be accessed or retrieved. If such a statement is published in a newspaper, the statement must be displayed in the format used for advertisements and printed in at least 10-point bold type or font.

(b) Any personal property billed on the unsecured tax roll is appraised or reappraised pursuant to [NRS 361.260](#), the delivery or mailing to the owner of such property of an individual tax bill or individual tax notice for the property shall be deemed to constitute adequate notice to the owner of the assessed valuation of the property as determined from the appraisal or reappraisal.

7. If the secured tax roll is changed pursuant to [NRS 361.310](#), the county assessor shall mail an amended notice of assessed valuation to each affected taxpayer. The notice must include:

(a) The information set forth in subsection 6 for the new assessed valuation.

(b) The dates for appealing the new assessed valuation.

8. Failure by the taxpayer to receive a notice required by this section does not invalidate the appraisal or reappraisal.

9. In addition to complying with subsections 6 and 7, a county assessor shall:

(a) Provide without charge a copy of a notice of assessed valuation to the owner of the property upon request.

(b) Post the information included in a notice of assessed valuation on a website or other Internet site, if any, that is operated or administered by or on behalf of the county or the county assessor.

[13:344:1953; A [1955, 327](#)) - (NRS A [1967, 957; 1975, 67; 1981, 791; 1991, 1425; 2003, 2762; 2005, 1506; 2009, 1218; 2011, 3522; 2015, 2711, 2714](#))



Board of Storey County Commissioners Agenda Action Report

Meeting date: 11/21/2023 10:00 AM -
BOCC Meeting

Estimate of Time Required: 1

Agenda Item Type: Consent Agenda

- **Title:** Personal Exemption Corrections.
- **Recommended motion:** Approval.
- **Prepared by:** Jana Seddon

Department: **Contact Number:** 775-847-0961

- **Staff Summary:** Exemption forms were turned in on time, however Assessor Staff input the exemption incorrectly so it was not applied to the parcels.
- **Supporting Materials:** See attached
- **Fiscal Impact:**
- **Legal review required:** False
- **Reviewed by:**

_____ Department Head

Department Name:

_____ County Manager

Other Agency Review: _____

- **Board Action:**

☐ Approved	☐ Approved with Modification
☐ Denied	☐ Continued

Jana Seddon

Storey County Assessor

Storey County Courthouse
26 South B Street
P.O. Box 494
Virginia City, NV 89440

(775) 847-0961 Phone
(775) 847-0904 Fax
Assessor@storeycounty.org

November 8, 2023

Memo to: Storey County Commissioners

Re: **Tax Bill Corrections**

Exemption Corrections due to incorrect input

003-393-02

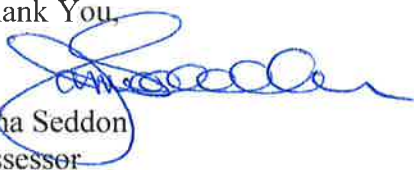
003-306-01

Below are parcels that had timely filed personal exemptions, but were incorrectly input in the system by Assessor Staff.

	Original	Exemption \$ Amt	Adjusted bill
Robert Fletcher 3-306-01	\$1859.02	(\$115.59)	\$1743.43
Heather Adams 3-393-02	\$5928.12	(\$1155.88)	\$4772.24

Please approve this correction and advise the Treasurer and/or Assessor to make the change and issue an amended bill or refund as necessary.

Thank You,



Jana Seddon
Assessor
Storey County

Tax Year 2023 (2023 - 2024)

Storey County

Property Key: 003-393-02

Source: Secured

Type: Personal Exemption Change

Owner: ADAMS, HEATHER

4610 TYBO ROAD

RENO, NV 89521

Correction Reason:

BOE Case:

Legal Description: PARCEL MAP ID :

LOT : 461 BLOCK :

10'S-461

TOWN : HIGHLAND RANCHES

The nature of such error and the cause which produced the error are as follows:

Personal Exemption Change

2023 Correction

	Assessed Value	Taxes
Starting Assessed Value and Balance Due	245,680	\$5,928.12
+ Value Change Due to Changes in Building Value	0	N/A
+ Value Change Due to Changes in Land Value	0	N/A
+ Value Change Due to Changes in Pers.Prop Value	0	N/A
+ Tax Change Due to Changes in Special Assessments	N/A	\$0.00
+ Tax Change Due to Changes in Ad Valorem	N/A	(\$1,155.88)
+ Value/Tax Change Due to Changes in Recoupment	N/A	N/A
+ Value Change Due to Changes in Abatements	N/A	\$0.00
+ Value Change Due to Changes in Exemptions	0	\$0.00
Total Change in New Value	0	N/A
Total Change in Value/Taxes	0	(\$1,155.88)
Final Corrected Value and Balance Due	245,680	\$4,772.24
Total Payments Made Before Correction	N/A	\$2,964.06
Refund	N/A	\$0.00
Balance Due	N/A	\$1,808.18

This certificate is a preview. Actual values are calculated at the time this correction is posted.

Assessor's Signature

Treasurer's Signature

Board Chair's Signature

Change Notes: Exemption was returned in a timely manner, but was input in the incorrect year by the Assessor Office. Should have been applied to the 2023-24 tax year. js

Tax Year 2023 (2023 - 2024)

Storey County

Property Key: 003-306-01

Source: Secured

Type: Personal Exemption Change

Owner: FLETCHER, ROBERT JOHN
304 WAGON WHEEL WAY
DAYTON, NV 89403

Correction Reason: CORRECTION

BOE Case:

Legal Description: PARCEL MAP ID :
LOT : 15 BLOCK : U.7
MTE U.7- 15
TOWN : MARK TWAIN ESTATES

The nature of such error and the cause which produced the error are as follows:

Personal Exemption Change

2023 Correction

	Assessed Value	Taxes
Starting Assessed Value and Balance Due	65,774	\$1,859.02
+ Value Change Due to Changes in Building Value	0	N/A
+ Value Change Due to Changes in Land Value	0	N/A
+ Value Change Due to Changes in Pers.Prop Value	0	N/A
+ Tax Change Due to Changes in Special Assessments	N/A	\$0.00
+ Tax Change Due to Changes in Ad Valorem	N/A	(\$115.59)
+ Value/Tax Change Due to Changes in Recoupment	N/A	N/A
+ Value Change Due to Changes in Abatements	N/A	\$0.00
+ Value Change Due to Changes in Exemptions	0	\$0.00
Total Change in New Value	0	N/A
Total Change in Value/Taxes	0	(\$115.59)
Final Corrected Value and Balance Due	65,774	\$1,743.43
Total Payments Made Before Correction	N/A	\$929.50
Refund	N/A	\$0.00
Balance Due	N/A	\$813.93

This certificate is a preview. Actual values are calculated at the time this correction is posted.

Assessor's Signature

Treasurer's Signature

Board Chair's Signature

Change Notes: Exemption was timely filed but parcel number was not entered in by Assessor staff.
Therefore exemption was not applied to parcel. js



Board of Storey County Commissioners Agenda Action Report

**Meeting date: 11/21/2023 10:00 AM -
BOCC Meeting**

Estimate of Time Required: 5 min

Agenda Item Type: Discussion/Possible Action

- **Title:** Public Hearing for second Reading of Bill 136, Ordinance 23-324, an ordinance amending provisions of Storey County Code Title 17 to allow for changeable copy or variable message signs to be installed on public zoning district land and providing for other matters properly related thereto.
- **Recommended motion:** Continue to next available Board of Storey County Commissioners meeting to be tentatively held on December 5, 2023.
- **Prepared by:** Kathy Canfield

Department: **Contact Number:** 775-847-1144

- **Staff Summary:** Continue File No. 2023-040.
- **Supporting Materials:** See attached
- **Fiscal Impact:**
- **Legal review required:** False
- **Reviewed by:**

_____ Department Head

Department Name:

_____ County Manager

Other Agency Review: _____

- **Board Action:**

☐ Approved	☐ Approved with Modification
☐ Denied	☐ Continued



Board of Storey County Commissioners

Agenda Action Report

**Meeting date: 11/21/2023 10:00 AM -
BOCC Meeting**

Estimate of Time Required: 10 min

Agenda Item Type: Discussion/Possible Action

- **Title:** County staff has reviewed the responses to the Requests for Qualifications (RFQ) for the Construction Management portion of the Lockwood Senior Center Rebuild Project. County staff intends to pursue cost and contract negotiations with the selected respondent, Construction Materials Engineers, Inc.
- **Recommended motion:** For Discussion Only - No Motion Needed
- **Prepared by:** Honey Coughlin

Department: **Contact Number:** 7755463183

- **Staff Summary:** Four responses to the RFQ solicitation were received. The Review Committee was comprised of Stacy York, Jason Wierzbicki, Mike Northan, and Honey Coughlin.
- **Supporting Materials:** See attached
- **Fiscal Impact:**
- **Legal review required:** False
- **Reviewed by:**

_____ Department Head

Department Name: _____

_____ County Manager

Other Agency Review: _____

- **Board Action:**

☐ Approved	☐ Approved with Modification
☐ Denied	☐ Continued



Board of Storey County Commissioners Agenda Action Report

**Meeting date: 11/21/2023 10:00 AM -
BOCC Meeting**

Estimate of Time Required: 10 min

Agenda Item Type: Discussion/Possible Action

- **Title:** Consideration and possible approval for County Staff to apply for grant funding in the amount of \$700,000 for ADA compliant restroom facilities for the Virginia City Fairgrounds through Conserve Nevada's Nevada Conservation and Recreation fund, with a 20% match of \$140,000 being required of the county.
- **Recommended motion:** I, _(commissioner), move to approve County Staff to apply for grant funding in the amount of \$700,000 for ADA compliant restroom facilities for the Virginia City Fairgrounds through Conserve Nevada's Nevada Conservation and Recreation fund, with a 20% match of \$140,000 being required of the county.
- **Prepared by:** Honey Coughlin

Department:

Contact Number: 7755463183

- **Staff Summary:** Due to the rapidly increasing cost of goods and services, the ADA restrooms for the Fairgrounds had to be removed from the scope of work in the current Fairgrounds Upgrade grant funded project. The current grant funded project, FY23 Appropriations Request award, includes the installation of water and electric to the Fairgrounds both of which are to be installed with the consideration of the future build of the ADA compliant restrooms. The application submittal date for this Conserve Nevada grant is December 28, 2023. Award announcements will be made in February 2024. If awarded, the project will begin in FY24/25 and will be budgeted accordingly.
- **Supporting Materials:** See attached
- **Fiscal Impact:**
- **Legal review required:** False
- **Reviewed by:**

_____ Department Head

Department Name:

_____ County Manager

Other Agency Review: _____

- **Board Action:**

☐ Approved	☐ Approved with Modification
☐ Denied	☐ Continued



Board of Storey County Commissioners

Agenda Action Report

**Meeting date: 11/21/2023 10:00 AM -
BOCC Meeting**

Estimate of Time Required: 15 min.

Agenda Item Type: Discussion/Possible Action

- **Title:** Consideration and possible approval of Resolution No. 23-714, a resolution setting grade and salary range of employees fixed by ordinance or resolution per NRS 245.045 for appointed Storey County officials for the 2023-24 fiscal year and superseding prior year action by resolution for appointed Storey County employees with the addition of Undersheriff at grade 148 and reallocation of Assistant Sheriff from grade 148 to grade 144.
- **Recommended motion:** I (commissioner) move to approve Resolution No. 23-714, a resolution setting grade and salary range of employees fixed by ordinance or resolution per NRS 245.045 for appointed Storey County officials for the 2023-24 fiscal year and superseding prior year action by resolution for appointed Storey County employees with the addition of Undersheriff at grade 148 and reallocation of Assistant Sheriff from grade 148 to grade 144.
- **Prepared by:** Brandie Lopez & Jeanne Greene

Department:

Contact Number: 775.847.0968

- **Staff Summary:** The Sheriff's Office is undergoing a reorganization. They are requesting the creation of an Undersheriff at grade 148 which was the grade of the previous Assistant Sheriff. We are further requesting the reallocation of the grade level for Assistant Sheriff to go from grade 148 down to grade 144. The two Assistant Sheriff's will report to the Undersheriff thus a four-grade differential is appropriate.
- **Supporting Materials:** See attached
- **Fiscal Impact:** Funds available.
- **Legal review required:** TRUE
- **Reviewed by:**

_____ Department Head

Department Name:

_____ County Manager

Other Agency Review: _____

- **Board Action:**

☐ Approved	☐ Approved with Modification
☐ Denied	☐ Continued

RESOLUTION NO. 23-714

A RESOLUTION SETTING SALARIES OF EMPLOYEES FIXED BY ORDINANCE OR RESOLUTION PER NRS 245.045 FOR APPOINTED OFFICIALS.

BE IT HEREBY RESOLVED BY THE STOREY COUNTY BOARD OF COUNTY COMMISSIONERS, STOREY COUNTY, NEVADA:

WHEREAS, for the purposes of NRS 245.045, the Storey County Board of County Commissioners has authority to establish the salaries of all appointed and non-represented County employees by the enactment of a resolution.

WHEREAS, the salaries of all appointed officials and non-represented county employees, are consistently to be derived from a similar step and grade range salary system shown in the General Salary Schedule A for appointed officials and non-represented employees of the county and General Salary Schedule B for intermittent/less than parttime employees of the county.

WHEREAS, the General Salary Schedule step and grade ranges (Schedules A and B) will be consistent with the AFSCME general employees salary schedule and will be adjusted accordingly on a year-by-year basis to account for cost-of-living and to maintain consistency in the county's classification plan.

WHEREAS, the salary grade range of appointed officials and non-represented employees shall be as follows for the 2023-24 fiscal period:

Position	Salary Grade
Administrative Assistant I	Grade 110
Administrative Assistant II	Grade 116
Administrative Assistant III	Grade 119
Administrative Officer	Grade 140
Assistant Sheriff	Grade 148 -144
Automotive/Equipment Manager	Grade 133
Bailiff/Court Services Officer	Grade 124
Buildings and Grounds Manager	Grade 133
Building Official	Grade 144
Business Development Officer	Grade 140
Chief Deputy District Attorney	Grade 153
Community Development Director	Grade 152
Community Services Coordinator	Grade 130
Comptroller	Grade 154
Corrections Officer	Grade 117
County Manager	Grade 161
Culinary Coordinator	Grade 119
Cyber Security Officer	Grade 133

Deputy District Attorney	Grade 152
Dispatch Manager	Grade 140
Emergency Management Director	Grade 144
Tourism and Event Manager	Grade 135
Event and Site Manager	Grade 124
Grants Manager	Grade 135
HR Director	Grade 144
HR Generalist	Grade 124
Information Technology Director	Grade 152
Information Technology Officer	Grade 140
Kitchen Aide	Grade 108
Management Analyst	Grade 131
Meals on Wheels Coordinator	Grade 110
Planning Manager	Grade 144
Public Works Director	Grade 152
Roads Manager	Grade 133
Senior Center Site Manager	Grade 119
Senior Services Director	Grade 144
Tourism Director	Grade 152
Undersheriff	Grade 148

WHEREAS, the salary grade and step range of casual intermittent less-than part-time positions in the General Salary Schedule B shall be as follows for the 2023-24 fiscal period:

IPT Administrative Assistant I	Grade 110
IPT Administrative Assistant II	Grade 116
IPT Evidence Custodian	Grade 115
IPT Facilities Maintenance Worker	Grade 110
IPT Homemaker	Grade 102
IPT Inmate Work Crew Coordinator	Grade 117
IPT Lifeguard	Grade 100
IPT Maintenance Worker/Heavy Equipment Operator	Grade 118
IPT Park Maintenance Worker	Grade 105
IPT Pool Maintenance Worker	Grade 110
IPT Pool Supervisor	Grade 108
IPT Program Coordinator (Senior Services)	Grade 104
IPT Road Worker	Grade 110
IPT Volunteer Coordinator (Sheriff Office)	Grade 117
IPT Tourism Assistant	Grade 110
IPT Tourism Transportation Driver	Grade 110
IPT Transportation Driver	Grade 102
IPT Visitor Liaison	Grade 110

WHEREAS, the salary grade and step range of casual, intermittent, less-than part-time Deputy Sheriff positions shall be as outlined in Appendix A of the Storey County Sheriff's Office Employees' Association/Nevada Association of Police and Sheriff's Officers (NAPSO) for the 2023-24 fiscal period.

WHEREAS, the flat-rate salaries for the positions below shall be set by the Storey County Board of Commissioners as follows:

Government Affairs Director	\$30,000 (salary split 50/50 with SCSD)
Justice of the Peace	\$ 89,500

WHEREAS, salaries are set by the Nevada Legislature and County Commissioners for elected positions as follows:

Assessor	\$71,361
Commissioners	\$30,806.31
Clerk/Treasurer	\$71,361
District Attorney	\$122,678
Recorder	\$71,361
Sheriff	\$96,937

WHEREAS, if there is a PERS increase, said increase will be shared equally between Storey County and the employee in accordance with NRS 286.421 (3) (a) (1) and will be so reflected on Salary Schedule A. Salary Schedule B and casual, intermittent, less than part-time Deputy Sheriffs will not be impacted by any changes in PERS contributions.

NOW, THEREFORE BE IT RESOLVED BY THE STOREY COUNTY BOARD OF COUNTY COMMISSIONERS, by unanimous vote, to adopt Resolution 23-___ providing for the setting of salaries for the appointed officials and non-represented employees.

This resolution shall be effective on the 21st day of November 2023.

PROPOSED AND ADOPTED this 21st day of November 2023.

THOSE VOTING AYE: _____

THOSE VOTING NAY: _____

STOREY COUNTY

BOARD OF COUNTY COMMISSIONERS: _____

Jay Carmona, Chairman

ATTEST:

CLERK TO THE BOARD



Board of Storey County Commissioners Agenda Action Report

**Meeting date: 11/21/2023 10:00 AM -
BOCC Meeting**

Estimate of Time Required: 10 min

Agenda Item Type: Discussion/Possible Action

- **Title:** Consideration and possible approval for County Staff to proceed with a Letter of Intent to Apply for a Principal Forgiveness Loan through the Nevada Division of Environmental Protection (NDEP) for Phase 1 of the Lead Siphon Transmission Replacement Project in the amount of \$2,504,666.16.
- **Recommended motion:** I, _(commissioner), move for the approval of County Staff to proceed with a Letter of Intent to Apply for a Principal Forgiveness Loan through the Nevada Division of Environmental Protection (NDEP) for Phase 1 of the Lead Siphon Transmission Replacement Project in the amount of \$2,504,666.16.
- **Prepared by:** Honey Coughlin

Department: **Contact Number:** 7755463183

- **Staff Summary:** Board of County Commissioners' approval is required for the application process. County staff has been working with the NDEP and DOWL Engineering to complete the Letter of Intent to Apply requirements which are due December 1, 2023, to be considered for award.
- **Supporting Materials:** See attached
- **Fiscal Impact:**
- **Legal review required:** False
- **Reviewed by:**

_____ Department Head

Department Name:

_____ County Manager

Other Agency Review: _____

- **Board Action:**

☐ Approved	☐ Approved with Modification
☐ Denied	☐ Continued



Board of Storey County Commissioners

Agenda Action Report

**Meeting date: 11/21/2023 10:00 AM -
BOCC Meeting**

Estimate of Time Required: 15 min.

Agenda Item Type: Discussion/Possible Action

- **Title:** Consideration and approval of appointing a county resident to serve as a voting member on the Comstock Cemetery Foundation Board of Directors as the Storey County representative.
- **Recommended motion:** I (commissioner) motion to appoint Caitlin Best to serve as a voting member on the Comstock Cemetery Foundation Board of Directors as the Storey County representative.
- **Prepared by:** Austin Osborne

Department:

Contact Number: 775.847.0968

- **Staff Summary:** Storey County posted countywide a notice seeking letters of interest to serve as a voting member on the Comstock Cemetery Foundation (CCF) representing Storey County. An interview of an applicant expressing interest was conducted, and the applicant was found to be highly knowledgeable and interested in the historical, cultural, and modern elements of the Silver Terrace Cemeteries, Gold Hill Cemetery, and other cemeteries and related matters in the county.
- Storey County and the Comstock Cemetery Foundation (CCF) operate the Silver Terrace Cemeteries and other listed cemeteries in Storey County under a Memorandum of Understanding (MOU). The MOU and the cemetery foundation bylaws specify that the board of directors includes one voting member from Storey County.
- Storey County and other entities are responsible for performing modern burials and maintenance at the Silver Terrace Cemeteries in Virginia City and the Gold Hill Cemetery in Gold Hill (the cemeteries). The Silver Terrace Cemeteries is subdivided into several independent sub-units including, but not limited to, the Freemasons, Odd Fellows, Virginia City Firemen, Catholic, and Storey County cemeteries. They are each maintained by their respective fraternal, religious, and civic organizations with assistance and coordination by the Comstock Cemetery Foundation (CCF), a non-profit 501(c)(3) managed by the CCF Board of Directors.
- The MOU will facilitate a structured relationship between Storey County and the CCF for appropriate accounting and administration, records management, funding, coordinated oversight and strategic planning, site security, and risk management as related to modern burials, funding, administration, historic preservation, and enhancement of the cemeteries within appropriate jurisdictional allowances.

- **Supporting Materials:** See attached

- **Fiscal Impact:** None

- **Legal review required:** TRUE

- **Reviewed by:**

_____ Department Head

Department Name:

_____ County Manager

Other Agency Review: _____

- **Board Action:**

☐ Approved	☐ Approved with Modification
☐ Denied	☐ Continued

CAITLIN BEST

2499 Cartwright Rd., Reno, NV 89521
(775) 233-3829 | mrsdbest@gmail.com

September 20th, 2023

COMSTOCK CEMETERY FOUNDATION

Storey County Human Resources Office
Storey County Courthouse, 26 South "B" Street (P.O. Box 176)
Virginia City, NV 89440



To Whom It May Concern,

As a resident of the Storey County community who is fascinated with and enamored by the deep cultural significance and preservation of cemeteries, the posting for the appointment to the Comstock Cemetery Foundation Board truly sparked my interest.

Through my formal, full-time role I have 10 years of experience working with non-profit organizations on fundraising, public grants, and neighborhood placemaking and revitalization projects (twice with "Art Belongs Here" for the City of Reno.) I'm familiar with the intricacies of working within diverse communities, and comfortable and proficient at building and sustaining professional relationships.

I believe that historical cemeteries are the biographies of a community - and those governed by the CCF retain an immense significance locally. They are unique in architecture, landscape, and memories, and restoring, preserving, and maintaining them is paramount. I'm enthusiastic about being involved, and would love to be considered to share my passion and skills with the board.

Respectfully,

Caitlin Best

STOREY COUNTY PUBLIC NOTICE

**Appointment of Storey County Representative
to the
Comstock Cemetery Foundation Board**

Position: The Board of Storey County Commissioners seeks a qualified member of the county to serve on the Comstock Cemetery Foundation (CCF) Board of Directors as the Storey County Representative for a 2-year term.

Responsibilities: The CCF is a 501(c)(3) non-profit organization with jurisdiction over organizational, religious, and county cemeteries located within the boundaries of the Virginia City National Historic Landmark. Under direction of the 7-member board, the CCF is managed by an executive director and may employ staff and/or volunteers.

The purpose of the CCF is to preserve, protect, and interpret the historic cemeteries located within the Virginia City National Historic Landmark for the benefit of the public.

Under a Memorandum of Understanding (MOU) between the CCF and Storey County, the CCF board is also responsible for oversight and direction regarding modern burials in the county portions of the cemeteries. The MOU and CCF Bylaws are enclosed herewith. The cemetery board is responsible for providing oversight and direction regarding historic resources preservation; improving cemetery facilities and infrastructure; securing grants, donations, and endowments; procedures for modern burials; and overseeing management and fiscal practices.

Board meetings occur four times per year at 6:30 p.m. on days designated by the board but occurring on the first Wednesday of the determined month. Board and officer duties and terms are specified in the attached CCF Bylaws.

Preferred Qualifications: The applicant must be a resident of Storey County. The applicant must demonstrate interest in preservation, improvement, and operation of cemeteries or similar resources of cultural significance, and as a board member ensuring the fulfillment of the responsibilities referenced above. The applicant must demonstrate an ability to sustain harmonious working relationships with other board members, the public, and represent the best interest and professionalism of Storey County. The new appointee must successfully pass a criminal background investigation.

Compensation: This is a volunteer non-paid position representing Storey County, Nevada.

Letter of Interest: All interested parties must submit a letter of interest showing qualifications and reasons for applying for the position. An official job application is not needed.

Closing Date: Letters of interest (originals) must be received by the Storey County Human Resources Office, Storey County Courthouse, 26 South "B" Street (P.O. Box 176), Virginia City, NV 89440 by **5:00 p.m., Monday, October 2, 2023.** Please contact 775.847.0968 for further questions.

Tentative Appointment Date

The Board of County Commissioners will consider letters of interest following receipt of letters and applicant reviews. Applicants will be notified well ahead of the meeting where the board may consider applicants.

Storey County is an Equal Opportunity Employer. Posting dates: 09/06/23 – 10/02/23.



Board of Storey County Fire Commissioners Agenda Action Report

Meeting date: 11/21/2023 10:00 AM -
BOCC Meeting

Estimate of Time Required: 10 Minutes

Agenda Item Type: Discussion/Possible Action

- **Title:** Consideration and discussion regarding the Storey County Fire Protection District 2024-2029 Capital and Operational improvement plan.
- **Recommended motion:** I (Fire Commissioner) move to direct the Fire Chief to make the following recommended changes to the SCFPD 2024-2029 Capital and Operational Improvement plan.
- **Prepared by:** Jeremy Loncar

Department: **Contact Number:** 775-847-0954

- **Staff Summary:** In preparation for the upcoming budget cycle, it is important that the capital and operational plan be revisited for annual updates and to ensure fiscal and operational alignment with the district's growth and funding.
- **Supporting Materials:** See attached
- **Fiscal Impact:** N/A
- **Legal review required:** False
- **Reviewed by:**

_____ Department Head

Department Name: _____

_____ County Manager

Other Agency Review: _____

- **Board Action:**

☐ Approved	☐ Approved with Modification
☐ Denied	☐ Continued



STOREY COUNTY FIRE PROTECTION DISTRICT

Capital Improvement 2024-2029

Apparatus / Heavy Equipment	2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	Notes
Type III Engine at FS #72	\$0						Purchased 2023 - (District Funds)
Type III Engine at FS #74 (Replacement)		\$520,000					
Type III Engine at FS #75 (Replacement)			\$525,000				
Type III Engine at FS #77 (New)				\$550,000			
Type I Engine at FS #74 (Replacement)				\$1,000,000			
Type I Engine at FS #75 (Replacement/Industrial spec)					\$1,000,000		
Type I Engine at FS #77 (New)			\$850,000				
Type I Engine at FS #71 (Replacement)		\$850,000					
Fire Chiefs Vehicle (Replacement)				\$75,000			
Fire Marshal Vehicle (Replacement)		\$72,000					
Fuels Management Vehicle (Replacement)				\$80,000			
Prevention Vehicle (Inspector Replacement)		\$70,000			\$75,000		
Training Officer Vehicle (New)			\$70,000				
Battalion Chief Vehicle (3 year replacement plan)		\$85,000			\$90,000		
Assistant Chief Vehicle	\$0						Purchased 2023 - (District Funds)
Haz Mat Unit #75						\$1,500,000	
Ambulance Replacement (2-year replacement plan)		\$370,000		\$380,000		\$390,000	
New Ambulance at FS #77 (New)			\$375,000				
75' Ladder truck at FS #71 (Replacement)		\$1,250,000					
Mechanics Service Truck			\$135,000	\$145,000			
Mechanics Shop Tools/Equip.			\$35,000	\$25,000			
Plow Truck for Station #72 (New)			\$65,000				
Repaint / Refurbish Squad 75			\$80,000				

Operational Improvement

Staffing		2023/2024	2024/2025	2025/2026	2026/2027	2027/2028	2028/2029	Notes
Heavy Equipment Operator			\$150,000					NVE Agreement
Firefighter/AEMT FS# 73				\$170,000				FEMA SAFER Grant
Firefighter/AEMT FS# 73				\$170,000				FEMA SAFER Grant
Firefighter/AEMT FS# 73				\$170,000				FEMA SAFER Grant
Firefighter/Medic FS# 72						\$175,000		Will apply for SAFER Grant
Firefighter/Medic FS# 72						\$175,000		Will apply for SAFER Grant
Firefighter/Medic FS# 72						\$175,000		Will apply for SAFER Grant
Firefighter/Medic FS#73				\$190,000				FEMA SAFER Grant
Firefighter/Medic FS#73				\$190,000				FEMA SAFER Grant
Firefighter/Medic FS#73				\$190,000				FEMA SAFER Grant
Firefighter/AEMT FS#71			\$170,000					Will apply for SAFER Grant
Firefighter/AEMT FS#71			\$170,000					Will apply for SAFER Grant
Firefighter/AEMT FS#71			\$170,000					Will apply for SAFER Grant
Battalion Chief (North Districts)							\$235,000	
Battalion Chief (North Districts)							\$235,000	
Battalion Chief (North Districts)							\$235,000	
Firefighter/AEMT FS# 74					\$175,000			Will apply for SAFER Grant
Firefighter/AEMT FS# 74					\$175,000			Will apply for SAFER Grant
Firefighter/AEMT FS# 74					\$175,000			Will apply for SAFER Grant
Captain FS# 74				\$200,000				
Captain FS# 74				\$200,000				
Captain FS# 74				\$200,000				
Fire-Inspector #1		\$0						Filled 2023
Captain FS#72						\$210,000		
Captain FS#72						\$210,000		
Captain FS#72						\$210,000		
Firefighter/AEMT FS# 77					\$170,000			Will apply for SAFER Grant
Firefighter/AEMT FS# 77					\$170,000			Will apply for SAFER Grant
Firefighter/AEMT FS# 77					\$170,000			Will apply for SAFER Grant



Board of Storey County Fire Commissioners Agenda Action Report

**Meeting date: 11/21/2023 10:00 AM -
BOCC Meeting**

Estimate of Time Required: 5 minutes

Agenda Item Type: Discussion/Possible Action

- **Title:** Consideration and possible approval of the purchase of a command vehicle approved and ordered within the 2022/2023 budget and received within the 2023/2024 that is unbudgeted.
- **Recommended motion:** I (Fire Commissioner) move to approve the purchase of a command vehicle approved and ordered within the 2022/2023 budget and received within the 2023/2024 budget.
- **Prepared by:** Jeremy Loncar

Department: **Contact Number:** 775-847-0954

- **Staff Summary:** Under the 2022/2023 district budget, a command vehicle was approved and ordered within that budget cycle. Due to unforeseen delays with the vehicle, it arrived within October of the 2023/2024 unbudgeted year. Funds dedicated to this purchase are still available within the District Capital Projects fund.
- **Supporting Materials:** See attached
- **Fiscal Impact:** N/A
- **Legal review required:** False
- **Reviewed by:**

_____ Department Head

Department Name:

_____ County Manager

Other Agency Review: _____

- **Board Action:**

☐ Approved	☐ Approved with Modification
☐ Denied	☐ Continued

280-280-64010-000

Fiscal

Prints the current window

Balance: 31,428.96

Pending: 0.00

FIRE CAPITAL PROJECTS

7/1/2022 - 6/30/2023

Summary

General

Segmentation

Report Groups

Notes

Authorization

Budget

Summary

Detail

Period Distributions

Adjustments

Budget Notes

History

Detail

Period Activity

Fiscals

Journal Entries

Encumbrances

Reserves

History

Account

Documents

Description	Units	Price	Original Budget Amount
☒ Ambulance	1.00	250,000.00	250,000.00
Type 3 Brush	1.00	465,000.00	465,000.00
Air Ride on C	1.00	30,000.00	30,000.00
Fuel Pump re	0.25	79,275.00	19,818.75
Fuel Pump re	0.25	79,275.00	19,818.75
Assistant Fire	1.00	79,000.00	79,000.00

\$263,637.50

CORWIN BUICK GMC RENO

900 KIETZKE LN
RENO, NV 89502-2018
775-333-0000

RETAIL PURCHASE ORDER

CUST#: R128104

Deal #: 54649

Purchaser's Name(s): **STOREY COUNTY FIRE PROTECTION DISTRICT**

Date: 06/15/2023

Address: 145 N C ST PO BOX 603 PO BOX 603 VIRGINIA CITY, NV 89440-0435

County: **STOREY**

Telephone (1): 775-847-0958

Telephone (2): 775-847-0256

DOB:

E-mail: **JNEVIN@STOREYCOUNTY.ORG**

D.L./State I.D.#

Issuing State:

Exp. Date:

The above information has been requested so that we may verify your identity. By signing below, you represent that you are at least 18 years of age and have authority to enter into this Agreement. The Odometer Reading for the Vehicle you are purchasing is accurate unless indicated otherwise. Please refer to the Federal Mileage Statement for full disclosure.

YEAR 2024	MAKE GMC	MODEL SIERRA 3500	COLOR GXD	STOCK NO. 1166635
VIN/SERIAL NO. 1GT48TE79HF165635		ODOMETER READING ☐ Not Accurate 3	THE VEHICLE IS: ☒ NEW ☐ USED	
THIS VEHICLE IS BEING PURCHASED FOR: ☐ PERSONAL USE ☐ BUSINESS PURPOSES ☐ AGRICULTURAL USE		PRIOR USE DISCLOSURE: ☐ DEMONSTRATOR ☐ FACTORY OFFICIAL ☐ RENTAL ☐ OTHER		
WARRANTY STATEMENT			CASH PRICE OF VEHICLE	65135.00
Our Dealership is selling this Vehicle to you AS-IS. We make no representations, promises or warranties, express or implied, as to the merchantability of the Vehicle or whether the Vehicle is suitable or fit for the particular purpose intended, unless we have done so in this Retail Purchase Order or in a separate written agreement signed by us. However, if we make an express warranty in this Order or in a separate written agreement or, within 90 days after the date of this Order, we enter into a service contract with you that applies to the Vehicle, the exclusion of implied warranties set forth in this paragraph does not exclude any implied warranties that may exist with respect to the Vehicle during the term of the agreement in which the express warranty is made. Any warranties by a manufacturer or supplier other than our Dealership are theirs, not ours, and only such manufacturer or supplier shall be liable for performance under such warranties. We neither assume nor authorize any other person to assume for us any liability in connection with the sale of the Vehicle and the related goods and services. CONTRACTUAL DISCLOSURE STATEMENT (USED VEHICLES ONLY) The information you see on the window form for this Vehicle is part of this contract. Information on the window form overrides any contrary provisions in the contract of sale. Guía para compradores de vehículos usados. La información que ve en el formulario de la ventanilla para este vehículo forma parte del presente contrato. La información del formulario de la ventanilla deja sin efecto toda disposición en contrario contenida en el contrato de venta. ☐ We are providing a Used Vehicle Limited Warranty in connection with this transaction. Any implied warranties apply for the duration of the Limited Warranty.			OTHER GOODS/SERVICES	N/A
			TITLE FEE	28.25
				N/A
				N/A
				N/A
				N/A
			EMISSION INSPECTION FEE	N/A
			DOCUMENTARY FEES	N/A
			TAXABLE SELLING PRICE	65135.00
			SALES TAX	N/A
TRADE-IN VEHICLE INFORMATION			REGISTRATION FEE	N/A
Year:	Make:	Model:	Color:	
N/A	N/A	N/A	N/A	
VIN/Serial No:	Odometer Reading:			
N/A	☐ No: Accurate N/A			
Trade-In Allowance:	Balance Owed & Lienholder:			
N/A	N/A			
OTHER MATERIAL UNDERSTANDINGS AND INTEGRATED DOCUMENTS			TITLE FEE	N/A
☐ If box is marked, please see the Delivery Confirmation				
☐ If box is marked and you sign here, the Notice of Rescission Rights (Option to Cancel) is applicable to this Agreement. See Paragraph 14. X				
*The Deposit/Down Payment received from you is not refundable, except as set forth in this Retail Purchase Order. X _____ X _____			NET TRADE-IN ALLOWANCE	N/A
			TOTAL DUE	65163.25
			TRADE-IN SALES TAX CREDIT	N/A
			DEPOSIT/DOWN PAYMENT*	N/A
			REBATE	3000.00
			CASH DUE AT DELIVERY	N/A
			AMOUNT TO BE FINANCED (See Paragraphs 11 and 14)	62163.25

This Agreement and any documents which are part of this transaction or incorporated herein comprise the entire agreement affecting this Retail Purchase Order and no other agreement or understanding of any nature concerning the same has been made or entered into or will be recognized. I have read all of the terms and conditions of this Agreement, and agree to them as if they were printed above my signature. I further acknowledge receipt of a copy of this Agreement. This Agreement shall not become binding until signed and accepted by an Authorized Dealership Representative.

Purchaser

Accepted by Authorized Dealership Representative

Purchaser

DealerCAP

CATALOG #8883235
53379*1*33-FI

© 2015 CDK Global, LLC Nevada (01/18)

	Board of Storey County Commissioners Agenda Action Report	
Meeting date: 11/21/2023 10:00 AM - BOCC Meeting	Estimate of Time Required: 15 min.	
Agenda Item Type: Discussion/Possible Action		

- **Title:** Discussion and possible consideration of the board’s position responding to the Nevada Governor’s Office of Economic Development (GOED) requesting from Storey County a letter of acknowledgement regarding an application to GOED for Sales and Use Tax Abatement, Modified Business Tax Abatement, and Personal Property Tax Abatement for Arcadia Cold Reno, LLC. planned in Storey County. The tax abatements are subject to GOED approval per NRS 360 as a “standard partial abatement”.
- **Recommended motion:** I (commissioner) motion to direct county staff to submit a letter to GOED acknowledging an application for Sales and Use Tax Abatement, Modified Business Tax Abatement, and Personal Property Tax Abatement for Arcadia Cold Reno, LLC., planned in Storey County.
- **Prepared by:** Austin Osborne

Department: **Contact Number:** 775.847.0968

- **Staff Summary:** This item is subject to NRS 360 and the application to the Governor’s Office of Economic Development to receive standard GOED abatements for meeting certain full-time employment, investments, and capital equipment investments for logistic users. The abatement impacts are summarized in the attached letter from GOED. GOED will consider the abatements at its 11/20/23 meeting. See <https://goed.nv.gov/about/board/> for GOED board meeting materials.
- **Supporting Materials:** See attached
- **Fiscal Impact:** Yes
- **Legal review required:** TRUE
- **Reviewed by:**

_____ Department Head

Department Name:

_____ County Manager

Other Agency Review: _____

- **Board Action:**

☐ Approved	☐ Approved with Modification
☐ Denied	☐ Continued

Nevada Governor's Office of
ECONOMIC DEVELOPMENT

555 E. Washington Avenue, Suite 5400, Las Vegas, NV 89101
702.486.2700 • www.diversifynevada.com

10/20/2023

Mr. Austin Osborne
Storey County Manager
P.O. Box 176
Virginia City, NV 89440

RE: Sales & Use Tax, Modified Business Tax and Personal Property Tax Abatement
Arcadia Cold Reno, LLC

Dear Mr. Osborne,

This is a notification of and a request for a Letter of Acknowledgment regarding Arcadia Cold Reno's application to the Governor's Office of Economic Development for Sales & Use Tax Abatement, Modified Business Tax Abatement and Personal Property Tax Abatement for their operations planned in Storey County.

Please note: this company was initially approved at the September 12, 2023, GOED Board Meeting. However, the approved location was Washoe County, and the company plans to locate in Storey County.

This will result in at least 88 new full-time jobs for at least five years. The company is planning to invest \$2,819,105.40 in capital equipment. The ten-year total economic impact is estimated to be \$284,164,553 and new tax revenue generated over ten years is estimated to be \$10,778,378.

We are under a statutory requirement to notify affected local governments prior to the public hearing where the application will be considered (NRS 360.757). We estimate the total Sales & Use Tax Abatement to be \$176,617; the total Modified Business Tax to be \$91,742; and the Personal Property Tax Abatement is estimated to be \$65,801 over 10 years.

A board meeting is scheduled to review this application on November 20, 2023, at 1:00 p.m. If you'd like to provide feedback about this project, we encourage you to attend this meeting and come forward during public comment.

Thank you for your attention and consideration of this request. If you have any questions, please feel free to contact this office at your convenience.

Sincerely,



Melanie Sheldon
Senior Director of Business Development

	Board of Storey County Commissioners Agenda Action Report	
Meeting date: 11/21/2023 10:00 AM - BOCC Meeting	Estimate of Time Required: 30 min.	
Agenda Item Type: Discussion/Possible Action		

- **Title:** Consideration and possible approval to adopt the 2023 Storey County Water Resources Plan for south and central Storey County including Comstock (Virginia City, Gold Hill, Silver City, and American Flat), Highlands, and Mark Twain. This item is being considered in accordance with the 2016 Storey County Master Plan.
- **Recommended motion:** In accordance with the recommendation by staff, and in conformance with the 2016 Storey County Master Plan and NRS 278.0228, I (commissioner) motion to adopt the enclosed 2023 Storey County Water Resources Plan.
- **Prepared by:** Austin Osborne

Department: **Contact Number:** 775.847.0968

- **Staff Summary:** The 2023 Storey County Water Resources Master Plan was commissioned in accordance with the 2016 Storey County Master Plan, and by NRS 287.0228 as amended by Senate Bill 150 in the 2019 legislative session, requiring each governing body in the state to develop and maintain a water resources master plan by 2029.
-
- The enclosed draft water master plan focuses on south and central communities of Storey County including the Virginia City Highlands; Highland Ranches; Comstock areas including Virginia City, Gold Hill, Silver City (Lyon County), and American Flat; and Mark Twain. Because the county does not provide water service in other portions of the county, those areas are outside of
- the scope of this plan. In the future, it is anticipated that the Canyon General Improvement District in Lockwood and the TRI-General Improvement District in McCarran will complete similar water resource plans which can that be considered for potential incorporation into this county plan as appendices.
-
- The plan also references water resources planning and master plans in other parts of the county, including the Canyon General Improvement District in Lockwood and TRI-General Improvement District in McCarran.
-
- The plan reviews available water, water rights, and parcel data in developing findings and recommendations regarding current use demands, and future growth potential and limitations. The discussion includes groundwater and surface water resources, as

applicable, in each area, and a discussion about the Marlette Water System resources for the Comstock area and potentially other communities in the subject plan area.

-
- Background and data in the Storey County Water Resources Plan will be applied to negotiating with the State of Nevada a successor agreement to the Carson City Water Agreement governing distribution of Marlette System water resources to Storey County.

- **Supporting Materials:** See attached

- **Fiscal Impact:** None

- **Legal review required:** TRUE

- **Reviewed by:**

_____ Department Head

Department Name:

_____ County Manager

Other Agency Review: _____

- **Board Action:**

☐ Approved	☐ Approved with Modification
☐ Denied	☐ Continued

STOREY COUNTY WATER RESOURCES PLAN 2023





EXECUTIVE SUMMARY

This Water Resource Plan (Plan) is intended to provide Storey County (County) a document to guide future decisions related to the City's water supply, transmission and distribution system, and its ability to meet customer water demands into the future. This Plan also addresses the requirements of Nevada Revised Statute (NRS) Chapter 287.0228 as amended by Senate Bill (SB) No. 150, as part of the 2019 legislative session, to require governing bodies to develop and maintain a water resource plan. Per NRS 278.0228, the plan shall be in place by 2029 and then updated every 10 years. This executive summary provides a snapshot of the key findings from each chapter of the Plan. In total, the Plan is comprised of an Introduction and three topic-focused chapters.

INTRODUCTION

This WRP will focus on the populated areas of Virginia City, Gold Hill, American Flat, Virginia City Highlands, Highland Ranches, and Mark Twain Estates in the southern portion of the County (Plan Area). A map of the Plan Area is provided in Figure 2. The major water supply for this portion of the County is supplied by the Marlette Lake Water System (Marlette System). The Marlette System is owned and operated by the State of Nevada (State). The Marlette System provides water to the County Water System for customers in Virginia City, Gold Hill, and American Flat. The County also delivers water to residents of Silver City which is located in Lyon County. The remaining populated areas within the Plan Area are supplied by individual domestic wells.

Because the County does not provide water service in other portions of the County, those areas are outside the scope of this Plan. In the future, it is anticipated that the Canyon General Improvement District (Canyon GID) and the Tahoe Reno Industrial GID (TRI GID) will complete similar water resource plans which can be considered for potential incorporation into this Plan as Appendices.

CHAPTER 1: WATER DEMANDS, SOURCES, AND MANAGEMENT

Chapter 1 summarizes current County Water System water demands, water sources and water management strategies within the Plan Area. This Chapter presents an analysis of current water uses and demands to establish estimates and assumptions which will form the basis for the Plan.

The County Water System currently serves approximately 803 metered customers. The majority of customers (666) are within Virginia City, 51 within Gold Hill, and 86 are within Silver City. The County serves approximately 207 commercial customers and the remaining 596 are residential. For the period between 2018 through 2021 the County Water System consumed an average of 221 AF of water per year and a maximum of 234 AF in 2017 from the Marlette System.

Deliveries to the majority of customers in the County's systems are metered, however some unmetered connections still exist. For this reason, Farr West utilized the Water Treatment Plant (WTP) flow meter data as the basis for estimating system demands. Analysis of WTP water meter records from 2016 to 2019 yielded the following:

- Average Annual Demand (AAD) 210 AF
- Average Day Demand (ADD) 131 gpm
- Maximum Day Demand (MDD) 262 gpm
- Peak Hour Demand (PHD) 524 gpm

Considering the County System serves 803 customers, the average water use per connection is 0.26 AF per year which is equivalent to approximately 0.16 gpm per connection. This average connection demand was used to set existing water demands but was adjusted to 0.3 AF per new residential connection to estimate future water demands.

The County does not own the water rights to what is currently its only water supply. However, each of the water rights owned by the State defines the place of use as Virginia City, Gold Hill, Silver City, and Carson City. Prior to the State being able to deliver water to locations not currently included as the place of use, a temporary or permanent change to the water right would have to be approved by the office of the Nevada State Engineer (NSE). Finally, the contract between the County and the State for continued delivery of water from the Marlette System is currently being negotiated for renewal.

Historically, the State has implemented 10-year contracts with the County for delivery of Marlette System water according to the limits shown in Table ES-1.

Table ES-1: County Delivery Limits per 2002 Contract (Supply Contract, 2002)

Year	June, July, Aug., & Sept. Daily Peak Limit (gallons per day)	Remaining Month Daily Peak Limit (gallons per day)	Annual Use Limit (acre-feet)
2015	833,500	533,500	448.2
2016	846,500	546,500	456.1
2017	859,500	559,500	464.0
2018	872,500	572,500	471.9
2019	885,500	585,500	479.8
2020	898,500	598,500	487.7
2021	911,500	611,500	495.6

Water for the County Water System is delivered through a seven-mile inverted siphon which transitions to a pipeline. The County's ownership of the system begins at the location where the siphon crosses under Interstate 580 at Lakeview, north of Carson City. The transmission line discharges to the Five-Mile Reservoir and/or the Five-Mile Tank prior to filling the Bullion Tank next to the 1.2 MGD Water Treatment Plant where water is treated to potable standards and placed into the County Water System distribution system.

Key findings of this chapter include a review of water right ownership, water demand calculations, an estimate of unaccounted for water, a summary of water storage facilities, and domestic well pumpage estimates.

CHAPTER 2: SOURCE WATER RELIABILITY AND SYSTEM CAPACITY

Chapter 2 discusses the water system's current capacity, the quality and quantity of all water sources, a water source risk analysis, and drought mitigation strategies available to the County. Recent water use in the Plan Area is estimated to be 1,157 AF per year. Of this volume, 221 AF is raw water from the Marlette System used to serve Virginia City, Gold Hill, and Silver City. The remainder is unmetered groundwater pumped at private domestic wells. Utilizing a consumption rate of 1 AF per domestic well it is estimated that 588 AF is pumped in the Highlands, 333 AF in Mark Twain, and 15 AF in the American Flat area.

The only water source currently available to the County Water System is the surface water provided by the Marlette Water System. This source is very reliable and of high quality, however the volume of water available from the Marlette Water System is primarily influenced or restricted by transmission pipeline capacity, although annual snowpack, fishery management at Marlette Lake, and operating agreement limits also have a potential to limit the amount of water available from this source. The annual volume of water available under the Franktown Decree to NPWD is approximately 7,200 AFA. Per the previous operating agreement, the County has reserved up to approximately 500 AF of that annual total.

Water resources within the Plan Areas are less than current demand. Annual recharge of area aquifers is limited due to inadequate elevation of the Plan Area and adjoining areas for significant recharge. The

primary source of recharge occurs within the upslope mountain block and is attributed to snowpack melt and infiltration from winter storms. Recharge from drainages can provide an additional source of recharge depending on the slope and soil permeability. The Highlands is dependent on local recharge within the mountain block without significant impact from adjoining areas. The Mark Twain area water resources are impacted by mountain block (“upslope”) recharge, recharge conveyed by drainages and the Carson River watershed.

The populated areas of the Highlands and Mark Twain also lie within the Plan Area but are not provided water by the County Water System. Residences in these areas utilize individual wells to provide domestic water supplies. Even though each area sits in a separate hydrographic basin, both areas have experience water availability problems during extended dry periods. Per the Plan, it is not feasible to develop a single, groundwater well to serve the local community in either of these areas due to aquifer performance concerns.

For the County to provide a reliable water supply to its customers, it must actively manage its water sources and system infrastructure. Some key recommendations made in this chapter include:

- Negotiate a long-term delivery agreement and contract with the Marlette Water System,
- Maintain an up-to-date Water Resource Plan,
- Complete a Water Conservation Plan,
- Develop a water right dedication rate schedule and maintain a water right ledger, and
- Develop policy which requires future development utilizing groundwater as its only water source to provide substantial analysis and study of the groundwater aquifer and prove that the proposed uses will have limited and mitigatable effect on existing users or uses.

This chapter also reviewed existing system infrastructure and provided estimates of how much water the system can supply on a regular and maximum day basis. Considering the conveyance capacity of the siphon transmission main, the surface water treatment plant, and the storage tanks throughout the system it is estimated that up to 864 additional residential connections can be added to the system without creating problems. Additionally, each portion of the system was analyzed separately from one another, and it is estimated that up to 768 units could be added to Virginia City and/or 710 units could be added in Gold Hill. It should be noted that even though these estimates are provided in the unit of single-family residences (SFR), other land uses (e.g., commercial, industrial) can be added to the system. Projected water demands for these uses should be divided by the SFR water demand factor of 0.3 AF per unit to account for the number of “units” the proposed development represents in overall system capacity accounting.

CHAPTER 3: FUTURE DEMANDS AND WATER MANAGEMENT

The purpose of Chapter 3 is to estimate potential buildout demands resulting from land development within the Plan Area in the future. This chapter also identifies the impacts to the Storey County Water System at the buildout condition which includes improvements to existing infrastructure and water right holdings. Future utility and water resource planning efforts is also discussed.

Future water demands for the Plan Area were generated from applying water demand factors against parcel size (i.e., acreage) or unit counts using designated land uses as of December 2020. The areas analyzed were:

- The Comstock,
- VC Highlands,
- Mark Twain, and
- American Flat.

Table ES-2 provides an accounting of the projected number of units or acres which can be developed in each sub-area.

Table ES-2: Vacant Parcel Land Use

	Comstock	Highlands	Mark Twain	American Flat	Total
Single-Family Residential (ERUs)	293	607	74	-	974
Multi-Family Residential (ERUs)	21	-	-	-	21
Commercial (Acres)	132	-	-	-	132
Industrial (Acres)	19	-	4,327	252	4,598
Forestry (ERUs)	11	-	23	31	65
Special Planning Zone (parcels)	74	-	-	-	74

Utilizing water demand factors based on the existing system or similar areas in the region, estimated water demands were estimated at the buildout condition for each sub-area. A summary of these estimates is shown below in Table ES-3.

Table ES-3: Plan Area Water Demands

Area	Existing Demand (AFA)	Additional Demand (AFA)	Buildout Demand (AFA)
Comstock	221	456 ⁱ	677 ⁱ
Highlands	176	182	358
Mark Twain	100	4,875	4,975
American Flat	4.5	291	296
Total	502	5,804	6,306

i - Includes 105.3 AFA for Silver City

To supply the volume of water that will be required to meet maximum day demands of the entire Plan Area at buildout, the County will need to have sufficient conveyance capacity in their water system infrastructure as well as have the volume of water rights needed to provide almost 7,000 acre-feet of water on an annual basis. Farr West developed improvement project(s) for each water system need in the future to provide a picture for what the connection or development of specific areas will have on the current system. Per the findings of this chapter, the County will need to invest between \$5.7 and \$127 million dollars in water system improvement projects in order to maintain system compliance and supply water to new areas (e.g., Highlands, American Flat, Mark Twain).

Table ES-4: Water System Projects

Project	Probable Costⁱ
Existing System Deficiencies	\$6.0 M
Comstock Service Area Buildout	\$12.4 M
Comstock Service Area Buildout + American Flat Buildout	\$27.7 M
Comstock Service Area Buildout + Mark Twain Ex. Residents Only	\$53.4 M
Comstock Service Area Buildout + Highlands Ex. Residents Only	\$95 M
Comstock Service Area Buildout + Highlands Buildout	\$126 M

i – All costs are presented in 2021 dollars and are Class 5 per AACEI (Association for the Advancement of Cost Estimating International)

In addition to constructing the infrastructure necessary to provide water service at buildout, the County will need to maintain or acquire a sufficient volume of water rights to be able to serve the number of connections projected at buildout. At the most extreme condition where the County Water System is expanded to provide service to meet the buildout demands of the Highlands, Mark Twain, and American Flat in addition to the buildout demands of the Comstock, the volume of water rights needed would be 6,911 AF. If the County were to only provide water service to the existing Comstock area, this total is reduced to 2,178 AF.

This chapter also evaluated additional water sources which may be available to the County in the future. While the new external sources are unlikely to be connected in the near term (i.e., 10 years) it is important to document every option in the case that economic, political, or system conditions change, and the viability of these sources is altered. Additionally, by implementing a proactive approach to water management planning, Storey County will ensure a reliable and resilient water utility well into the future to meet the needs of its residents and businesses.

TABLE OF CONTENTS

EXECUTIVE SUMMARY	i
Table of Contents	vi
Table of Tables	viii
Table of Figures	viii
INTRODUCTION	4
1.0 Purpose.....	5
2.0 Background.....	5
3.0 Scope of Water Resource Plan.....	5
3.1 Plan Area.....	5
3.2 Need for a Water Resource Plan.....	5
CHAPTER 1: WATER DEMANDS, SOURCES, AND MANAGEMENT	1
1.0 Purpose.....	1
2.0 Summary of Communities	1
2.1 Storey County Water Customers	1
2.2 Estimated Population within Plan Area	1
3.0 Water Resources	2
4.0 Water Rights in Nevada	2
4.1 Water Right Priority and Appropriation Statutes and Regulation	2
4.2 Nevada State Engineer Regulatory Actions.....	3
4.3 Water Right Ownership	3
5.0 Marlette Water System	3
5.1 Franktown Creek Decree	3
5.2 Marlette Lake Water Rights.....	3
5.3 Marlette System Surface Water Rights.....	4
5.4 Contract Between State of Nevada and Storey County	6
6.0 Water Rights within Storey County	6
6.1 Tracey Segment Water Rights	6
6.2 Dayton Valley Lake Water Rights.....	7
6.3 Domestic Groundwater Use.....	7
7.0 Water Production and Facilities.....	8
7.1 Storey County Water System Facilities	8
7.2 Storey County System Demands	8
7.2.1 Raw Water Delivery	8
7.2.2 Water Treatment Plant Production.....	9
7.2.3 Customer Meter Records	9
7.3 Water Demand Factors	10
7.4 Unaccounted For Water	10
7.5 Water Storage Facilities	11
CHAPTER 2: SOURCE WATER RELIABILITY	13
1.0 Purpose.....	13
2.0 Water Resource Availability and Management	13
2.1 Estimated Use Within Plan Area	13
2.2 Surface Water	13
2.3 Groundwater	13
3.0 Threats to Existing and Future Water Resources.....	15
3.1 Drought and Climate Change.....	16
3.2 Regulatory Actions	17

3.3	Contamination.....	18
3.3.1	Surface Water	18
3.3.2	Groundwater	18
3.3.3	Distribution System	18
3.4	Conveyance Interruptions	18
4.0	Remaining Capacity Analysis.....	19
4.1	Remaining Storage Capacity.....	19
4.2	Remaining Supply Capacity	19
4.3	Remaining System Capacity	20
5.0	Long-Term Strategies	22
5.1	Water Rights	22
5.1.1	Surface Water	22
5.1.2	Groundwater	22
5.1.3	Best Management Practices	24
5.2	Resource Management.....	24
5.3	Dedication Rates	24
5.4	Water Conservation Plan	25
5.5	Water Resource Planning.....	25
CHAPTER 3: MANAGEMENT OF WATER RESOURCES		26
1.0	Purpose.....	26
2.0	Future Demands	26
2.1	Vacant Parcels and Land Use	26
2.2	Demand Factors and Total Buildout Demands	32
3.0	Buildout Impacts.....	33
3.1	Infrastructure Improvements.....	33
3.1.1	County Water System	33
3.1.2	American Flat	34
3.1.3	Mark Twain.....	34
3.1.4	VC Highlands	35
3.1.5	Siphon Upgrades.....	37
3.1.6	Water Treatment Plant Upgrades.....	37
3.1.7	Project Summary.....	37
3.2	Water Rights	38
4.0	Future Management	39
4.1	Future Water Resources	39
4.2	Regionalization	39
5.0	Future Water Management Planning	39
6.0	Conclusion	40
Bibliography		41
Appendix A.....		Storey County 2016 Master Plan
Appendix B		Storage and Supply Calculations
Appendix C		Opinions of Probable Cost

LIST OF TABLES

Table ES-1: County Delivery Limits per 2002 Contract (Supply Contract, 2002).....	ii
Table ES-2: Vacant Parcel Land Use.....	iv
Table ES-3: Plan Area Water Demands.....	iv
Table ES-4: Water System Projects.....	v
Table 5: Current Population and Household Size.....	2
Table 6: Marlette System Water Rights.....	5
Table 7: County Delivery Limits per 2002 Contract (Supply Contract, 2002).....	6
Table 8: Domestic Pumpage Estimates.....	7
Table 9: Monthly Raw Water Deliveries (Acre-Feet).....	9
Table 10: Residential Customer Demand.....	10
Table 11: Commercial Customer Demand.....	10
Table 12: Total Customer Demand.....	10
Table 13: System Demands.....	11
Table 14: Water Storage Facilities.....	12
Table 15: Existing Customer Base System Capacity Analysis.....	20
Table 16: Existing System Maximum Capacity Analysis (864 Additional Connections).....	21
Table 17: Storage + Supply Calculations Summary for Storey County Systems.....	21
Table 18: Water Demand Factors.....	27
Table 19: Vacant Parcel Land Use.....	33
Table 20: Plan Area Water Demands.....	33
Table 21: Water Treatment Plant Capacity Upgrade Needs.....	38
Table 22: Water System Projects.....	38
Table 23: Water System Planning.....	41

LIST OF FIGURES

Figure 1: Storey County 2016 Master Plan Planning Areas.....	x
Figure 2: Plan Area.....	xi
Figure 3: Monthly Average Water Treatment Plant Production (2016 – 2019).....	9
Figure 4: Annual Percentage of Revenue Water.....	12
Figure 5: Comstock Vacant Parcels.....	29
Figure 6: Highlands Vacant Parcels.....	30
Figure 7: Mark Twain Vacant Parcels.....	31
Figure 8: American Flat Land Use.....	32
Figure 9: Highlands Water System Improvements.....	37

INTRODUCTION

1.0 PURPOSE

The purpose of this Water Resource Plan (Plan) is to provide Storey County (County) with a documented plan and policy related to the County's ability to provide a sustainable water supply to its customers even during periods of extended drought. This Plan also addresses the requirements of Nevada Revised Statute (NRS) Chapter 287 as amended by Senate Bill (SB) No. 150 (2019) to require governing bodies to develop and maintain a water resource plan by 2029.

2.0 BACKGROUND

On January 21, 2020, the Storey County Board of County Commissioners awarded a contract to Farr West Engineering to prepare a Water Resource Plan. This Plan is separated into three chapters, with each addressing a specific component of the Plan as follows:

- Chapter 1 – Water Demands, Sources, and Management
- Chapter 2 – Source Water Reliability and System Capacity
- Chapter 3 – Future Demand and Water Management

3.0 SCOPE OF WATER RESOURCE PLAN

Storey County is located in the Western portion of Northern Nevada. The County is bordered by Washoe County to the west and north and Lyon County to the east and south. The County is a mountainous area which sits above the Reno metropolitan area and is bounded by the Truckee River to the north. There are eight distinct land use areas in the County including Comstock (Virginia City, Gold Hill, and American Flat), Highlands (Virginia City Highlands and Highland Ranches), Lagomarsino, Lockwood-Mustang, McCarran, Painted Rock, Northeast, and Mark Twain. The County is considered rural but includes areas with high-tech industry.

3.1 PLAN AREA

This Plan will focus on the populated areas of Virginia City, Gold Hill, American Flat, Virginia City Highlands, Highland Ranches, and Mark Twain Estates in the southern portion of the County (Plan Area). A map of the Plan Area is provided in Figure 2. The major water supply for this portion of the County is supplied by the Marlette Lake Water System (Marlette System). The Marlette System is owned and operated by the State of Nevada (State). Pursuant to Nevada Revised Statute (NRS) 331.160, the Public Works Division (NPWD) is responsible for the supervision and administration of the system which includes transmission and storage of water in Carson City, Washoe County, and Storey County. The Marlette System provides water to the County for customers in Virginia City, Gold Hill, and American Flat. The County also delivers water to residents of Silver City which is in Lyon County. The remaining populated areas within the Plan Area are supplied by individual domestic wells.

Because the County does not provide water service in other portions of the County, those areas are outside the scope of this Plan. In the future, it is anticipated that the Canyon General Improvement District (GID) and the Tahoe Reno Industrial GID (TRI GID) will complete similar water resource plans which can be considered for potential incorporation into this Plan as Appendices.

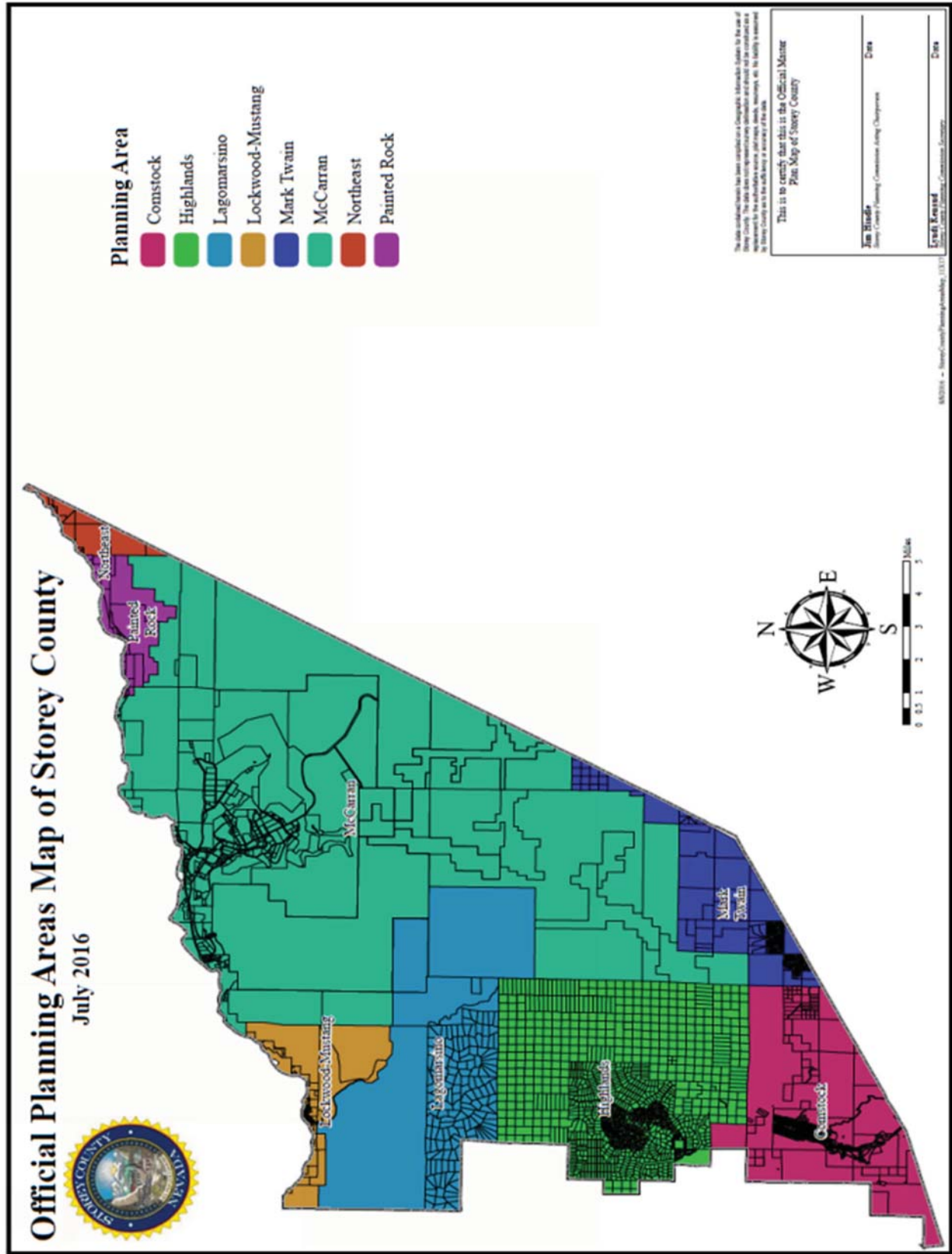
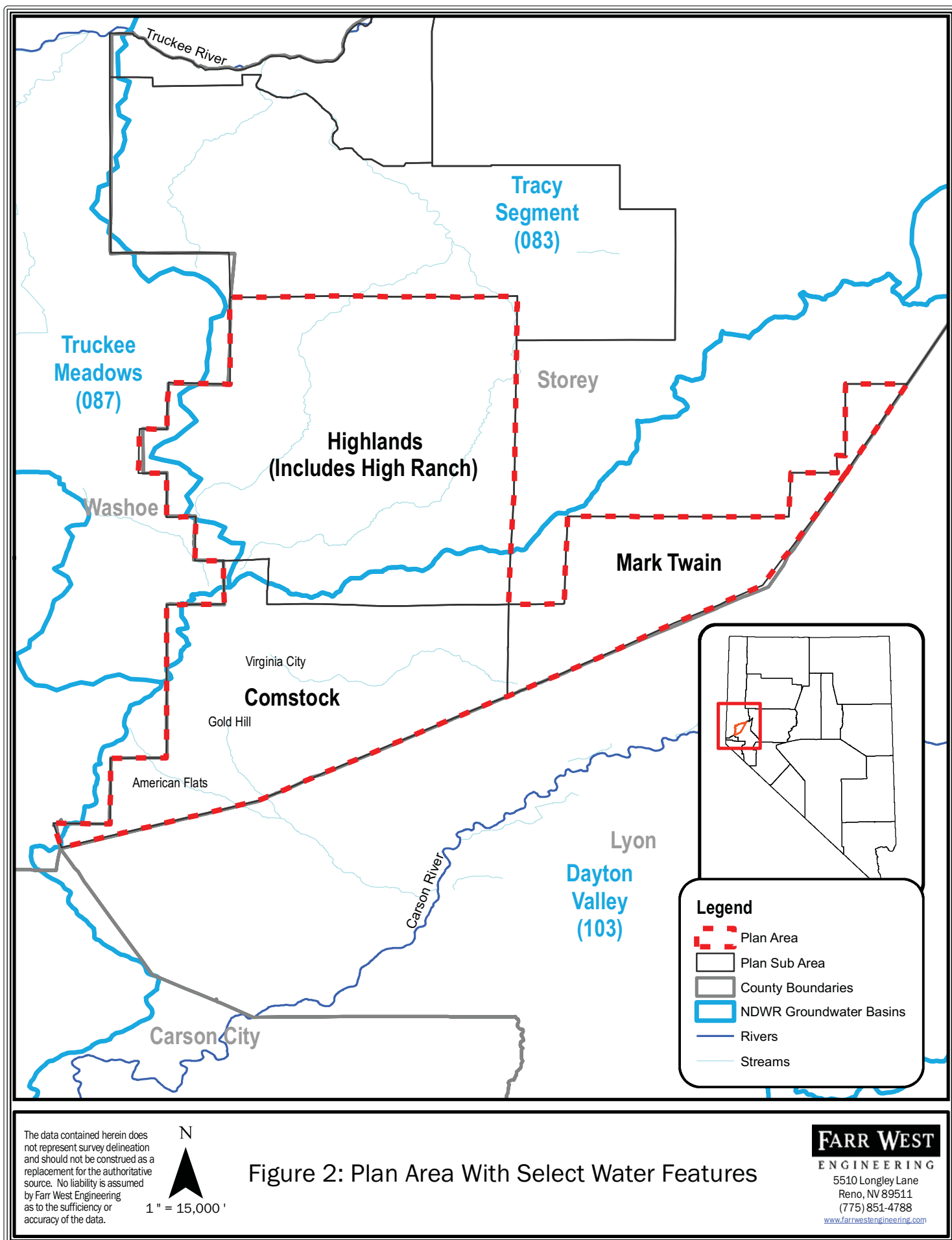


Figure 1: Storey County 2016 Master Plan Planning Areas



3.2 NEED FOR A WATER RESOURCE PLAN

The County does not own the water rights to what is currently its only water supply. In addition, the contract between the County and the State for continued delivery of water from the Marlette System is currently being negotiated for renewal. This Plan will review current water demands within the Plan Area and project water demands into the future based on buildout scenarios. This analysis will assist the County in determining the amount of water which may be needed to serve customers in the future and ensure that there are adequate supplies to do so.

This Plan is the County's first water resource plan, and it is recommended that this Plan be updated every five to ten years to address issues due to potential changes in Nevada water law, economic growth, land use planning, water quality, and water quantity. Additionally, NRS 278.0228 requires that governing bodies update their water resource plan no less than every ten years. This Plan will provide the basis for future updates and help guide the County in decisions related to water resources including future investments in the water system and water sources.

The County completed its Master Plan in 2016. The 2016 Master Plan states, "Nearly every community in the county is faced with water supply challenges." Water resource planning is tied directly to master planning efforts, and these two planning efforts are intended to complement each other. Information from the 2016 Master Plan was used in this Plan.

CHAPTER 1: WATER DEMANDS, SOURCES, AND MANAGEMENT

1.0 PURPOSE

The purpose of this chapter is to summarize current water demands, water sources and water management strategies within the Plan Area. As described in the Introduction, the Plan Area consists of the populated areas in the southern portion of the County including Virginia City, Gold Hill, American Flat, Virginia City Highlands, Highland Ranches and Mark Twain Estates and is shown on Figure 2. The Storey County Water System currently serves customers in Virginia City and Gold Hill and delivers water to Silver City in Lyon County. Other communities within the Plan Area rely on individual wells to meet demands. This chapter presents an analysis of current water uses and demands to establish estimates and assumptions which will form the basis for the Plan.

2.0 SUMMARY OF COMMUNITIES

The Comstock Area, located at the southern end of the County, includes Virginia City, the Divide, Gold Hill and American Flat. This area was originally developed in the late 1800s and considerable measures are employed to maintain the rich historical character while promoting business, tourism, and the rural Nevada lifestyle. The Highlands Area, located north of the Comstock, is a residential estate community surrounded by undeveloped lands. This is a rural community which is relatively close to the conveniences of the Reno metropolitan area. There are no commercial uses within the Highlands. The Mark Twain Area is also a residential estate community surrounded by undeveloped lands and is at the southern border of the County. Mark Twain abuts Lyon County and is near the growing suburban area of Dayton.

2.1 STOREY COUNTY WATER CUSTOMERS

The County currently serves approximately 803 metered customers. The majority of customers (666) are within Virginia City, 51 within Gold Hill, and 86 are within Silver City. The County serves approximately 207 commercial customers and the remaining 596 are residential.

2.2 ESTIMATED POPULATION WITHIN PLAN AREA

The County's 2016 Master Plan includes a population summary based on data from 2014. This information is reproduced in Table 5 below along with an estimate of current population provided by the State Demographer. The population estimate for Storey County for 2019 was 4,258. The Demographer also provides estimates for Gold Hill and Virginia City. The 2019 population of the other areas in Table 5 were estimated based on the Demographer's information and 2014 population estimates from the 2016 Master Plan. The estimated population of the Plan Area is 3,346 persons.

Table 5: Current Population and Household Size

Area	2014	2019
Storey County	3,974	4,258
Gold Hill	201	206
Virginia City	832	904
Highlands	1,398	1,498
Mark Twain	689	738
Lockwood/River	979	1,049
Household Size	2.1	2.1

ⁱ Sources: (Storey County, 2016); (Demographer, 2020)

3.0 WATER RESOURCES

The major water supply within the Plan Area is the Marlette Lake Water System (Marlette System). The Marlette System is owned and operated by the State of Nevada (State). Pursuant to Nevada Revised Statute (NRS) 331.160, the Public Works Division (NPWD) is responsible for the supervision and administration of the system which includes transmission and storage of water in Storey County, Carson City, and Washoe County. Currently, Carson City and Storey County are the only two customers of the Marlette System.

The Marlette System provides water to the County to supply customers in Virginia City and Gold Hill. The County also delivers water to Silver City located in Lyon County. The remaining populated areas are supplied by individual domestic wells.

4.0 WATER RIGHTS IN NEVADA

The Nevada Division of Water Resources (NDWR) is the regulatory authority for water rights in the State of Nevada. The Nevada State Engineer (NSE), as head of this division, approves or denies water right applications, establishes limitations to water usage and manages dam safety operations within the State.

4.1 WATER RIGHT PRIORITY AND APPROPRIATION STATUTES AND REGULATION

The legal process to acquire water rights and transfer those rights to the subject property is defined by Nevada Revised Statutes (NRS) Chapters 533 and 534, Nevada Administrative Code (NAC), and internal office policy. All water, whether above or below the surface of the ground is owned by the public. Nevada water right law is based on the prior appropriation doctrine, otherwise known as “first in time, first in right.” By filing an application to appropriate through the office of the Nevada State Engineer (NSE), surface water resources have been appropriated since 1905 and groundwater resources in Nevada have been appropriated for use since 1939. The priority date assigned to each water right establishes what water rights can be exercised from a source depending on available water at a given time.

Another pillar of Nevada water right law is the concept of beneficial use. Beneficial use is the basis, measure, and limit to the water right. This means that only the portion of the water right that can be used beneficially is established as the perfected, or certificated water right. To allow water right owners flexibility to place their rights to beneficial use, there is a process to change or move the permitted location of these water rights to meet project demands. Furthermore, if the beneficial use of the right was initiated prior to the 1905 or 1939 appropriation dates for surface water and groundwater, respectively, those rights are deemed vested water rights and are thus more senior than rights appropriated after 1905 or 1939.

For general purposes, statutes for groundwater rights and surface water rights are in separate chapters in the NRS. While these rights have generally been administered separately, current legislative actions have established conjunctive use management requirements that the Nevada State Engineer must adhere to. For

the purposes of this Plan, we will consider groundwater rights and surface water rights separate, though long-term water right management should consider future conjunctive use implications.

4.2 NEVADA STATE ENGINEER REGULATORY ACTIONS

Dayton Valley and the Tracey Segment Hydrographic Basins are within the Plan Area. The NSE has designated both groundwater basins under Orders 471 and 688 in Dayton Valley and Order 705 in the Tracey Segment. These designation Orders provide the NSE additional regulatory tools to manage groundwater appropriation such as designation of preferred/non-preferred uses and processing applications out of filing order.

The Dayton Valley Hydrographic Basin is considered over-appropriated. NSE Ruling 5823 established the perennial yield between 8,000 and 20,000 acre-feet annually (AFA) and approximately 24,495 AFA are currently appropriated. The Tracey Segment Hydrographic Basin is nearing the perennial yield of 11,500 AFA according to NSE Ruling 5747, with approximately 11,230 AFA appropriated. For planning purposes, the ability to obtain new appropriations for groundwater in either hydrographic basin is considered limited.

4.3 WATER RIGHT OWNERSHIP

Water rights in the Marlette System have been held by different parties over the years. Reports of Conveyance which update water right ownership must be submitted to NDWR, and deeds that transfer ownership are recorded in the respective County Recorder's office. Water right ownership processes are important to understand especially as the County does not own the water rights to the Marlette System. Currently, the State owns all water rights associated with Marlette System approved for use within the County which are described below. Each of the water rights owned by the State defines the place of use as Virginia City, Gold Hill, Silver City, and Carson City. Prior to the State being able to deliver water to locations not currently included as the place of use, an application to expand the place of use would have to be submitted and approved by the NSE.

5.0 MARLETTE WATER SYSTEM

The Marlette System dates back to the 1870's and includes several water sources. The following is a summary of the Marlette System sources and water rights.

5.1 FRANKTOWN CREEK DECREE

The Franktown Creek Decree defines the water rights to streams on the eastern slope of the Sierra Nevada Mountains which are associated with the Marlette System. The decree is the result of a 1951 petition by the Franktown Creek Irrigation District to the State Engineer to determine the relative rights of claimants to the waters of Franktown Creek. At the time of the decree, the water rights to the Marlette System were held by Marlette Lake Company. The decree states that the water source for Marlette Lake Company is, "Hobart Creek (tributary to Franktown Creek) and certain waters in the Franktown Creek Watershed proper having sources in the eastern slopes of the Sierra Nevada Mountains at and above Red House" (Franktown Creek Decree, 1961). The decree also states that the Marlette Lake Company had the right to store water in the 110-acre foot Hobart Reservoir. Water stored in Hobart Reservoir is released to supplement flows in the natural channel. The amount of the Claim was limited to 10 cubic feet per second (cfs) based on the capacity of the flumes downstream from Red House (Affirmation, 1963). This water right is described as Franktown Decree Claim V-02419 and is deemed "vested" since the beneficial use of this water right was initiated prior to March 1, 1905. The specific priority and volume for these rights will be determined in the future should Franktown Creek undergo an adjudication.

5.2 MARLETTE LAKE WATER RIGHTS

Marlette Lake was originally constructed in 1873. A tunnel was constructed through Herlan Peak to connect Marlette Lake to Franktown Creek and Hobart Reservoir. Marlette Lake had an initial capacity of about 3,400 acre-feet (AF) when it was constructed in 1873. The dam was subsequently raised to its current height in 1959 to bring the capacity to approximately 11,500 AF. Prior to purchase by the State, discussed further below, there were no documented water rights associated with Marlette Lake as the original construction pre-dated the statutory requirements to file an application. Marlette Lake water rights are currently subject to an agreement between the State's Building and Grounds Department and Nevada Department of Wildlife. The agreement limits annual diversions to maintain a minimum water surface elevation necessary for spawning of the for the Lahontan Cutthroat Trout and could impact water resource availability should the County require water from Marlette Lake in any given year.

5.3 MARLETTE SYSTEM SURFACE WATER RIGHTS

In 1963, Marlette Lake Company sold all property, water rights, easements and improvements associated with the Marlette System to the State. This included Marlette Lake, all water rights included in the Franktown Creek Decree (i.e., waters above Red House Diversion Dam and Hobart Lake), Five Mile Reservoir and waters of Mill Creek, Tunnel Creek and others draining into the North Flume. Following the purchase of these rights, the State filed additional water right applications. A summary of these water rights is provided in Table 6.

Table 6: Marlette System Water Rights

Owner of Record	App	Cert	Priority Date	App Status	Source	Source Description	Type of Use	Div. Rate (cfs)	Duty (AFA/S)	AF Storage
Marlette Drainage										
Nevada Building and Grounds Division	24877	8855	1/22/1969	Certificate	Stream	Marlette Creek and Lake	Municipal	0.000	90.79	3,000
Nevada Building and Grounds Division	30896	--	12/8/1976	Permit	Stream	Marlette Creek and Lake and Tributary	Municipal	0.000	3,000.00	0
Hobart Drainage										
Nevada Building and Grounds Division	24876	8801	1/22/1969	Certificate	Underground	Tunnel	Municipal	0.710	514.00	0
Nevada Building and Grounds Division	30895	10786	12/8/1976	Certificate	Underground	Tunnel	Municipal	0.836	631.89	0
Nevada State Lands Division	V02419	--	1/8/1871	Decree	Stream	Hobart Creek	Municipal	10.000	7,240.14 ⁱ	-

i – Not to exceed. Volume not specified in Franktown Decree.

5.4 CONTRACT BETWEEN STATE OF NEVADA AND STOREY COUNTY

As described in this section, all water rights for the Marlette System are owned by the State and administered by NPWD. The State has provided water to Storey County since 1963. Historically, the State has entered into 10-year contracts with the County for delivery of Marlette System water. This is currently the only supply available to County water customers located in Virginia City, Gold Hill, and Silver City. Currently, the County and the State are negotiating a new contract. While this occurs, the entities have agreed to operate under the terms of the prior contract dated October 23, 2002 (2002 Contract).

The 2002 Contract includes a table summarizing the maximum amount of raw water to be supplied to the County each year through 2021. A portion of this information is reproduced in Table 7. It is important to note that this is for illustrative purposes only and does not represent any indication of current negotiations between the State and County.

Table 7: County Delivery Limits per 2002 Contract (Supply Contract, 2002)

Year	June, July, Aug., & Sept. Daily Peak Limit (gallons per day)	Remaining Month Daily Peak Limit (gallons per day)	Annual Use Limit (acre-feet)
2015	833,500	533,500	448.2
2016	846,500	546,500	456.1
2017	859,500	559,500	464.0
2018	872,500	572,500	471.9
2019	885,500	585,500	479.8
2020	898,500	598,500	487.7
2021	911,500	611,500	495.6

6.0 WATER RIGHTS WITHIN STOREY COUNTY

There are other water users within the southern portion of Storey County which rely on water rights to groundwater, springs, and small streams. These water rights are currently not permitted for municipal purposes and are instead for use by individuals or companies for mining and milling, stock water, irrigation, environmental, domestic, and quasi-municipal purposes. A more specific study or analysis is needed to determine if these rights may be available to the County for M&I uses in the future.

6.1 TRACEY SEGMENT WATER RIGHTS

The County is listed as the owner of two groundwater rights within the Tracey Segment Hydrographic Basin. These water rights are permitted for use in the Canyon General Improvement District (GID)¹ water system, although the GID maintains a separate holding of rights which are used to provide service to its non-County facility customers. Permit No. 80870, and Permit 50553, Certificate No. 18224 are for quasi-municipal and domestic uses to support County facilities and uses within the GID service area. These water rights represent approximately 48.5 AF in two production wells. For planning purposes, the balance of water rights above what is being used to support County facilities in the GID service area could be transferred to another location within the Tracey Segment Hydrographic Basin. A more specific study or analysis is needed to determine the exact balance of these rights that may be available to the County for use in the basin.

¹ The canyon GID is outside of the Water Resource Plan study area.

6.2 DAYTON VALLEY WATER RIGHTS

A review of water rights appropriated by Storey County in the Dayton Valley Hydrographic Basin indicates four previous applications, which have been cancelled or denied, that sought water rights to support fire protection and storage for treated effluent. The applications and permits contain limited information as to the nature of the cancellation or denial, but several attempts to appropriate water since the 1980s may indicate a need for this water.

Recommendations for applying for and permitting water rights to support fire protection needs and distribution of treated effluent will be developed in subsequent chapters.

6.3 DOMESTIC GROUNDWATER USE

A water right is not required for a domestic well to serve a single-family dwelling. Groundwater use for domestic purposes is not to exceed 2 AF per year. There are portions of three hydrographic basins within the Plan area including Tracy Segment, Dayton Valley and a small portion of the Truckee Meadows as shown in Figure 2. NDWR documents the number of domestic wells within each groundwater basin and then estimates domestic use at 1 AF per year for each domestic well. Based on current County GIS data, the number of single-family residences with a domestic well within the Plan area was determined, and the same assumption of 1 AF per year for each domestic well was applied. Table 8 summarizes the volume of committed groundwater resources associated with domestic wells² (i.e., 2 AF per domestic well) and the estimated volume pumped for the entire basin and for the portions within the Plan area.

Table 8: Domestic Pumpage Estimates

Basin	NDWR Values for Basin ⁱ		Plan Area Estimates ⁱⁱ	
	Committed Volume (AF)	Estimated Annual Use (AF)	Committed Volume (AF)	Estimated Annual Use (AF)
Dayton Valley	3,012	1,506	744	372
Tracy Segment	1,460	730	1,064	532
Truckee Meadows	3,498	1,749	80	40

ⁱ This information is based on the Water Year 2017 Pumpage Inventories for the Dayton Valley, Tracy Segment and Truckee Meadows Hydrographic Basins.

ⁱⁱ The Plan Area estimates are based on a query of the NDWR Well Log Database dated November 15, 2019 and downloaded from the NDWR website on February 26, 2020 along with Storey County assessor parcel data.

² Domestic wells are exempt from water right permitting requirements in the State of Nevada unless the maximum demand of the user exceeds 2 acre-feet annually.

7.0 WATER PRODUCTION AND FACILITIES

As described above, the County's primary water source is surface water which originates from the Marlette System which consists of two reservoirs, several catchment basins, and a diversion dam on Hobart Creek at Red House. The current capacity of the flumed pipe diverting water at Red House Dam is about 7 cfs. From the Red House Division Dam, the pipe discharges to the Lakeview Tank. At this location, water can be directed towards Carson City or Storey County.

7.1 STOREY COUNTY WATER SYSTEM FACILITIES

Water for the County is delivered through a seven-mile inverted siphon which transitions to a pipeline. The County's ownership of the system begins at the location where the siphon crosses under Interstate 580 at Lakeview, north of Carson City. The transmission line discharges to the Five-Mile Reservoir and/or the Five-Mile Tank. The transmission main from the Lakeview Tank to Five-Mile is currently operated at a flow rate up to 320 gallons per minute³ (gpm). During normal operations, the transmission line discharges directly to Five-Mile Reservoir which fills the tank or continues northeast to the Bullion Tank then through the water treatment plant at the south end of Virginia City.

The water treatment plant is a filtration plant used to meet surface water treatment requirements and has a capacity of 1.2 MGD⁴. The treated water is then pumped into the Hillside storage tanks. From the Hillside tanks, the water flows directly into the distribution system and can also fill the Taylor Tank and Divide Tank. Water from the Divide Tank is used to supply Gold Hill and also fills the Silver City Tank to supply the community of Silver City.

7.2 STOREY COUNTY SYSTEM DEMANDS

Within the County's system, water flows are metered at numerous locations that can be considered when analyzing the system demands. For the purpose of this Plan, water meter data for deliveries to the County's system at the Lakeview Tank (source), water treatment plant and customer service connections (end user) were reviewed and analyzed.

7.2.1 Raw Water Delivery

Raw water from the Marlette System is measured by a flow meter at the Lakeview Tank. The County is billed for raw water provided by the State based on readings at this meter. Table 9 summarizes raw water deliveries to the County during 2016 through 2019. During this time, the County used an average of approximately 221 AF per year.

³ If 320 gpm were to be delivered continuously, this would be equal to approximately 516 AFA. The maximum capacity of the siphon is estimated at 738 gpm (1,190 afa) but the flows are throttled down with valves below the Lakeview Tank.

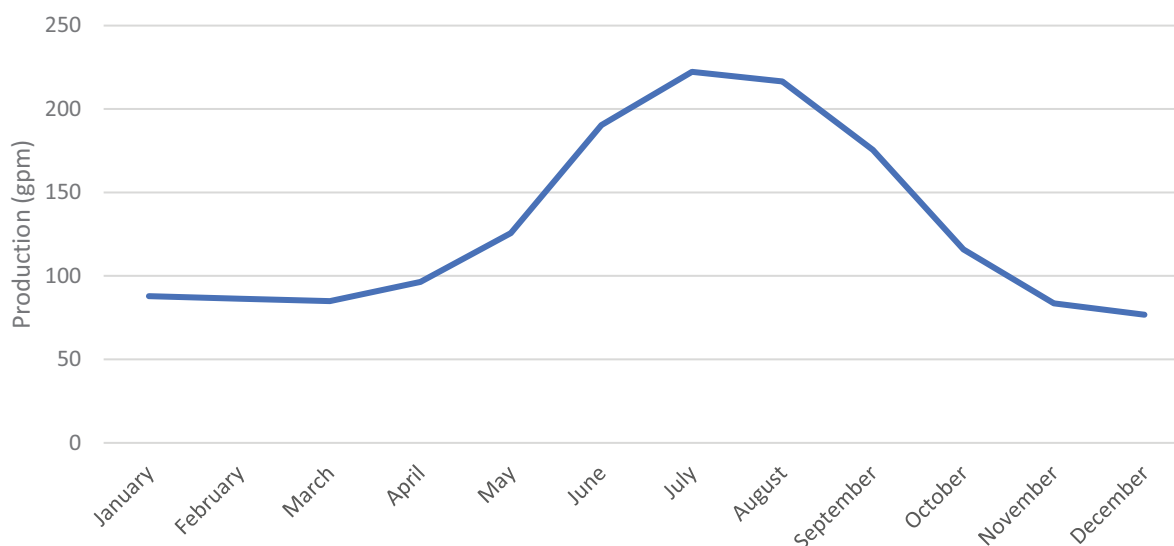
⁴ Based on design capacity flow rate of 875 gpm.

Table 9: Monthly Raw Water Deliveries (Acre-Feet)

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
2016	12.3	11.2	13.3	14.3	16.8	26.7	34.5	30.9	27.3	16.9	11.6	12.0	227.7
2017	11.9	11.1	13.0	11.3	18.0	30.5	33.1	31.4	25.3	16.8	13.2	18.4	234.0
2018	11.7	7.5	13.0	14.4	19.4	27.7	31.8	34.2	25.8	18.6	11.4	9.6	225.1
2019	9.0	9.4	9.9	10.6	18.9	23.6	28.1	27.0	23.1	16.5	11.8	9.1	196.9
Avg.	11.2	9.8	12.3	12.6	18.2	27.1	31.8	30.9	25.4	17.2	12.0	12.3	220.9

7.2.2 Water Treatment Plant Production

The water treatment plant was constructed in 1997 and consists of three filters. Figure 3 shows the monthly average flow rate through the water treatment plant during 2016 through 2019. The average production at the treatment plant during this time period was 210 AF per year which equals an average flow rate of 131 gpm. The monthly average treatment plant flows also provide the seasonal demand curve. This seasonal demand curve is typical and shows increased system demand during warmer months when yard irrigation occurs and tourist activity increases. Reduced demand occurs during the cooler, non-irrigation months when tourism slows off its summer and fall peak. Maximum summer production is 2.9 times greater than minimum wintertime production.

**Figure 3: Monthly Average Water Treatment Plan Production (2016 – 2019)**

7.2.3 Customer Meter Records

Deliveries to the majority of customers in the County's systems are metered. Currently, the County Public Works shop and the sewer treatment plant are not metered. Table 10 through Table 12 summarizes the daily average and maximum water use, in addition to the flow rate, based on monthly customer records provided by the County for 2018 through 2021. The average demand during this time period was approximately 153,100 gallons per day, or 106.3 gpm. Residential customers accounted for 60 percent of this demand, at 92,800 gallons, or 64.5 gpm, on average. Commercial customers accounted for the other 40 percent at 60,300 gallons, or 41.8 gpm, on average. There was approximately 25 percent of the non-peak daily flow limit from the Marlette System, in 2020.

Between 2018 and 2021, the average maximum day demand was 284,110 gallons per day, or 197.3 gpm. This was approximately 30 percent of the summertime daily flow limit from the Marlette System, in 2020. Residential customers used 167,600 gallons of maximum day demand, on average, or 116.4 gpm. Commercial customers used 116,500 gallons of maximum day demand, equating to 80.9 gpm, on average.

Table 10: Residential Customer Demand

Year	Daily Average		Maximum	
	Delivery (kgal)	Flow Rate (gpm)	Delivery (kgal)	Flow Rate (gpm)
2018	88.0	61.1	177.5	123.3
2019	84.1	58.4	158.6	110.1
2020	95.4	66.2	154.4	107.2
2021	103.8	72.1	179.9	124.9
Average	88.0	61.1	177.5	123.3

Table 11: Commercial Customer Demand

Year	Daily Average		Maximum	
	Delivery (kgal)	Flow Rate (gpm)	Delivery (kgal)	Flow Rate (gpm)
2018	55.6	38.6	102.6	71.3
2019	53.1	36.9	96.3	66.9
2020	62.1	43.1	122.4	85.0
2021	70.2	48.8	144.6	100.4
Average	55.6	38.6	102.6	71.3

Table 12: Total Customer Demand

Year	Daily Average		Maximum	
	Delivery (kgal)	Flow Rate (gpm)	Delivery (kgal)	Flow Rate (gpm)
2018	143.7	99.8	280.2	194.6
2019	137.2	95.3	254.9	177.0
2020	157.5	109.4	276.8	192.2
2021	174.0	120.9	324.5	225.3
Average	143.7	99.8	280.2	194.6

7.3 WATER DEMAND FACTORS

Water demands for a system are typically presented in four ways:

- Average Annual Demand (AAD),
- Average Day Demand (ADD),
- Maximum Day Demand (MDD), and

- Peak Hour Demand (PHD).

For the purposes of this Plan, system water demand factors are based on the WTP flow meter data. As stated above, the average production at the WTP, or AAD, was 210 AF per year. Therefore, the average flow rate (ADD) during the study period of 2016 through 2019 was 131 gpm. Based on the monthly flow data provided, the daily flow during the maximum month was 1.75 times greater than the average day flow. Because daily data are not available, a more conservative peaking factor of 2.0 is used for this Plan. PHD is also based on an assumed PHD peaking factor of 4.0 x ADD. Table 13 summarizes the system demands which will be used in this Plan.

Table 13: System Demands

System Demand	Demand Volume or Flow	Peaking Factor
AAD	210 AF per year	N/A
ADD	131 gpm	N/A
MDD	262 gpm	2.0 x ADD
PHD	524 gpm	4.0 x ADD

Based on the customer meter analysis presented in Section 7.2.3, the average water consumption for residential customers is 0.17 AF per year while commercial customers average 0.33 AF per year. An average connection demand of 0.30 AF (0.19 gpm or 268 gpd) per residential connection and 0.50 AF (0.31 gpm or 446 gpd) per commercial connection will be used in this Plan to estimate future water demands.

7.4 UNACCOUNTED FOR WATER

Unaccounted for water (UAFW) is the difference between the quantity of water purchased/produced and the quantity of water delivered to customers or billed. UAFW is not the same as water loss, as losses are only a component of UAFW. Figure 4 shows the percentage of revenue water which is the counterpart to UAFW and is calculated by dividing the customer meter volume by raw water deliveries. From 2016 through 2019, revenue water fluctuated between 65 and 75 percent on an annual basis, with a non-weighted average of 70 percent.

There are numerous factors that can contribute to UFAW or non-revenue water including waterline leaks, evaporative losses at Five-Mile Reservoir⁵, process losses at the water treatment plant, system flushing, unmetered connections, fire hydrants and unmetered construction water usage. The Divide Reservoir¹, which holds 1.5 million gallons of treated water and is used for fire protection, is another connection which is not metered. The Divide Reservoir is located in Virginia City and is on an automatic fill which regularly offsets evaporation, and larger refills occur following use for fire protection. In addition, during the period of 2016 through 2019, several large construction projects took place including a sewer system improvement project, a water main extension/replacement project and construction of the courthouse parking lot with retaining walls. All of these would contribute to the volume of unmetered or unbilled water. It is recommended that the County pursue a comprehensive water loss analysis or audit to confirm the primary contributor(s) to system non-revenue water and reduce this volume below 15 percent of all water purchased from the Marlette Water System.

⁵ Average annual evaporative losses at the Five-Mile and Divide Reservoirs are estimated at 1.24 and 0.74 acre-feet, respectively. Combined, these losses make up less than one percent of average annual raw water deliveries.

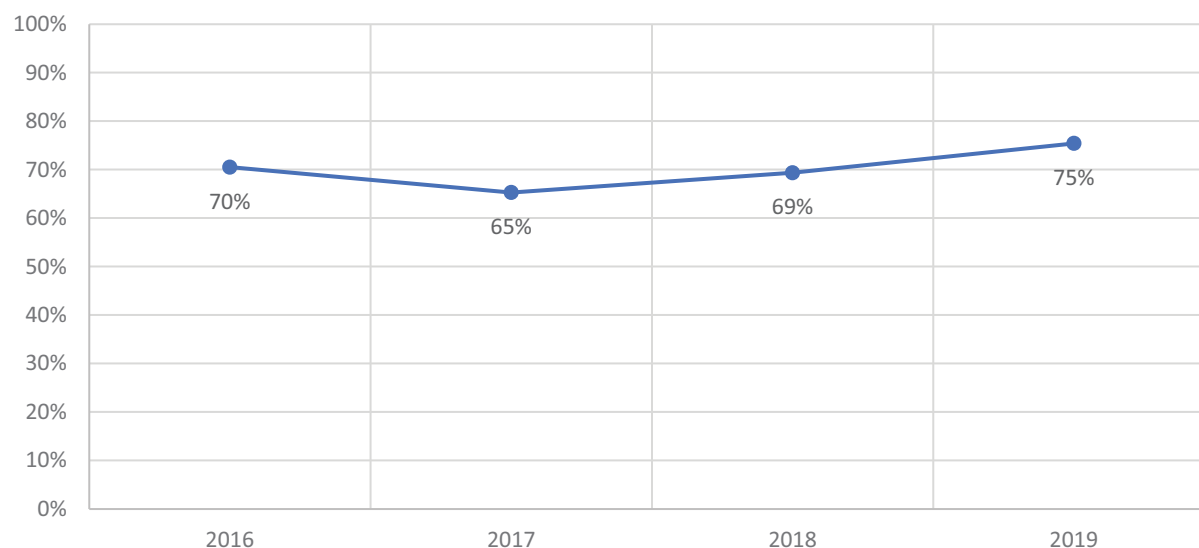


Figure 4: Annual Percentage of Revenue Water

7.5 WATER STORAGE FACILITIES

The County uses non-potable and potable water storage facilities to operate the water system. Table 14 summarizes the capacity of each of the tanks and reservoirs in the County's System. The potable water tanks are designed to provide operational, emergency and fire storage (see NAC 445A.6674 through 6675); however, the Divide Reservoir is used to store water for wildland fire protection purposes only. Additional information and analysis regarding the benefit of water storage is provided in Chapter 2.

Table 14: Water Storage Facilities

Tank	Raw/Potable	Operational Capacity (gal)
Five Mile Reservoir	Raw	5,600,000
Five Mile Tank	Raw	500,000
Bullion Tank	Raw	1,400,000
Total Raw Water Storage =		7,500,000
Hillside Tank No. 1	Potable	500,000
Hillside Tank No. 2	Potable	500,000
Taylor Tank	Potable	200,000
Divide Tank	Potable	115,000
Silver City Tank	Potable	160,000
Total Potable Water Storage =		1,475,000
Divide Reservoir ⁱ	Potable	1,552,000

ⁱ The Divide Reservoir is located at the south end of Virginia City. The reservoir is filled with potable water; however, it is currently only used for wildland fire protection purposes only and does not contribute to system storage volumes.

CHAPTER 2: SOURCE WATER RELIABILITY

1.0 PURPOSE

The purpose of this chapter is to assess the availability, capacity and quality of each water source used within the Plan Area as shown on Figure 2. Additionally, this chapter identifies risks associated with each source and provides strategies to mitigate those potential threats. This chapter also includes an analysis of remaining capacity of Storey County Water System facilities.

2.0 WATER RESOURCE AVAILABILITY AND MANAGEMENT

Water resources within the Plan Area are less than current demand. The County lies in the rain shadows created by the Sierra Nevada Mountains and the Virginia Range. Average annual precipitation in the Plan Area is approximately 12.5 inches per year based on a Western Regional Climate Center station located in Virginia City (WRCC, 2020). Annual recharge of area aquifers is limited due to inadequate elevation of the Plan Area and adjoining areas for significant recharge. The primary source of recharge occurs within the upslope mountain block and is attributed to snowpack melt and infiltration from winter storms. Recharge from drainages can provide an additional source of recharge depending on the slope and soil permeability. The Highlands is dependent on local recharge within the mountain block without significant impact from adjoining areas. The Mark Twain area water resources are impacted by mountain block (“upslope”) recharge, recharge conveyed by drainages and the Carson River watershed.

As a result of significant mining activities in the second half of the 19th century, an external water source was brought in to supply domestic and mining uses. This source of water is surface water, supplied by the Marlette Water System from the eastern slope of the Sierra in the Tahoe Basin and is conveyed through a reverse siphon transmission pipeline for approximately 7 miles. This section of the Plan will address the availability of water and current management practices for these existing resources.

2.1 ESTIMATED USE WITHIN PLAN AREA

Recent water use in the Plan Area is estimated to be 1,157 AF per year. Of this volume, 221 AF is raw water from the Marlette System used to serve Virginia City, Gold Hill, and Silver City. The remainder is unmetered groundwater used by private domestic wells. Utilizing a consumption rate of 1 AF per domestic well it is estimated that 588 AF is pumped in the Highlands, 333 AF in Mark Twain, and 15 AF in the American Flat area.

2.2 SURFACE WATER

The annual volume of water available under the Franktown Decree to NPWD is approximately 7,200 AFA. Based on the information in Chapter 1, the County can use up to 487.7 AF during 2020. This is more than double the County Water System’s current demand. Because water from the Franktown Decree can also be supplemented by water stored in Marlette Lake, the Marlette Water System is a very reliable water source for Virginia City, Gold Hill, and Silver City. However, the maximum volume of water available from the Marlette Water System is restricted by transmission pipeline capacity and impacted by annual snowpack, fishery management at Marlette Lake, and operating agreement limits.

Future water demands, including a buildout scenario, will be analyzed as part of this Plan in chapter 3. This analysis will assist the County in determining the future needs within the Plan Area. Due to groundwater limitations described in Section 2.3, the County must pursue amending its Contract with the State to allow delivery of water to American Flat, the Highlands and Mark Twain.

2.3 GROUNDWATER

In total, Storey County overlies portions of six groundwater basins with the Plan Area overlying portions of four basins. Most of the Highlands area lies within the Tracy Segment Basin (083) and the majority of the Comstock and Mark Twain areas lie within the Dayton Valley (103) Basin. Because of limited recharge and water right appropriations exceeding perennial yields, groundwater development within the Plan Area is limited to predominantly domestic wells. Groundwater availability for the wells varies annually depending on precipitation, pumping, and corresponding water in groundwater storage. As identified in the chapter 1, future groundwater development will be discussed for the Plan Area and not the entire County.

The Highlands area currently has approximately 588 domestic wells ranging in screen depths from about 53 to 1,500 feet below ground surface. A significant portion of the wells in the area have been deepened over time as the more wells that are added to the area require a greater amount of groundwater from the aquifer, thus resulting in a lowering of the water table. Extended dry periods including between the period between 2013 through 2015 also generally resulted in less water availability. More specifically, Highlands area residents have experienced drawdown ranging upwards of 240-feet in the past requiring wells to be deepened or replaced.

The United States Geologic Survey (USGS) has been contracted to conduct a study of this area and has presented preliminary data in 2019 and 2020. Initial data indicates that groundwater levels have declined approximately 50 to 165 feet within the past two decades (Smith, 2020) in some areas. The study will also evaluate water level trends in the Highlands, develop water table and water level change maps, characterize the fractured volcanic rock aquifer(s)⁶ hydraulic properties and estimate recharge rates. The resulting 5-year study, expected in 2022, will provide valuable data that will assist the County in water resource planning. The current groundwater availability in the Highlands is inadequate to support current demands and will not be able to support the buildout condition of the existing lots with cost effective wells. Some residents are currently relying on trucked water and private storage tanks. Although the upper elevations of the Highlands watershed may allow for natural recharge, capturing or diverting precipitation from surface water runoff for local recharge is either not allowed⁷ or is already included in determining the perennial yield of the basin and would not result in any additional appropriative right(s). A comprehensive study of the water quality in the Highlands area has not been completed to date, although data which has been made available indicates groundwater in the Highlands can have high concentrations of constituents including, but not limited to total dissolved solids and iron. In fact, most Highlands residents employ some form of filtration treatment technology in their homes for the removal of iron from their domestic well.

The Mark Twain area currently has approximately 333 domestic wells ranging in depths from about 80 to 700 feet below ground surface. The area is proximal to Dayton, Nevada which relies on municipal and domestic production wells that produce groundwater from the same alluvial aquifer. Some wells in the Mark Twain area north of the alluvial basin require wells completed in fractured rock aquifers that are typically more limited in capacity and recharge than the alluvial aquifer. Like the Highlands, extensive water quality data does not exist for this area, although wells adjacent to this area have not meet water quality standards required for community water systems in the past. Residents in this area have experienced wells going dry when the total depth of the well is 170-feet or less.

The Comstock area includes an area commonly referred to as American Flat, which presently supports approximately 15 domestic wells. Currently, a mine and heap-leach facility is located in American Flat. A company purchased residences in the area to house mine workers and guests. Originally, American Flat

⁶ Volcanic rock aquifers are known to offer reduced water storage capacity and provide very limited recharge as compared to aquifers in other geologic units.

⁷ A single surface water permit was found for Long Valley Creek for industrial purposes. Any additional appropriation would need to ensure that this senior right would not be negatively impacted by the proposed use. No surface water rights associated with Lagomarsino Creek were found on the NDWR database.

was part of the County water system and received treated surface water from the Marlette System. In 1964, American Flat was excised from the County water services and is now supported by groundwater through two domestic wells. With a total of 44 domestic wells lying within the Comstock area the amount of groundwater being used is small. Also, hydrogeology characteristics indicate that the costs associated with drilling higher capacity production wells will exceed the benefits that would be realized by developing groundwater resources in this area. Additionally, water quality in the Comstock is suspected to generally not meet drinking water maximum contaminant levels due to hydrothermal mineralization and historic (i.e., 19th century) anthropogenic contamination from mining processes. A current liability for the Storey County Water System is the absence of any formal agreement for providing water service to the community of Silver City (Lyon County). It is strongly recommended that Storey County and Lyon County work together to enter into an agreement which clearly defines Storey County's responsibility(s) to provide water service to future development in Silver City.

Because all existing wells in the Plan Area are domestic wells, which are owned and operated by private residents, the County's ability to have influence on the ongoing management of groundwater use may be limited. In the 2016 Master Plan, the County developed many objectives and policies regarding groundwater use within the Plan Area and it is recommended that the County enforce and build on these policies to protect the sustainability of current groundwater resources. The County shall provide education and guidance to private landowners that production from existing domestic wells in the Virginia Highlands is not sustainable and deepening of domestic wells is a cyclic, never-ending process. The County could require individual landowners to demonstrate that their proposed domestic well will not negatively impact adjacent landowners by enforcing a policy such as:

Policy: If a proposed domestic well is to be installed within a distance of approximately 1 mile of an existing domestic well(s), then water level data for existing well(s) within 1 mile of the proposed well should be reviewed and determined to have an annual average drawdown of less than 0.25 feet per year for a 10-year period. If the annual average drawdown is determined to be greater than 0.25 feet per year, drilling of additional domestic wells within the one-mile radius should not be allowed due to impacts to existing groundwater users. Additionally, after the installation of any new domestic well, water level data shall be collected and provided annually to the County. Water level trends should indicate an average steady decline of no greater 0.25 feet in the new domestic well for each of the past 10 years prior to the site being deemed sustainable for domestic use. If the well is not found to be sustainable, the residence will be required to abandon the well and receive water from an external source (i.e., delivery truck). The County reserves the right to increase or decrease the proposed allowable rate of 0.25 feet per year as aquifer conditions change over time.

Another proposed policy which will improve the sustainability of local aquifers and provide valuable data for the long-term understanding of aquifer conditions is the implementation of water meters on domestic wells. The proposed policy should include the following provisions:

Policy: Unless the residence is granted a waiver by Storey County, all domestic well users must install a meter to measure all water produced by the well. The meter must comply with County specifications and provide electronic direct read transfer of data to County Public Works equipment. The meters are to be used for quantifying the capacity of the limited aquifers in the County. The County may also use the meter data to enforce state limitations for the production of groundwater (i.e., 2 acre-feet annually maximum) or any future restrictions to domestic groundwater production.

Per Chapter 16 of the Storey County Code, land subdivision applications must also demonstrate that a sufficient volume of uncommitted water exists to serve the needs of the development as well as evidence that the use of water for the development will not adversely impact existing surrounding residents,

properties and uses. Procurement of the necessary water is not required until filing for final map at which point the sufficiency of the rights will be reviewed by the County and NDWR. This policy is beneficial to future groundwater sustainability. It is also recommended that the County continue to develop their groundwater management plan, through studies like this plan and by participating in more specific studies, to guide groundwater use in these areas. See appendix A for supporting information.

3.0 THREATS TO EXISTING AND FUTURE WATER RESOURCES

For the County to provide a reliable water supply to its Storey County Water System customers, it must consider any potential changes which may affect its water source and supply. Additionally, residents outside of the Water System's service area must also be aware of potential risks. The risks and threats presented in this section are typically out of a water supplier's and private well owner's control; however, proper management and planning can mitigate their impacts. This section identifies potential threats to water supplies within the Plan Area. Recommendations as to how the County and residents can mitigate these threats are discussed in this chapter and in chapter 3.

3.1 DROUGHT AND CLIMATE CHANGE

The Storey County Water System's only source of water is from the Sierra Nevada Mountains. The amount of water available to the County system through the Marlette Water System is directly dependent on seasonal storms and the snowpack on the East Slope of the Tahoe Basin and in the Marlette/Hobart Lake watershed and existing pipeline capacity at the siphon. Extended periods of below average precipitation are known to occur in the Tahoe Basin and on the eastern side of the Sierra Nevada which have the potential to reduce the amount of water available in any given year. However, this condition is mitigated by the upstream Marlette and Hobart storage reservoirs.

Extended periods of dry weather are especially known to affect the availability of groundwater within the Plan Area. As mentioned previously, the drought which occurred from 2013 through 2015 resulted in declining groundwater levels within the Virginia Highlands. Some homeowners had to deepen their wells to be able to pump the groundwater in this area. Drought also affects the Mark Twain area and the Dayton Valley. Groundwater in this area is affected by flows in the Carson River which has limited upstream storage resulting. Below average precipitation in the Carson River Watershed results in decreased surface and subsurface flows through the Dayton Valley which can impact groundwater levels.

In addition to droughts, which are temporary, climate change is expected to have lasting effects on the availability of future water supplies. Climate is used in reference to prevailing weather conditions in an area over a long period of time. No climate study or evaluation was undertaken for the purpose of this Plan; however, sources were reviewed and referenced regarding climate change and climate predictions. The California Department of Water Resources (CDWR) released a report entitled *California Climate Science and Data for Water Resources Management*. Although this report does not include Nevada, it does include the Tahoe and Carson Basins as part of the North Lahontan hydrologic region⁸. CDWR summarized the key climate vulnerabilities for the North Lahontan region as:

- Increased air and water temperatures would place additional stress on sensitive ecosystems and species;
- Loss of snowpack storage may reduce reliability of surface water supplies and result in greater demand on groundwater resources;
- Magnitude and frequency of extreme precipitation events may increase, resulting in greater flood risk; and

⁸ The Marlette Water System is directly adjacent to the North Lahontan hydrologic region which is bounded by the eastern border of the State of California.

- High temperature and longer dry seasons would increase wildfire risk.

Many of these vulnerabilities not only apply to the region of surface water supply in the Sierra Nevada Mountains but are also potential vulnerabilities in and around the Plan Area. CDWR provides a list of Resource Management Strategies that water suppliers can consider as tools to adapt to climate change. The following are CDWR recommended Resource Management Strategies for the climate vulnerabilities identified which are applicable to the County and Plan Area.

- Urban Water Use Efficiency: Practices that maximize use of available water supplies by reducing waste and increasing efficiency.
- Conveyance – Regional/Local: Improvement and maintenance of water conveyance systems to improve system reliability, protect water quality, increase available water supplies, and provide operational flexibility.
- Conjunctive Management and Groundwater Storage: Coordinated and planned use and management of surface water and groundwater resources to maximize the availability and reliability of water supplies.
- Surface Storage – Regional/Local: Human made, above-ground reservoirs to collect water for later release when needed. Surface storage has played a key role where the quantity, timing and location of water demand does not match the natural water supply availability.
- Drinking Water Treatment and Distribution: Development and maintenance of public water treatment and distribution facilities. Reliability, quality, and safety of the raw water supplies are critical to achieving this goal.

Although timing and magnitude of warming and other climate change factors are unknown, resource management strategies such those limited above will be useful considerations for climate change adaption. Through the County's planning efforts, it will be critical to continue assessing potential climate change strategies and implement them as feasible and needed.

3.2 REGULATORY ACTIONS

As discussed throughout this chapter, the County's water source(s) is governed by State and Federal regulatory guidelines, Nevada water rights law, the Franktown Decree and through agreements with the Marlette Water System. The water available to the County from the Marlette Water System is also utilized by other entities (e.g., Carson City, private irrigation companies) according to their appropriation and priority. Additional parties, agreements and decrees could also influence the quantity and availability of water resources should the County pursue groundwater development within the Plan Area in the future.

The NSE has the ability to regulate groundwater usage within a hydrographic basin by limiting water rights based on the priority dates of appropriations. If, in the NSE's judgement, the hydrographic basin is over-appropriated and being overdrawn, the NSE can issue a curtailment order. A curtailment⁹ order establishes which water rights can be exercised, and which cannot, to protect the long-term health of the aquifer. Being that the County's current groundwater right holdings are limited, any future appropriations would be very junior in priority and would be at a greater risk for curtailment. This risk could be mitigated if the County chooses to purchase senior groundwater rights as opposed to filing for new appropriations.

More importantly, the County should monitor the development of new regulations and determine whether they directly impact the County's current water supply or not. Conjunctive use regulations are currently being developed in the Humboldt Regional Hydrographic Basin which could have an impact to future water resources the County may or may not pursue. While previous legislative sessions have resulted in conjunctive use management statements, there are currently no regulations to guide how groundwater and

⁹ Domestic wells are also at risk to the curtailment process. Although bills including such provisions have not made it through past State of Nevada legislative sessions.

surface water interaction or conflict will work through the existing permitting process. If new conjunctive use management regulations are developed, it may impact the County's ability to acquire, change and exercise permitted and certificated groundwater rights.

Other potential regulatory actions that the County should consider include:

- Modification to activities and uses which impact basin inflows and outflows.
- Future reduction in water quality maximum contaminant limits.

3.3 CONTAMINATION

The County is committed to providing a high level of service with its drinking water system and is dedicated to ensuring that level of service in the future. This section focuses on protection of source water quality, which is also of importance to private well owners, and ensuring that negative impacts to water quality from anthropogenic and natural sources are minimized to the greatest extent possible.

3.3.1 Surface Water

Due to the location of the surface water source, which is above any major roads or railways, the source is less vulnerable to contamination. However, the County should still be aware of possible contamination events including, but not limited to, turbidity events and algal blooms as opposed to toxic spills. The water treatment plant is designed to treat surface water but understanding and maintain the highest quality of water possible arriving at the plant is important.

3.3.2 Groundwater

Changes to water quality of the groundwater sources in the Plan Area can occur in two ways:

1. The concentrations of naturally occurring constituents could change over time, or
2. Groundwater sources could become contaminated as a result of human activities.

Although the County does not currently utilize groundwater as a water source, constituents which could pose threats to the quality of groundwater are Arsenic, Gross Alpha, Uranium, Nitrate, Iron and Manganese. The County should encourage private well owners to send the County any water quality data to develop a database and monitor trends.

3.3.3 Distribution System

The County relies upon certified water treatment and distribution system operators who continually monitor water quality in the treatment and distribution systems. All testing and monitoring are done in conformance with established health and safety standards and under an operating permit with the Nevada Division of Environmental Protection – Bureau of Safe Drinking Water. The County prepares an annual water quality Consumer Confidence Report which provides an overview of the previous year's drinking water quality data for the Storey County Water System.

3.4 CONVEYANCE INTERRUPTIONS

The materials which make up the siphon and transmission main which delivers water from the Marlette Water System to the Plan Area are approximately 150 years old and known to have vulnerabilities. In 2018, a portion of the line experienced a leak which required emergency repair to ensure continued delivery of water to Virginia City, Gold Hill, and Silver City. Although the County has 20 to 50 days¹⁰ of raw and potable water storage within its system, this event and others like it show the importance of regular monitoring and maintenance. Due to the age of the transmission main most parts or repairs must be

¹⁰ Range in values is dependent on average or max day water use

completed with custom fittings which are not only costly but require longer lead times. In order to increase system reliability and conveyance capacity it may become necessary to replace large portion of the siphon in the future.

4.0 REMAINING CAPACITY ANALYSIS

A remaining capacity assessment of the System is a critical resource for the County to use to make future development determinations. The System's capacity to convey and provide water to its customers and to future users is based on two primary factors:

1. A System's ability to operate within the parameters of Nevada Administrative Code (NAC) regulations; and,
2. Proper allocation of water rights with the NSE.

This section will focus on the existing System capacity and will convert remaining capacity estimates into residential connection counts. Remaining capacity evaluations will be made on a combined supply and storage basis as described further below. Key assumptions used for this analysis include:

- Water supply is based on 100% utilization of the siphon transmission main for a 24-hour period.
 - The theoretical flow capacity of the siphon transmission main is 738¹¹ gpm.
- Maximum fire demand is assumed to be 3,600 gpm for 2 hours for Virginia City and 1,500 gpm for 2 hours each for Silver City and Gold Hill. The largest fire demand, 3,600 gpm for 2 hours, will be used for the combined system analysis.
- Operating Storage is equal to the Average Day Demand (ADD) for 24 hours.
- Emergency Storage is 75% of the Operating Storage.
- The available potable storage within the system is assumed to be 1.475 Mgal¹².

4.1 REMAINING STORAGE CAPACITY

Typical capacity calculations use a combination of storage and supply to determine if a system meets NAC requirements. However, it is informative to analyze storage and supply capacity separately to better understand which of the two is the limiting factor in capacity. Current storage requirements are 762,000 gallons out of the existing 1,475,000 gallons of storage capacity. Based on the Maximum Day Demand (MDD) and operations and emergency supply requirements, the remaining storage capacity can support an additional 1,519 connections. This assumes that no water is being supplied via the siphon over a 24-hour period.

The individual systems comprising the larger County system, vary in their storage capacities. The Virginia City system has ample storage, while both Gold Hill and Silver City have sufficient storage to meet demands as they are currently. This leads to the Virginia City storage providing the bulk capacity for the larger County system.

4.2 REMAINING SUPPLY CAPACITY

Currently, the siphon that provides water to the County System is not metered, so a flow rate has been calculated. The siphon that provides water to the County System is primarily 10-inch threaded steel pipe. The majority of the pipeline was installed around 1875, with portions of the siphon replaced over the years. Due to the age and massive pressures experienced by the siphon in places, the siphon is never operated at its full capacity. The siphon begins at the Lakeview Tank, which controls the water diversions to both Carson City and Virginia City. Flow to the County Systems is controlled by an actuated flow control valve.

¹¹ Value listed is the theoretical capacity of the siphon. See Section 4.2 for further information.

¹² For this analysis, the capacities of the Hillside Tanks are assumed to be their future capacity of 500,000 gal each.

This valve is never fully opened. Anecdotal evidence shows that the average flow seen in the siphon is approximately 320 gpm. The theoretical, calculated capacity of the pipeline is 738 gpm.

Raw water is conveyed from the 5-Mile Reservoir to the Bullion tank in Virginia City by a 3-mile pipeline that is made up of a combination of newer 12-inch high-density polyethylene (HDPE) pipe and older 12-inch ductile iron pipe. This pipeline is capable of conveying over 2,000 gpm of raw water to the water treatment plant. The water treatment plant serving the system is rated at 1.26 MGD. This equates to a flow rate of 875 gpm. Therefore, the limiting factor in the overall transmission of raw water to the system is the siphon at 738 gpm. A 738 gpm flow rate equates to 4,528 connections in the County system. Removing the existing connections, leaves us with a system capacity of 3,862 possible connections.

Potable water is also transmitted from Virginia City to Gold Hill and then to Silver City. The Gold Hill system is fed by the Divide Tank off a separate 12-inch main. This pipe can convey up to 2,800 gpm if required. Silver City is fed by a single 4-inch main. This presents capacity issues in the system, as the main can only convey up to 315 gpm. Per the system hydraulic model, this flow rate is achieved when filling the Silver City Tank.

4.3 REMAINING SYSTEM CAPACITY

Minimum water system capacity requirements are established in NAC 445A sections 6672 through 66755. NAC 445A.6672(3) establishes specific water system capacity requirements for systems relying upon groundwater production wells to meet the following scenarios:

- (a) Maximum day demand + fire demand with all water sources functioning, or
- (b) Average day demand + fire demand with the most productive well out of service

NAC 445A allows for a combination of water supply wells and storage to satisfy the requirements. Since Storey County does not rely on wells for supply, scenario (b) was excluded from this analysis, and it is assumed that scenario (a) provides the appropriate assessment of system capacity for the County. Table 15 provides a summary of the available system capacity, storage requirements and excess storage capacity for the potable storage tanks in the County System. The analysis is based on a 24-hour period and considers the design ADD of 131 gpm as summarized in Table 15. It is assumed that each potable water tank is filled to its operational capacity at the beginning of the 24-hour analysis period.

Table 15: Existing Customer Base System Capacity Analysis

	MDD + Fire with All Sources	
Storage Type	Capacity Requirement (kgal)	Capacity Balance (kgal)
Potable Tank Storage		1,475
Siphon Supply in Excess of Demand ¹³		686
Available System Capacity		2,161
Fire Storage	432	1,729
Operating Storage	189	1,540
Emergency Storage	141	1,399

Based on this analysis, the system has the source and storage capacity to meet the requirements of NAC 445A.6672 and shows that there is a remaining system capacity of 1,399 kgal. Table 16 provides the capacity analysis considering the maximum number of additional connections based on the excess capacity shown in Table 16.

¹³ Siphon flowrate of 738 gpm used for capacity calculations.

Table 16: Existing System Maximum Capacity Analysis (864 Additional Connections)

	MDD + Fire with All Sources	
Storage Type	Capacity Requirement (kgal)	Capacity Balance (kgal)
Potable Tank Storage		1,475
Siphon Supply in Excess of Demand ⁷		-60
Available System Capacity		1,415
Fire Storage	432	983
Operating Storage	562	421
Emergency Storage	421	0

As shown, when the number of connections and resulting demands increase, the operating storage and emergency storage requirements increase correspondingly. Under the “MDD + Fire with All Sources” the existing supply infrastructure and potable storage tank system could support an additional 864 connections, assuming an average annual usage of 0.3 gpm per connection, without system expansion or improvement. This is the number of additional connections which results in a capacity balance of zero. For complete calculations, refer to Appendix B.

Additional analysis was performed on the individual systems comprising the larger Storey County Water System. Separate storage and supply calculations for Virginia City, Gold Hill and Silver City were completed to better understand where specific capacity issues may arise, as well as understand the hydraulic relationship between the three systems. A summary of the results can be found below in Table 17. The complete calculations can be found in Appendix B.

Table 17: Storage + Supply Calculations Summary for Storey County Systems

System	Total Storage (kgal)	Supply in Excess of Demand (kgal)	Total Required Storage (kgal)	Capacity Balance (kgal)	Capacity Remaining (EDUs)
Virginia City	1,200	750	706	1,244	768
Gold Hill	115	1,236	201	1,150	710
Silver City	160	412	215	357	220
Combined	1,475	686	761	1,398	864

As shown, two of the three individual systems have similar remaining capacities. However, the Silver City system is limited by its small storage and supply in comparison to its total required storage. The primary limiting factor being the small amount of storage in the area and is also exacerbated by the fact that the system is supplied via a 4-inch water main from Gold Hill. This restriction in combination with the small storage greatly reduces the ability to serve future connections in the area. However, in practice the three systems are operated as a single system. This allows upstream storage in Virginia City and Gold Hill to help alleviate the supply and storage issues in Silver City.

While the capacity remaining is represented in equivalent dwelling units (EDU), it does not require that all future development be comprised of residential uses. Rather, an EDU is a commonly used utility planning unit which is equal to the water demand of one single-family residence. If a proposed commercial or industrial development is projected to use ten times the amount of water as a single-family residence than that development would be allocated 10 EDUs of the remaining system capacity listed. It is recommended that the County require a proposed fixture unit count for all non-residential developments be provided at

the time of parcel map approval and/or building permit in order to convert projected water demands back to an EDU basis and evaluate available system capacity.

5.0 LONG-TERM STRATEGIES

Protection of existing and future water resources should be of utmost importance for the County and its residents. However, the strategic management of the County's resources becomes complicated due to the variety in water resource type (i.e., groundwater and surface water), the geographic distance between the communities in the Plan Area and the evolving regulatory environment, including Nevada water rights law. This section will review management approaches the County should consider both currently and in the future.

5.1 WATER RIGHTS

5.1.1 Surface Water

Storey County utilizes water from the Marlette Water System as its only source for providing water service to customers of the Storey County Water System. The Marlette Water System exercises water rights owned by the State of Nevada, under the Franktown Creek Decree which are contracted and delivered to the County. Because the County does not own any Decreed water rights, the delivery agreement and contract become especially important for dependable long-term water delivery. Furthermore, because the Marlette Water System is the sole source of water for the County system, the contract with the water system should allow for full utilization of the conveyance capacity of water system infrastructure and all for expansion to cover potential "growth" in the water system, especially in areas like the Highlands or Mark Twain where groundwater resources are limited.

While improbable, the Carson River is another source of surface water which could provide water service should the County intertie their water system with Lyon County Dayton Utilities. The County does not currently own any surface water rights associated with the Carson River system and it is not recommended for the County to purchase or accept dedication of Carson River rights at this time. The benefits and challenges of utilizing the Carson River as a future water source will be detailed in chapter 3.

5.1.2 Groundwater

The Plan Area overlies two primary hydrographic areas or basins from a water resource regulatory standpoint in the Tracy Segment and the Dayton Valley basin. Each of these areas has separate Orders and Rulings by the Nevada State Engineer that shape the regulatory options and environment the County must work within regarding groundwater resource development and use. For example, the Dayton Valley Hydrographic area has the benefit of a Domestic Well Credit Order (see page 23), whereas the Tracy Segment does not currently have that provision under the designation Order. Additionally, the County only owns less than 50 AF in the Tracey Segment with the point of diversion and place of use currently tied to the Canyon General Improvement District.

Also discussed in Section 2.3, the availability of groundwater resources in both the Highlands and Mark Twain areas is extremely restricted and their ability to continuously meet domestic use demands has become more and more limited over the last 20 years. The following information is meant to provide a planning level summary of short and long-term alternatives which the County may consider when evaluating providing future groundwater resources to its residents.

Change in Point of Diversion/Place of Use

Storey County owns approximately 48.58 acre-feet within the Tracey Segment Hydrographic Basin under Permit No. 50533, Certificate 18224, and 80870. These water rights currently support an elementary school, park, and the Lockwood Fire Station. The amount of water needed to support these facilities in the

Lockwood area should be identified and allocated appropriately with the Canyon General Improvement District. Any remainder in right could then be utilized within the Tracey Segment to support other County purposes. The balance of any right which could be moved is not expected to be large enough to support new development or a new public water system in the Highlands.

The future concept that this change could support could be to provide a single point of service within the Highlands community which residents whose wells had failed could access drinking water. This alternative may also require the construction of a new well, installation of water treatment equipment, construction of storage facilities, water system and water right permitting activities which are expected to range between 1.2 and 5 million dollars¹⁴ and span 12 to 36 months.

This alternative is not currently an option for the Mark Twain area due to the lack of existing rights owned by the County in the Dayton Valley basin.

Appropriate New Rights

An alternative to moving existing rights from one location to another is to file an application to appropriate new rights in either the Tracey Segment or Dayton Valley Basins. Review of the hydrographic basin summaries prepared by the NDWR show both the Tracey Segment and Dayton Valley as over-appropriated, with mining and milling identified as the preferred use in the Dayton Valley Basin. For these reasons, new appropriations for new municipal purposes should be considered unlikely. In the event a new appropriation is approved, it would be junior in priority date and would face additional challenges to be used to support to new development. Additionally, the infrastructure requirements (i.e., well, tank, distribution piping) proposed by the first alternative would still be required by this option as well.

Purchase Water Rights

Since new appropriations for groundwater are assumed to be limited based on total appropriation in each valley, purchasing existing water rights becomes the remaining option. Based on the cost associated with researching, confirming, purchasing, and developing these water rights, Farr West only recommends that the County pursue a water rights purchase for small quantities of rights to support existing development which may require a community water supply for an indefinite period of time. While this option may be the quickest to implement and receive reduced interest from other parties than that of new appropriations, it may also be the costliest with an approximate price tag of \$1.5 to \$8 million dollars¹⁵ and take anywhere from 12 to 18 months to implement.

In the case of new development being served by an existing system or the formation of a new water system, operated by Storey County or General Improvement District, Farr West recommends the County require developers to dedicate the necessary rights to support the proposed uses.

Domestic Well Credit Program

The Domestic Well Credit Order in Dayton Valley provides the ability for the owner of a Domestic Well on a lot that was created prior to July 1, 1993, to plug and abandon the Domestic Well and be provided water service from a water supplier using a credit to provide service to the property. The Order could be used to allow the County to develop a community water system in the Mark Twain area, but these credits cannot be transferred or sold like a water right after they have been issued. The benefit to this alternative is that new water rights would not be required and the overall impact to the water resource would be the same as the current condition. To provide a new water system in this area, a production well would still need to

¹⁴ Opinions of probable costs are planning level in nature (-50% to +100%) and are for a single point of use alternative. Costs associated with installing a distribution system are not included.

¹⁵ Cost of water rights are planning level estimates which projects a range of \$400,000 to \$3,000,000 depending on which basin (Tracey Segment, Dayton Valley, or both) the rights are purchased in. Estimates are based on a volume of 100 AF.

be permitted and constructed, storage tanks and distribution piping would be required to provide water service to the residents who forfeited their right to a domestic well. However, these types of conversion projects are rare due to the significant costs associated with the infrastructure improvements.

This alternative is not currently an option for the Highlands area due to the lack of existing Order in the Tracy Segment basin issued by the NSE. The County could apply to the NSE for an Order; however, the significant cost of associated infrastructure may still be prohibitive.

5.1.3 Best Management Practices

Farr West recommends Storey County allocate annual budget and staff time to continue to participate in regional planning groups, like the Carson River Subconservancy District and Truckee Meadows Water Authority Advisory Committee meetings or planning sessions. Involvement with these groups will allow the County to stay informed on regional policy changes and potentially provide insight into other water resource management strategies. Additionally, staying engaged with water right permit changes in basins which contribute to the Marlette Water System and inside of and adjacent to the Tracey Segment and Dayton Valley Hydrographic Basins will assist the County in maintaining their current and future water right interests.

Storey County owns two water right permits that are currently managed by Canyon General Improvement District. Farr West recommends that the County allocate budget and staff time to monitor due dates and water usage for these rights to maintain their good standing. In the event additional water rights are acquired or dedicated to the County, due dates for Proof of Completion of Work and/or Proof of Beneficia Use should be pursued and maintained.

5.2 RESOURCE MANAGEMENT

Some of the water right strategies, particularly the Domestic Well Credit Order in Dayton Valley, have long term impacts to Storey County residents. Domestic wells are the only source of water for many parcels in the County and while this land was originally developed with the understanding that these residents were to be responsible for their own water supply, it has become common for governing bodies to be forced into with providing water service or mitigating groundwater impacts in areas which groundwater conditions have changed significantly over time. To mitigate the potential for this outcome it is recommended that the County encourage local, private groups to be proactive in protecting the aquifer which supplies their groundwater wells. Examples of action that benefits aquifer sustainability has been provided throughout this chapter and Plan.

As shown in this chapter, the surface water from the Marlette Water System is the most available, highest quality source which the County has access to. Water from the Marlette Water System is critical for long-term sustainability in Storey County because it is the only source that is currently permitted with the NSE and is capable of regular deliveries. The County should place upmost importance on renewing the contractual agreement with the Marlette Water System and should pursue the contractual ability to transmit quantities of water that are commensurate with the investment the County has placed in its water system infrastructure and meets the long-term demands of the Comstock and surrounding areas far into the future.

5.3 DEDICATION RATES

Outside of the provisions for the division of lands within Chapter 16 of the Storey County Code, the County does not maintain a minimum water rights dedication for single unit residential development served by the County Water System. Farr West recommends a water right budget or allocation be applied to each existing connection or lot within the service area and for these values to be maintained on a digital ledger kept by either the Public Works or Planning Department. This will allow the County to accurately budget and manage water rights contracted from the Marlette Water System and provide the County the ability to justify water use factors and rates in future planning studies and communication with the NSE. Developing a

dedication rate would allow the County to include factors such as drought protection, unanticipated public uses, and system loss into allocations per connection. Benefits from representative dedication rates include maximizing volumes put to beneficial use, a correct assessment of water right needs related to future development, better land use planning and more accurate utility planning resulting in properly phased and sized infrastructure improvement projects.

5.4 WATER CONSERVATION PLAN

Water conservation planning is an important component to improving system sustainability well into the future. In fact, per chapter 540.121 of the NRS, each supplier of water must adopt a plan of water conservation which is in accordance with the requirements of NRS 540.141 and these plans should be updated at least every five years. These plans are typically geared to increase public awareness of the limited water resources which supply their region, and the impact conservation can have on the quality and quantity of water which is available long term. Additionally, these plans typically set near and long-term water use goals, present contingency plans for when water supplies are compromised and recommend water efficiency standards for new development. Another component of these plans is the evaluation of installing meters on all connections and the development of a tiered rate structure which encourages conservation. It is important to note that any modification to the rate structure should be included as part of a formal rate study which evaluates how changes to the rate structure impacts future water system revenues and expenses, including estimating a reduction in water use. The County is currently in the process of updating their Water Conservation Plan in 2021.

5.5 WATER SYSTEM FACILITY PLAN

The purpose of a water utility facility plan is to assess current and future system deficiencies and develop a capital improvement program to identify the projects needed to keep the system operating and in compliance. Once this program is defined the utility can identify future funding sources and associate the costs of the improvements to capacity replacement and capacity expansion. The most recent facility plan was completed in 2011 and it is recommended that the County pursue completing a plan by 2024.

5.6 WATER SYSTEM RATE AND CONNECTION FEE STUDY

Over the past 10 years, Storey County has evaluated the water utility user rates multiple times in the form of a formal rate study or as a rate analysis. One item which has not been updated as part of these studies is the connection fee for the County Water System. Currently, the County collects a hook-up fee based on the cost of providing the water meter and the physical connection to the water system, however this fee does not include any consideration for “buying in” to the available capacity of the system nor does it include a “water availability” charge. It is recommended that once the capital improvement program is defined as part of the facility plan that a formal rate and connection fee study be performed to recommend a representative fee for all future development.

5.7 WATER RESOURCE PLANNING

Per chapter 278.0228 of the NRS, all governing bodies shall develop and maintain a Water Resource Plan which:

- Evaluates all known sources of water,
- Quantifies current and future water demands,
- Analyzes the sufficiency of water sources in terms of quality and quantity, and
- Provides a plan for obtaining additional water of sufficient quality and quantity.

This plan must be updated at least once every ten years and shall be submitted to NDWR to be kept on file. Upon completion, this plan will satisfy this requirement and should be formally adopted by the Storey County Board of County Commissioners prior to being submitted to the NDWR. It is also recommended

that the County update this plan at least once every seven years as conditions can change over time and the information presented in a WRP is critical to ensuring the sustainability of a water utility. As a comparison the Truckee Meadows Water Authority updates its WRP on a five-year cycle.

CHAPTER 3: MANAGEMENT OF WATER RESOURCES

1.0 PURPOSE

This chapter is based on the findings from the third technical memorandum in a series of three which documented the analysis and findings of the 2021 Storey County Water Resource Plan (Plan). The specific purpose of this chapter is to estimate potential buildout demands as a result of future development within the Plan Area. This chapter will also identify the impacts to the Storey County Water System at the buildout condition which includes improvements to existing infrastructure and water right holdings. Future utility and water resource planning efforts will also be discussed.

2.0 FUTURE DEMANDS

Future demands for the Plan Area were generated from applying water demand factors against parcel size (i.e., acreage) or unit count. This analysis used the designated land use¹⁶, as of December 2020, for vacant parcels and applied a water demand factor as listed in Table 18. The Plan Area was broken up into the same four separate areas as used in Chapters 1 and 2 and shown on Figure 2. These areas are referred to as:

- The Comstock,
- VC Highlands,
- Mark Twain, and
- American Flat.

Additionally, Farr West held a workshop with Storey County staff on December 9, 2020, which detailed the methodology used for generating these future demands and presented preliminary results for future connections and improvement project alternatives.

Table 18: Water Demand Factors

Land Use	Demand Factor	Notes
Single-Family Residential	0.3 AFA/connection	Includes rural residential and forestry connections
Multi-Family Residential	0.9 AFA/connection	Assumes 3 units per parcel
Commercial	1.50 AFA/acre	Assumes 3 commercial connections per acre
Industrial	1.12 AFA/acre	Based on 1,000 gallons per day
Special Planning Zone	0.3 AFA/connection	Average connection demand determined from Chapter1

2.1 VACANT PARCELS AND LAND USE

Vacant parcel land use determinations were primarily pulled from County GIS data, however land use determinations for all areas were updated per the 2016 Storey County Master Plan. Due to the rural nature of the County, there were a large number of vacant parcels outside of the Plan Area that were not considered as a part of this analysis due to their distance from current water system infrastructure and a high barrier of cost to reach these areas through additional infrastructure. It should be noted that a vacant parcel analysis was not performed for Silver City, as it lies in Lyon County and future land uses are not under the

¹⁶ Vacant parcel land use determinations were primarily pulled from County GIS data, however land use determinations for all areas were updated per the 2016 Storey County Master Plan.

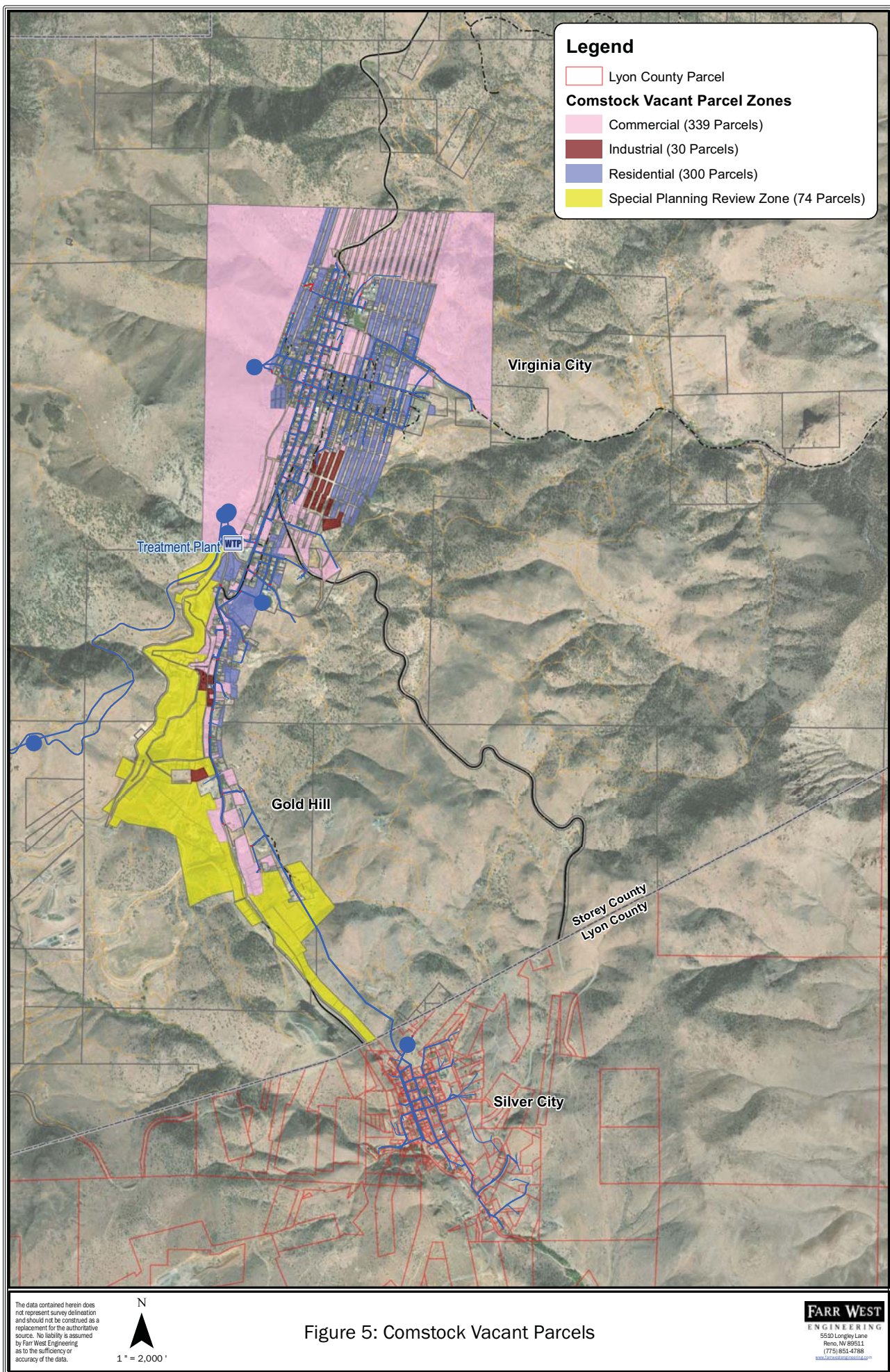
responsibility of Storey County. Future demands for Silver City were limited to the remaining system capacity of 105.3 acre-feet per annum (AFA) determined in chapter 2 of this Plan.

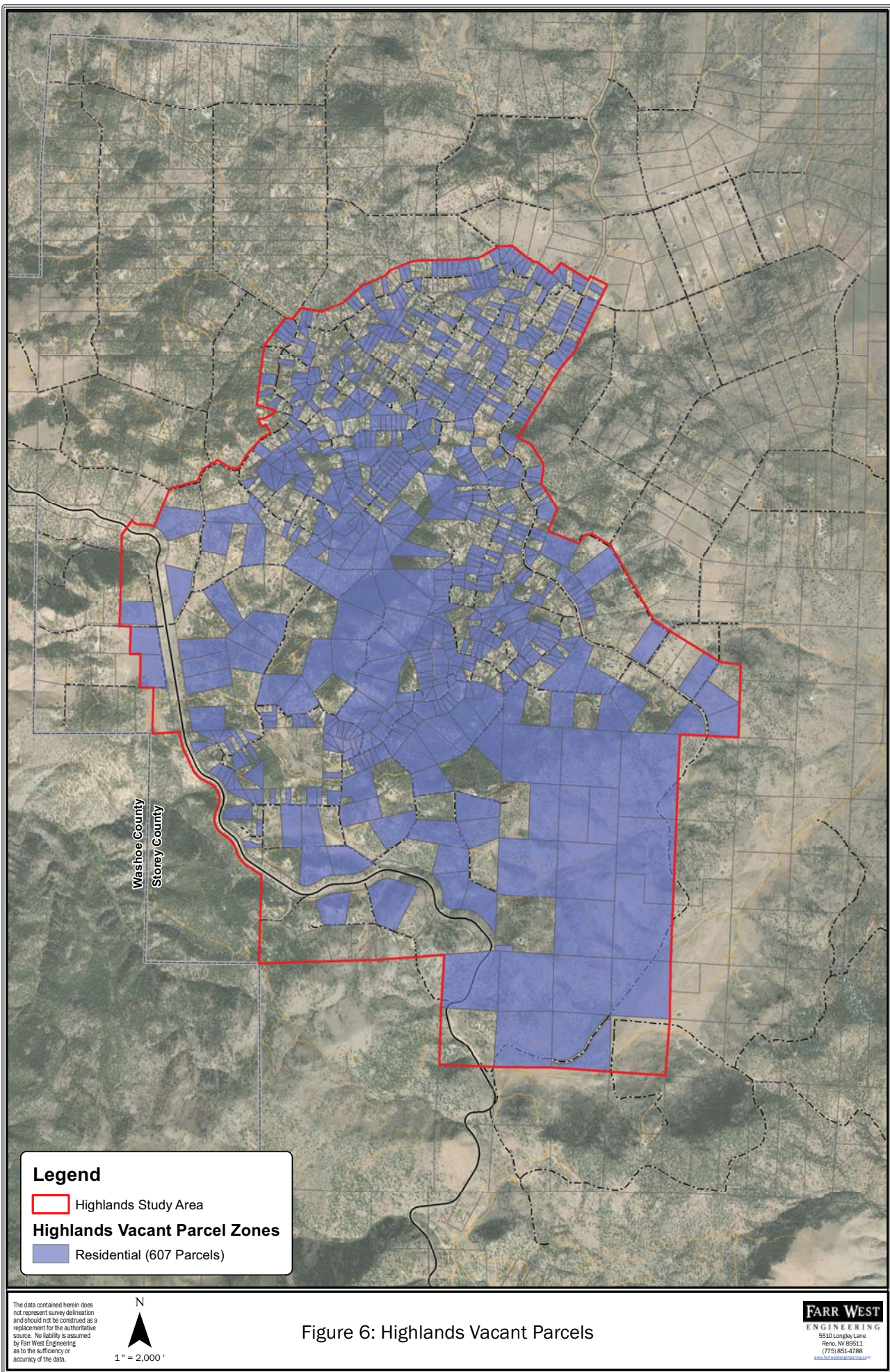
The vacant parcels in the Comstock area can be found in Figure 5. Vacant land uses within the Comstock include single-family residential, multi-family residential, commercial, industrial, forestry, and special planning zones. The special planning zone parcels are limited to railroad and mining uses. However, both designations were considered as potential future water users and assigned a single EDU per parcel as a worst-case scenario for buildout demands.

The vacant parcels in VC Highlands are comprised of entirely residential parcels, ranging in area from 1 acre to 40 acres. No matter the parcel size, all vacant parcels within the loop consisting of HWY 341, Lousetown Road, and Cartwright Road were included in this analysis and were counted as one EDU per parcel. There are 269, 10-acre parcels surrounding this looped area that are reasonable to include in future planning efforts but were excluded from this plan due to the diminishing cost-benefit relationship in adding this small number of connections. Figure 6 shows the parcels considered for the analysis as well as surrounding parcels.

The analysis of the Mark Twain area included land uses which reflect future changes as outlined in the 2016 Master Plan (see Appendix A). The area consists of single-family residential, rural residential, forestry, and industrial. Figure 7 shows the vacant parcels and zoning in the study area that was considered for this analysis.

The American Flat area southwest of Gold Hill currently has no existing development beyond a mining operation and two single family residences. However, future development potential was identified in the 2016 Master Plan. The land uses identified in the 2016 Master Plan were used for this area as shown in Figure 8. The area is primarily forestry with 252 acres of industrial. Similar to the Mark Twain area, the 240 acres of BLM forestry lands were removed from this analysis. For residential and special planning zone parcels, individual parcels were counted as possible future water service connections for this analysis. For rural residential parcels, a factor of 40 acres per future connection was used. Commercial and industrial parcels were counted as total acreage for the analysis and a water usage per acre demand factor listed in Table 18 was applied to the parcel area. Forestry parcel connections were assigned the same EDU value as rural residential parcel connections.





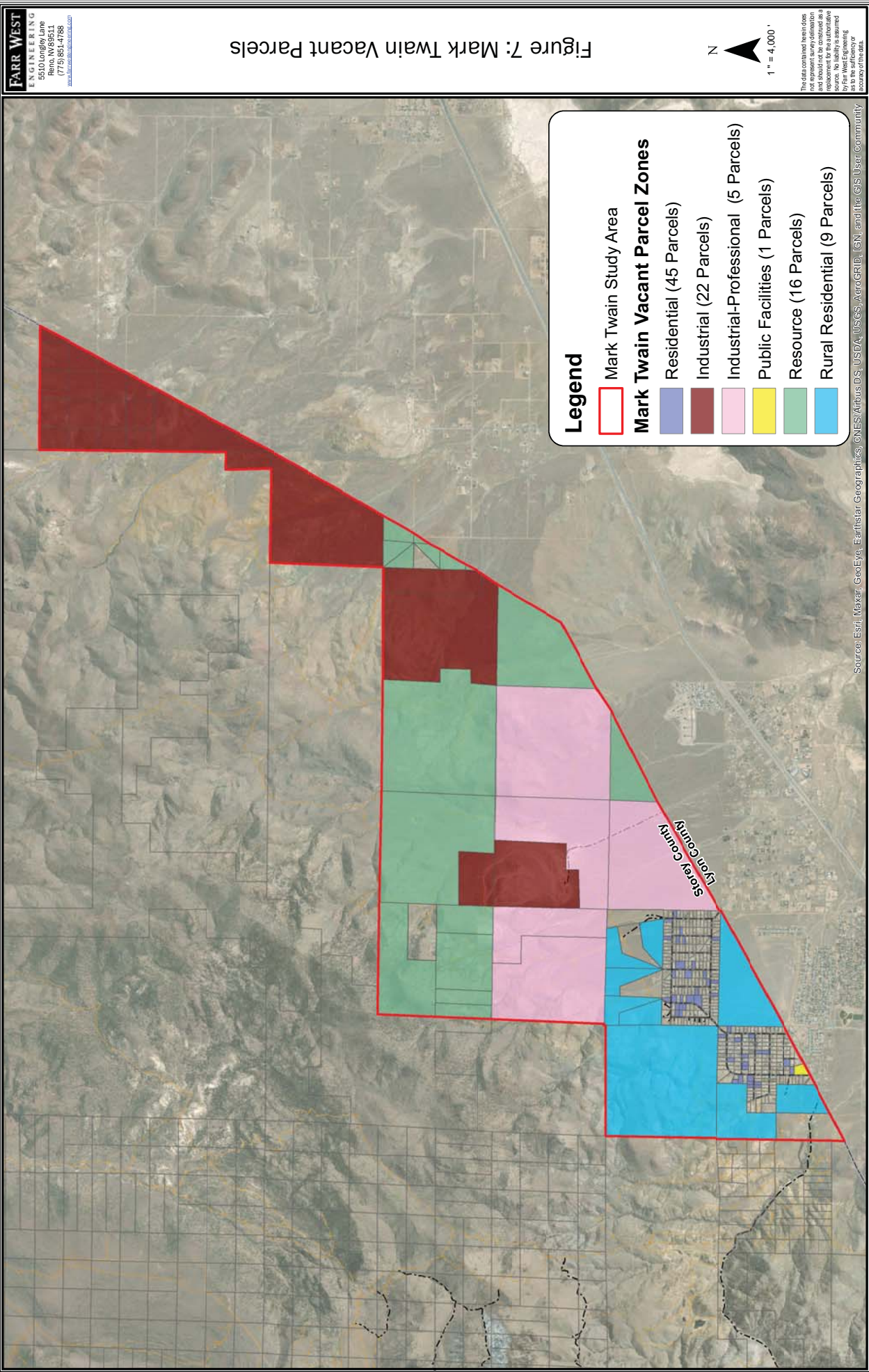
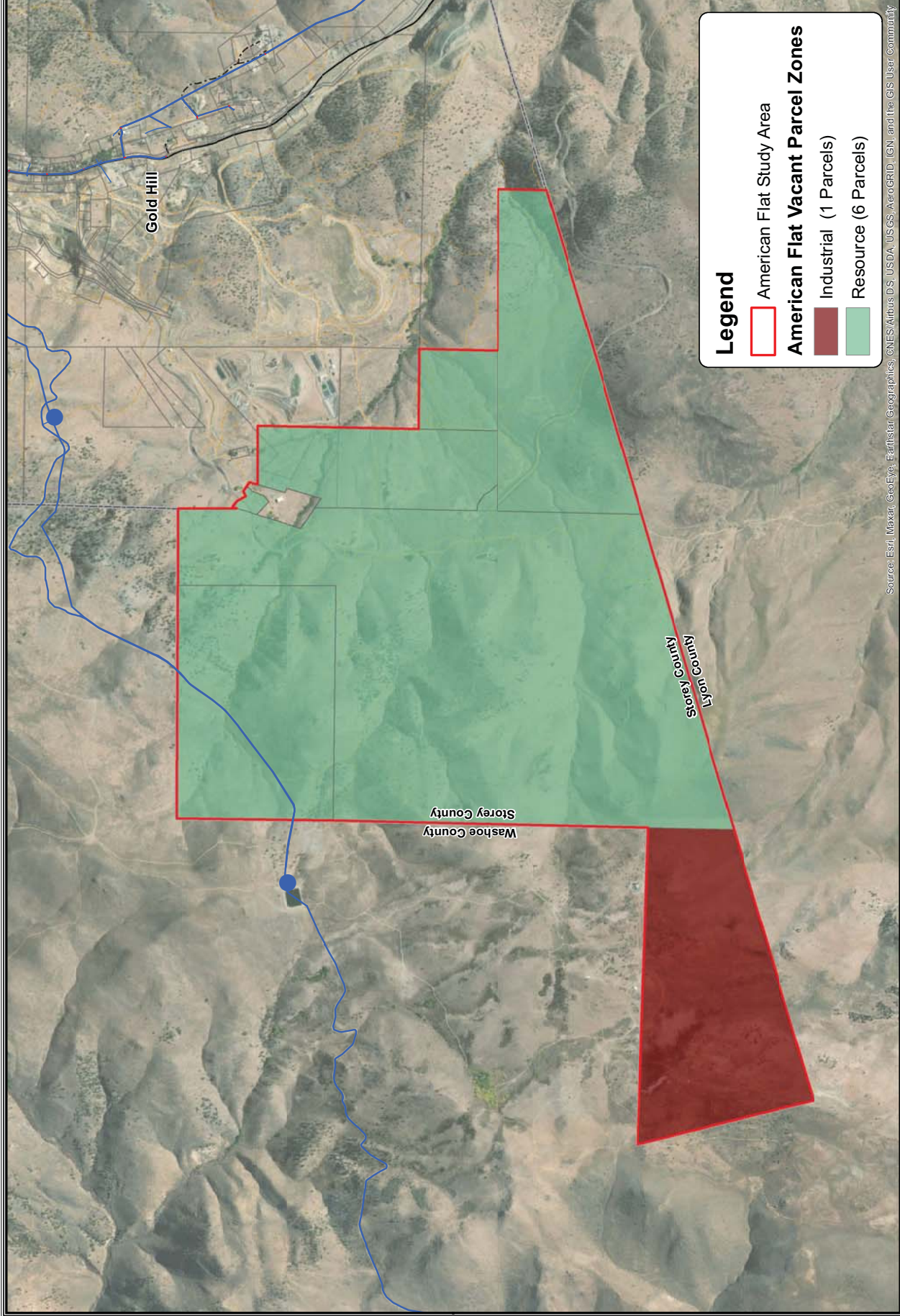


Figure 8: American Flat Vacant Parcels

N
1" = 1,500'

The data contained herein does not constitute a warranty, representation, or endorsement by Farr West Engineering, Inc. for any use other than that intended by Farr West Engineering, Inc. and should not be construed as a replacement for the authoritative information provided by the National Geospatial Intelligence Agency or the U.S. Geological Survey.



Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Table 19: Vacant Parcel Land Use

	Comstock	Highlands	Mark Twain	American Flat	Total
Single-Family Residential (ERUs)	293	607	74	-	974
Multi-Family Residential (ERUs)	21	-	-	-	21
Commercial (Acres)	132	-	-	-	132
Industrial (Acres)	19	-	4,327	252	4,598
Forestry (ERUs)	11	-	23	31	65
Special Planning Zone (parcels)	74	-	-	-	74

2.2 DEMAND FACTORS AND TOTAL BUILDOUT DEMANDS

Demand¹⁷ factors were applied to the vacant parcels in each area according to their land use. Although the average water usage per residential customer was determined to be 0.17 AFA per connection in Chapter 1, the projected unit water demand for residential uses or EDUs was adjusted to 0.3 AFA for this Plan. Multi-family residential assumes three units per parcel. Customer meter data also showed that commercial customers used 0.33 AFA on average. This volume was scaled up to 0.5 AF per commercial connection or 1.5 AF per acre for all vacant parcels zoned commercial for future water demand projections.

Industrial water usage was calculated on a per acre basis. The industrial demand factor was selected based on an analysis of Tahoe Reno Industrial Center, south Washoe County, and Douglas County water usages. Demand factors were then applied to all vacant parcels within the plan area. Table 20 below shows the existing demand, additional demand based on land use, and buildout demand.

Table 20: Plan Area Water Demands

Area	Existing Demand (AFA)	Additional Demand (AFA)	Buildout Demand (AFA)
Comstock	221	456 ⁱ	677 ⁱ
Highlands	176 ⁱⁱ	182	358
Mark Twain	100 ⁱⁱ	4,875	4,975
American Flat	4.5	291	296
Total	502	5,804	6,306

i - Includes 105.3 AFA for Silver City

ii – Existing demand was calculated by allocating 0.3 AF per existing residential connection.

¹⁷ All demands or demand factors in this chapter are average day demands unless noted otherwise.

3.0 BUILDOUT IMPACTS

To supply the volume of water that will be required to meet maximum day demands of the entire Plan Area at buildout, the County will need to have sufficient conveyance capacity in their water system infrastructure as well as have the volume of water rights needed to provide over 6,000 acre-feet of water on an annual basis. For further context, this volume of water correlates to a maximum day demand flow rate of 7,802 gpm or require transmission (i.e., siphon) and water treatment facilities (WTP) designed to deliver more than 11 million gallons per day (MGD). Due to the large disparity between the makeup of the current system and a system capable of providing more than 11 MGD to its customers, this Plan will only propose future improvement projects which eliminate current system deficiencies or will interconnect no more than one satellite area per any given development scenario or alternative.

3.1 INFRASTRUCTURE IMPROVEMENTS

Farr West developed improvement project(s) for each water system need in the future to provide a picture for what the connection or development of specific areas will have on the current system. These project alternatives were discussed and workshopped with County staff on December 9, 2020. All project cost estimates were prepared according to Class 5 methodology according to AACE International using conceptual or planning level engineering criteria to size significant project components.

3.1.1 County Water System

The County Water System consists of the water treatment plant, five storage tanks and distribution mains throughout Virginia City, Gold Hill, and Silver City. Overall, the system has aging infrastructure, areas with inadequate fire flow and static pressures in excess of 190 psi. Through previous master planning and recent hydraulic modeling analysis four projects were identified which would resolve current deficiencies¹⁸. These projects are:

- B St. & Union St. Water Main Replacement Project
- Divide Water Main Upsizing Project
- Silver City Transmission Main Replacement Project

After all these projects are completed, the County Water System will be able to meet or exceed all standard performance criteria/requirements as set forth by the Nevada Administrative Code 445A (NAC 445A) and enforced by the Nevada Division of Environmental Protection – Bureau of Safe Drinking Water (BSDW). Complete opinions of probable cost totaling approximately \$6.0 million dollars can be found in Appendix C.

If the Comstock area were to buildout per the current land use designations, Average Day Demand (ADD) and Maximum Day Demand (MDD) would increase to 413 and 825 gpm, respectively. System demands on this order would exceed current siphon capacity and would reduce WTP excess capacity to only four percent of total rated capacity. For this reason, the two additional recommended improvement projects would be:

- 12-inch diameter Parallel Siphon (from US 580 to Top of Siphon)
- WTP Capacity Improvement Project (1.26 MGD to 1.5 MGD)

The estimated total cost of all improvements required to meet the buildout condition for the existing Comstock service area is just more than \$18 million dollars with \$12.4 million being attributed to the Siphon and WTP projects.

¹⁸ The Silver City distribution system has been previously identified as deficient and in need of replacement in the 2011 Master Plan. An engineering design has been completed for these improvements and the Lyon County Utilities Department has assumed the role as sponsor for the construction of this project.

3.1.2 American Flat

The proposed development of the American Flat area as shown on Figure 8 would increase system demands by approximately 291 acre-feet annually or an additional 367 gpm during MDD. Water service would be supplied to the area via 3,100 linear feet (lf) of 12-inch diameter transmission main in addition to 750,000 gallons in above ground storage. In total these supply and storage improvements would cost approximately \$3.9 million dollars¹⁹.

This area would be supplied water through the Gold Hill pressure zone from the County Water System and would require the following additional improvements:

- 12-inch diameter Siphon replacement (from Lakeview Tanks to Top of Siphon)
- WTP Capacity Improvement Project (1.26 MGD to 2.2 MGD)

The estimated total cost of these additional County Water System improvements is approximately \$27.7 million dollars with \$6.3 million being associated with the pipeline installed between Lakeview Tanks and US 580 (i.e., Marlette Water System ROW).

3.1.3 Mark Twain

As stated in chapter 1, there are 333 existing connections in the Mark Twain area which would increase system demands by 100 acre-feet annually or an additional 124 gpm (0.2 MGD) during MDD. In order to supply water to serve the existing residential uses in the Mark Twain area via the existing County Water System, a 5.2-mile, 12-inch diameter transmission main would need to be constructed in 6-Mile Canyon Dr. along with a 500,000-gallon terminal tank. Additionally, an 8-inch diameter distribution system would also need to be installed to provide water service to the existing residences. The estimated cost of the improvements needed to supply potable water to the 333 connections is approximately \$30 million dollars.

Upgrades to the transmission siphon and WTP would also be required to meet NRS supply capacity requirements. These improvements would be:

- 12-inch diameter Siphon replacement (from Lakeview Tanks to Top of Siphon)
- WTP Capacity Improvement Project (1.26 MGD to 2.2 MGD)

The estimated cost of these additional County Water System improvements is just more than \$53 million dollars with \$6.3 million being installed between Lakeview Tanks and US 580 (i.e., Marlette Water System ROW).

3.1.4 VC Highlands

The area known as VC Highlands is home to approximately 588 residential structures which receive potable water service from individual domestic wells. If these existing residences were to be connected to the County Water System, it is estimated that system demands would increase by 176 acre-feet annually or an additional 219 gpm (0.3 MGD) during MDD. The infrastructure needed to supply water to the existing residents of the Highlands is:

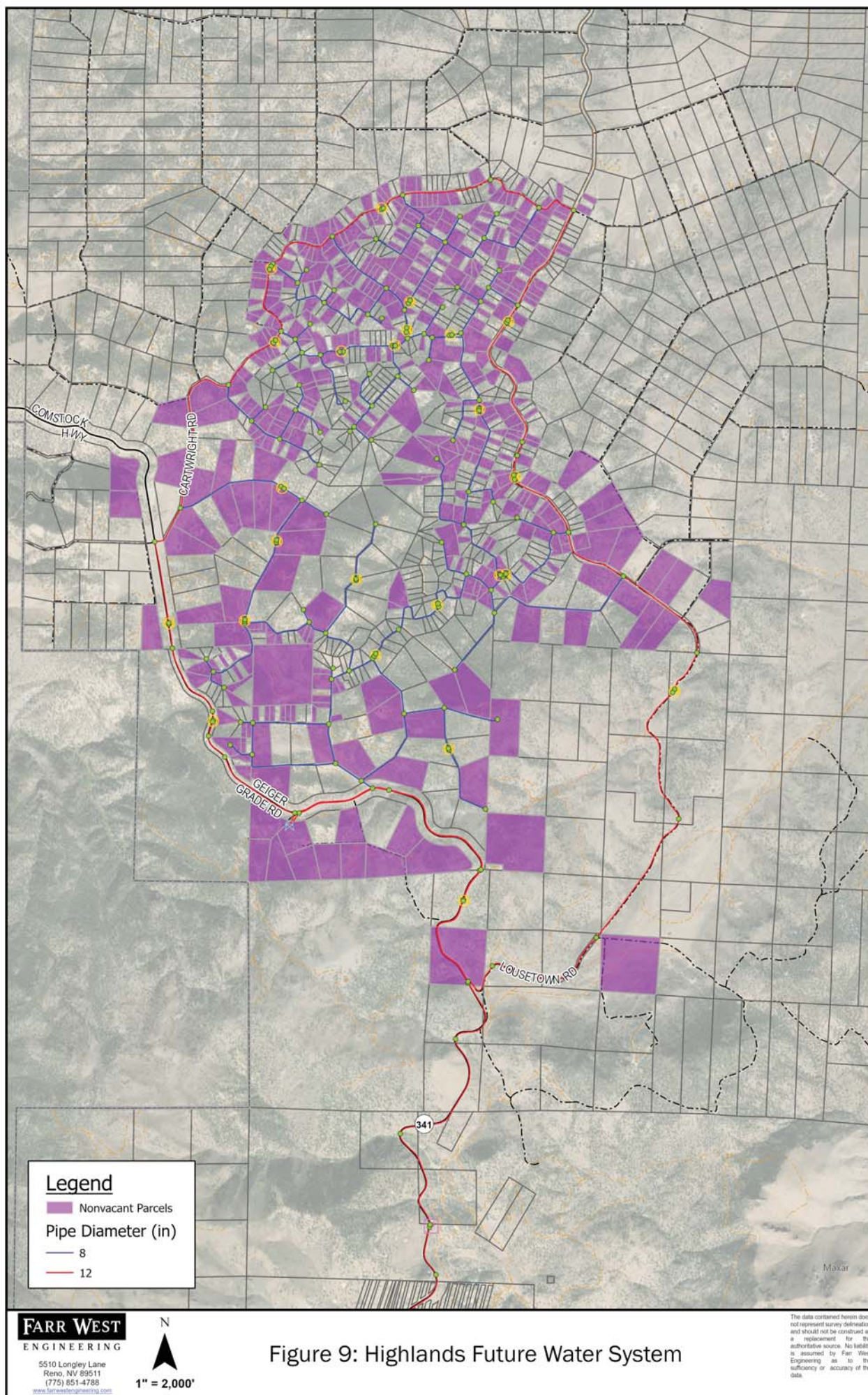
- 5.5 mile, 12-inch diameter transmission main between Virginia City and the top of Geiger Grade
- A 100 hp booster pump station located at the north end of the current County Water System
- 30 miles of 8 and 12-inch distribution main as shown on Figure 9
- 588 water meters and service lines
- 650,000-gallon water storage tank

¹⁹ The cost to install the distribution system in the American Flat area is not included in this total. It is assumed that the cost of these improvements would be borne by the developer/development.

In total, it is estimated that the cost of these improvements would exceed \$70 million dollars, with the transmission and storage portion totaling \$15.8 million. Due to the increase in system demands, upgrades to the transmission siphon and WTP would also be required to meet NRS supply capacity requirements. These improvements would be:

- 14-inch diameter Siphon replacement (from Lakeview Tanks to Top of Siphon)
- WTP Capacity Improvement Project (1.26 MGD to 1.6 MGD)

These additional water supply improvements would increase total project costs by \$25 million dollars and bring project totals to approximately \$95 million dollars. If the County were to size all infrastructure detailed in this section to accommodate complete buildout of the Highlands area the total cost of improvements increases from \$95 million to \$126 million dollars.



3.1.5 Siphon Upgrades

In review, the transmission siphon between Lakeview Tanks and the Top of Siphon does not have the conveyance capacity to supply enough water to meet the buildout condition for any of the scenarios evaluated in this Plan. At a minimum, a new 12-inch pipeline would need to be installed parallel to the existing main between US 580 and the Top of Siphon in order to meet buildout demands for the current service area. For all other scenarios, the entire line would need to be replaced between the Lakeview Tanks and the Top of Siphon with a 12, 14, or 16-inch diameter pipeline. Since different portions of the pipeline are owned and maintained by different parties (i.e., Marlette Water System and Storey County), it is reasonable to assume that each party would contribute funding for their portion of the improvements. The approximate split of ownership based on pipeline length is 61 percent for Storey County and 39 percent for the Marlette Water System.

3.1.6 Water Treatment Plant Upgrades

Like the upgrades to the siphon transmission main, the 1.26 MGD Water Treatment Plant will also need to be expanded to supply the volume of water needed at buildout for all development scenarios or alternatives studied in this Plan. Table 21 below details the additional capacity needed at the Water Treatment Plant to meet each development scenario.

Table 21: Water Treatment Plant Capacity Upgrade Needs

Development Scenario	Increase in Treatment Capacity (MGD)
Comstock Service Area Buildout	0.3
Comstock Service Area Buildout + American Flat Buildout	1.0
Comstock Service Area Buildout + Mark Twain (Ex.)	1.0
Comstock Service Area Buildout + Highlands (Ex.)	0.6
Comstock Service Area Buildout + Highlands Buildout	1.0

3.1.7 Project Summary

Per the findings of this Plan, the County will need to invest between \$6.0 and \$126 million dollars in water system improvement projects to maintain system compliance and supply water to new areas (e.g., Highlands, American Flat, Mark Twain). Table ES-4 lists a probable cost for each project that the County can reference for future long-term capital planning applications. These opinions of probable cost were developed using conceptual designs and cost data and should be refined as part of a preliminary engineering process prior to securing financing or allocating funds for their design and construction.

Table 22: Water System Projects

Project	Probable Cost ⁱ
Existing System Deficiencies	\$6.0 M
Comstock Service Area Buildout	\$12.4 M
Comstock Service Area Buildout + American Flat Buildout	\$27.7 M
Comstock Service Area Buildout + Mark Twain Ex. Residents Only	\$53.4 M
Comstock Service Area Buildout + Highlands Ex. Residents Only	\$95 M
Comstock Service Area Buildout + Highlands Buildout	\$126 M

i – All costs are presented in 2022 dollars and are Class 5 per AACEI

3.2 WATER RIGHTS

In addition to constructing the infrastructure necessary to provide water service at buildout, the County will need to maintain or acquire a sufficient volume of water rights to be able to serve the number of connections projected at buildout. The calculations provided below estimate what the minimum volume of water rights will need to be held in the interest of the County according to the land uses studied in Section 2.0.

Existing number of Residential Connections (County Water System)	596
Existing number of Commercial Connections (County Water System).....	207
Existing number of EDUs	998
Volume of water rights dedicated for existing development.....	1,118 AF
(assumes 1.12 ac-ft per EDU)	
Future EDUs (Highlands Ex. Domestic Wells).....	588
Future EDUs (Mark Twain Domestic Wells).....	333
Future EDUs (American Flat Domestic Wells).....	15
Future EDUs (Vacant - Single and Multi-Family Residential)	995
Future EDUs (Vacant - Commercial + Industrial) ²⁰	10,694
Future EDUs (Vacant - Other: Forestry + Special Planning) ²	139
Total Future EDUs	12,764
Water rights needed for all future development + conversion of existing domestic well owners to County Water System (assessed at 1.12 ac-ft per EDU)	8,783 AF
Estimated Domestic Well Credits (assessed at 2 acre-ft per DW)	(1,872 AF)
Total Water Rights Needed	6,911 AF

Per the 2002 contract, Storey County has reserved up to 495.6 acre-feet of water from the Marlette Water System in 2021²¹. This total is only slightly more than half of the volume that would typically be dedicated to support the existing 803 connections of the Storey County Water System. Considering the conversion of existing domestic well owners to the Storey County Water System and the absolute development of all vacant parcels according to approved land uses, Storey County may need to acquire right to upwards of 6,911 acre-feet of water to support permitting of the proposed developments.

Since Storey County does not maintain a ledger tracking historic water right dedications, this study assumes a dedication rate of 1.12 acre-feet per EDU²² for all calculations being presented in this section. This value has been commonly used across the state in the past to support the permitting of one residential unit with

²⁰ EDU counts for non-residential uses were calculated by dividing the projected average annual demand from Section 2 by a value of 0.3 AF/EDU.

²¹ Projecting out the annual increases in water made available to Storey County for the next 20 years results in an estimate of 653.6 acre-feet from the Marlette Water System in 2041.

²² This is a high estimate. Dedication rates of 1.12 AF/EDU have created large volumes of unexercised commitments of water rights throughout the state and the NSE's office has supported reduced dedication requirements over the past 10-20 years when there is adequate data to support a reduced rate.

the Nevada State Engineer's (NSE) office. If the County would like to have this unit volume reduced for future dedications it is recommended that the County prepare a more specific document summarizing their water use profile and proposed dedication rates and engage the NSE's office prior to passing new ordinance.

4.0 FUTURE MANAGEMENT

As shown in Section 3.2, the County will need to acquire or be dedicated almost 14 times the amount of water they have currently secured via contract with the Marlette Water System to meet buildout demands in all four areas studied as part of this Plan. If the County were to only provide water service to the Comstock area this volume gets reduced to approximately 4 times the currently contracted volume for a total of 2,178 acre-feet. In either scenario it will be necessary for the County to secure additional water in addition to modifying how the system is operated based on the number of customers and size of the service area in the future.

4.1 FUTURE WATER SOURCES

Chapter 2 found that the only viable water source for the County Water System is the Marlette Water System, and all future volumes of water should be acquired from this source. Additionally, chapter 2 also found that the current conveyance capacity of the siphon transmission main was limited to 738 gallons per minute (gpm) or 1,190 acre-feet annually. This stated capacity will be able to provide nearly all the future water needs of the Comstock area, however the addition of either the Highlands or Mark Twain areas will present the need for additional transmission mains to be constructed.

Another water source potentially available to the County could be the Carson River or groundwater rights in hydrographic basins 103, 104 or 105. To receive water supplies from these sources the County Water System would need to be interconnected with the Dayton and/or Mound House Water System(s), owned and operated by the Lyon County Utilities Department (LCUD). The connection to these systems can occur via a transmission main along 6-Mile Canyon Road and/or State Highway 341. Depending on the volume of water which will be supplied by these new connections, additional infrastructure in the LCUD or Carson City water systems may need to be installed prior to entering into any operating agreement with the associated utilities. An array of future utility management and operational strategies exist depending on how the new water source would be used and should be studied further prior to pursuing and water rights acquisitions or construction of any infrastructure improvements related to these water sources. These strategies include, but are not limited to: emergency backup supply, primary water supply for portion of water system, seasonal supply for greater water system, and an active wholesale connection between utilities.

Chapter 2 also found that the ability for existing groundwater sources to meet existing domestic uses has become more and more limited over the past 20 years and are not viable to support proposed development in the future. However, if the County were to pursue the interconnection of the County Water System to the Highlands or Mark Twain areas there is some merit to constructing a new community well which can be used seasonally (as conditions allow) and in emergencies. Additional water rights for this proposed water source should also not necessary since the conversion of domestic wells to the County Water System should provide domestic well credits which could be used to support permitting of the new community well.

4.2 REGIONALIZATION

If Storey County were to pursue interconnection of the County Water System with the Dayton/Mound House System, it would present the significant benefit of regionalizing water supplies for both the Comstock and surrounding areas. Regionalization of water supplies provides redundancy during periods of severe drought, during water system infrastructure failure, or when the quality or quantity of a water supply has diminished.

5.0 FUTURE WATER MANAGEMENT PLANNING

By implementing a proactive approach to water management planning, Storey County will ensure a reliable and resilient water utility well into the future. To do this the County needs to complete and update a variety of different planning efforts over a five to seven fiscal year (FY) cycle. While the intent and findings of each study is different, proper planning builds off the information developed in one plan to another and provides recommendations which improve the overall sustainability of the water system. An example of this would be developing a representative capital improvement program (CIP) as part of a water system master plan update. This CIP would subsequently ensure that accurate user and connection fees were being collected so that future capital funding needs were being met. Additionally, the rate study would also develop a user fee structure which promotes conservation and improves source water sustainability. This section summarizes key planning efforts required in the future and offers a recommendation for when these documents should be completed.

Table 23: Water System Planning

Plan	Year Completed	Recommended Update
County Strategic Plan	2020	2030
Water Resource Plan	2022	2027
Water System Master Plan	2011	2023
Rate Study	2011, 2020	2025
Water Conservation Plan	-	2022

6.0 CONCLUSION

This chapter has found that the development of all vacant parcels according to current land uses within the current service area boundary will nearly triple current average water use and require significant improvements to County Water System infrastructure. Beyond a projected cost of \$18.4M for these improvements, the County will also need to secure approximately 2,000 acre-feet of water from the Marlette Water System (or other) to support permitting of the proposed development(s). Additionally, if the County was to pursue connecting additional areas into the current service area improvement project costs may exceed \$100M and the need for additional water triples to more than 6,500 acre-feet beyond the volume the County has currently reserved with the Marlette Water System.

Completion of this Water Resource Plan is a significant step for the County towards improving water system sustainability. The findings of this Plan can be used to:

- support the acquisition of additional water resources,
- properly evaluate future land development proposals,
- improve capital planning exercises including the identification of future funding sources, and
- maintain regulatory compliance with NDEP the Nevada State Engineer's Office.

BIBLIOGRAPHY

- Affirmation of the Second Judicial District's Franktown Creek Decree, 4386 (Nevada Supreme Court April 24, 1963).
- Demographer, N. S. (2020). Certified Population Estimates of Nevada's Counties, Cities and Towns 2000 to 2019. Nevada: Nevada Department of Taxation.
- Franktown Creek Irrigation Company v. Marlette Lake Company, 4386 (Supreme Court of Nevada September 27, 1961).
- Smith, D. W. (2020, April 14). *Evaluation of water-level decline and aquifer properties in the Virginia City Highlands and Highland Ranches Volcanic Rock aquifer system, Storey County, Nevada*. Retrieved from USGS: https://www.usgs.gov/centers/nv-water/science/evaluation-water-level-decline-and-aquifer-properties-virginia-city?qt-science_center_objects=0#qt-science_center_objects
- Storey County. (2016). *Storey County Master Plan*. Storey County.
- Supply Contract. (2002, October 23). *Contract between the State of Nevada and Storey County to Supply Raw Water from the Marlette Lake Water System*. Carson, Nevada.
- WRCC. (2020, April 14). *Virginia City, Nevada (268761)*. Retrieved from Western Regional Climate Center: <https://wrcc.dri.edu/cgi-bin/cliMAIN.pl?nv8761>



EXECUTIVE SUMMARY

This Water Resource Plan (Plan) is intended to provide Storey County (County) a document to guide future decisions related to the City's water supply, transmission and distribution system, and its ability to meet customer water demands into the future. This Plan also addresses the requirements of Nevada Revised Statute (NRS) Chapter 287.0228 as amended by Senate Bill (SB) No. 150, as part of the 2019 legislative session, to require governing bodies to develop and maintain a water resource plan. Per NRS 278.0228, the plan shall be in place by 2029 and then updated every 10 years. This executive summary provides a snapshot of the key findings from each chapter of the Plan. In total, the Plan is comprised of an Introduction and three topic-focused chapters.

INTRODUCTION

This WRP will focus on the populated areas of Virginia City, Gold Hill, American Flat, Virginia City Highlands, Highland Ranches, and Mark Twain Estates in the southern portion of the County (Plan Area). A map of the Plan Area is provided in Figure 2. The major water supply for this portion of the County is supplied by the Marlette Lake Water System (Marlette System). The Marlette System is owned and operated by the State of Nevada (State). The Marlette System provides water to the County Water System for customers in Virginia City, Gold Hill, and American Flat. The County also delivers water to residents of Silver City which is located in Lyon County. The remaining populated areas within the Plan Area are supplied by individual domestic wells.

Because the County does not provide water service in other portions of the County, those areas are outside the scope of this Plan. In the future, it is anticipated that the Canyon General Improvement District (Canyon GID) and the Tahoe Reno Industrial GID (TRI GID) will complete similar water resource plans which can be considered for potential incorporation into this Plan as Appendices.

CHAPTER 1: WATER DEMANDS, SOURCES, AND MANAGEMENT

Chapter 1 summarizes current County Water System water demands, water sources and water management strategies within the Plan Area. This Chapter presents an analysis of current water uses and demands to establish estimates and assumptions which will form the basis for the Plan.

The County Water System currently serves approximately 803 metered customers. The majority of customers (666) are within Virginia City, 51 within Gold Hill, and 86 are within Silver City. The County serves approximately 207 commercial customers and the remaining 596 are residential. For the period between 2018 through 2021 the County Water System consumed an average of 221 AF of water per year and a maximum of 234 AF in 2017 from the Marlette System.

Deliveries to the majority of customers in the County's systems are metered, however some unmetered connections still exist. For this reason, Farr West utilized the Water Treatment Plant (WTP) flow meter data as the basis for estimating system demands. Analysis of WTP water meter records from 2016 to 2019 yielded the following:

- Average Annual Demand (AAD) 210 AF
- Average Day Demand (ADD) 131 gpm
- Maximum Day Demand (MDD) 262 gpm
- Peak Hour Demand (PHD) 524 gpm

Considering the County System serves 803 customers, the average water use per connection is 0.26 AF per year which is equivalent to approximately 0.16 gpm per connection. This average connection demand was used to set existing water demands but was adjusted to 0.3 AF per new residential connection to estimate future water demands.

The County does not own the water rights to what is currently its only water supply. However, each of the water rights owned by the State defines the place of use as Virginia City, Gold Hill, Silver City, and Carson City. Prior to the State being able to deliver water to locations not currently included as the place of use, a temporary or permanent change to the water right would have to be approved by the office of the Nevada State Engineer (NSE). Finally, the contract between the County and the State for continued delivery of water from the Marlette System is currently being negotiated for renewal.

Historically, the State has implemented 10-year contracts with the County for delivery of Marlette System water according to the limits shown in Table ES-1.

Table ES-1: County Delivery Limits per 2002 Contract (Supply Contract, 2002)

Year	June, July, Aug., & Sept. Daily Peak Limit (gallons per day)	Remaining Month Daily Peak Limit (gallons per day)	Annual Use Limit (acre-feet)
2015	833,500	533,500	448.2
2016	846,500	546,500	456.1
2017	859,500	559,500	464.0
2018	872,500	572,500	471.9
2019	885,500	585,500	479.8
2020	898,500	598,500	487.7
2021	911,500	611,500	495.6

Water for the County Water System is delivered through a seven-mile inverted siphon which transitions to a pipeline. The County's ownership of the system begins at the location where the siphon crosses under Interstate 580 at Lakeview, north of Carson City. The transmission line discharges to the Five-Mile Reservoir and/or the Five-Mile Tank prior to filling the Bullion Tank next to the 1.2 MGD Water Treatment Plant where water is treated to potable standards and placed into the County Water System distribution system.

Key findings of this chapter include a review of water right ownership, water demand calculations, an estimate of unaccounted for water, a summary of water storage facilities, and domestic well pumpage estimates.

CHAPTER 2: SOURCE WATER RELIABILITY AND SYSTEM CAPACITY

Chapter 2 discusses the water system's current capacity, the quality and quantity of all water sources, a water source risk analysis, and drought mitigation strategies available to the County. Recent water use in the Plan Area is estimated to be 1,157 AF per year. Of this volume, 221 AF is raw water from the Marlette System used to serve Virginia City, Gold Hill, and Silver City. The remainder is unmetered groundwater pumped at private domestic wells. Utilizing a consumption rate of 1 AF per domestic well it is estimated that 588 AF is pumped in the Highlands, 333 AF in Mark Twain, and 15 AF in the American Flat area.

The only water source currently available to the County Water System is the surface water provided by the Marlette Water System. This source is very reliable and of high quality, however the volume of water available from the Marlette Water System is primarily influenced or restricted by transmission pipeline capacity, although annual snowpack, fishery management at Marlette Lake, and operating agreement limits also have a potential to limit the amount of water available from this source. The annual volume of water available under the Franktown Decree to NPWD is approximately 7,200 AFA. Per the previous operating agreement, the County has reserved up to approximately 500 AF of that annual total.

Water resources within the Plan Areas are less than current demand. Annual recharge of area aquifers is limited due to inadequate elevation of the Plan Area and adjoining areas for significant recharge. The

primary source of recharge occurs within the upslope mountain block and is attributed to snowpack melt and infiltration from winter storms. Recharge from drainages can provide an additional source of recharge depending on the slope and soil permeability. The Highlands is dependent on local recharge within the mountain block without significant impact from adjoining areas. The Mark Twain area water resources are impacted by mountain block (“upslope”) recharge, recharge conveyed by drainages and the Carson River watershed.

The populated areas of the Highlands and Mark Twain also lie within the Plan Area but are not provided water by the County Water System. Residences in these areas utilize individual wells to provide domestic water supplies. Even though each area sits in a separate hydrographic basin, both areas have experience water availability problems during extended dry periods. Per the Plan, it is not feasible to develop a single, groundwater well to serve the local community in either of these areas due to aquifer performance concerns.

For the County to provide a reliable water supply to its customers, it must actively manage its water sources and system infrastructure. Some key recommendations made in this chapter include:

- Negotiate a long-term delivery agreement and contract with the Marlette Water System,
- Maintain an up-to-date Water Resource Plan,
- Complete a Water Conservation Plan,
- Develop a water right dedication rate schedule and maintain a water right ledger, and
- Develop policy which requires future development utilizing groundwater as its only water source to provide substantial analysis and study of the groundwater aquifer and prove that the proposed uses will have limited and mitigatable effect on existing users or uses.

This chapter also reviewed existing system infrastructure and provided estimates of how much water the system can supply on a regular and maximum day basis. Considering the conveyance capacity of the siphon transmission main, the surface water treatment plant, and the storage tanks throughout the system it is estimated that up to 864 additional residential connections can be added to the system without creating problems. Additionally, each portion of the system was analyzed separately from one another, and it is estimated that up to 768 units could be added to Virginia City and/or 710 units could be added in Gold Hill. It should be noted that even though these estimates are provided in the unit of single-family residences (SFR), other land uses (e.g., commercial, industrial) can be added to the system. Projected water demands for these uses should be divided by the SFR water demand factor of 0.3 AF per unit to account for the number of “units” the proposed development represents in overall system capacity accounting.

CHAPTER 3: FUTURE DEMANDS AND WATER MANAGEMENT

The purpose of Chapter 3 is to estimate potential buildout demands resulting from land development within the Plan Area in the future. This chapter also identifies the impacts to the Storey County Water System at the buildout condition which includes improvements to existing infrastructure and water right holdings. Future utility and water resource planning efforts is also discussed.

Future water demands for the Plan Area were generated from applying water demand factors against parcel size (i.e., acreage) or unit counts using designated land uses as of December 2020. The areas analyzed were:

- The Comstock,
- VC Highlands,
- Mark Twain, and
- American Flat.

Table ES-2 provides an accounting of the projected number of units or acres which can be developed in each sub-area.

Table ES-2: Vacant Parcel Land Use

	Comstock	Highlands	Mark Twain	American Flat	Total
Single-Family Residential (ERUs)	293	607	74	-	974
Multi-Family Residential (ERUs)	21	-	-	-	21
Commercial (Acres)	132	-	-	-	132
Industrial (Acres)	19	-	4,327	252	4,598
Forestry (ERUs)	11	-	23	31	65
Special Planning Zone (parcels)	74	-	-	-	74

Utilizing water demand factors based on the existing system or similar areas in the region, estimated water demands were estimated at the buildout condition for each sub-area. A summary of these estimates is shown below in Table ES-3.

Table ES-3: Plan Area Water Demands

Area	Existing Demand (AFA)	Additional Demand (AFA)	Buildout Demand (AFA)
Comstock	221	456 ⁱ	677 ⁱ
Highlands	176	182	358
Mark Twain	100	4,875	4,975
American Flat	4.5	291	296
Total	502	5,804	6,306

i - Includes 105.3 AFA for Silver City

To supply the volume of water that will be required to meet maximum day demands of the entire Plan Area at buildout, the County will need to have sufficient conveyance capacity in their water system infrastructure as well as have the volume of water rights needed to provide almost 7,000 acre-feet of water on an annual basis. Farr West developed improvement project(s) for each water system need in the future to provide a picture for what the connection or development of specific areas will have on the current system. Per the findings of this chapter, the County will need to invest between \$5.7 and \$127 million dollars in water system improvement projects in order to maintain system compliance and supply water to new areas (e.g., Highlands, American Flat, Mark Twain).

Table ES-4: Water System Projects

Project	Probable Costⁱ
Existing System Deficiencies	\$6.0 M
Comstock Service Area Buildout	\$12.4 M
Comstock Service Area Buildout + American Flat Buildout	\$27.7 M
Comstock Service Area Buildout + Mark Twain Ex. Residents Only	\$53.4 M
Comstock Service Area Buildout + Highlands Ex. Residents Only	\$95 M
Comstock Service Area Buildout + Highlands Buildout	\$126 M

i – All costs are presented in 2021 dollars and are Class 5 per AACEI (Association for the Advancement of Cost Estimating International)

In addition to constructing the infrastructure necessary to provide water service at buildout, the County will need to maintain or acquire a sufficient volume of water rights to be able to serve the number of connections projected at buildout. At the most extreme condition where the County Water System is expanded to provide service to meet the buildout demands of the Highlands, Mark Twain, and American Flat in addition to the buildout demands of the Comstock, the volume of water rights needed would be 6,911 AF. If the County were to only provide water service to the existing Comstock area, this total is reduced to 2,178 AF.

This chapter also evaluated additional water sources which may be available to the County in the future. While the new external sources are unlikely to be connected in the near term (i.e., 10 years) it is important to document every option in the case that economic, political, or system conditions change, and the viability of these sources is altered. Additionally, by implementing a proactive approach to water management planning, Storey County will ensure a reliable and resilient water utility well into the future to meet the needs of its residents and businesses.

TABLE OF CONTENTS

EXECUTIVE SUMMARY	i
Table of Contents	vi
Table of Tables	viii
Table of Figures	viii
INTRODUCTION	4
1.0 Purpose.....	5
2.0 Background.....	5
3.0 Scope of Water Resource Plan.....	5
3.1 Plan Area.....	5
3.2 Need for a Water Resource Plan.....	5
CHAPTER 1: WATER DEMANDS, SOURCES, AND MANAGEMENT	1
1.0 Purpose.....	1
2.0 Summary of Communities	1
2.1 Storey County Water Customers	1
2.2 Estimated Population within Plan Area	1
3.0 Water Resources	2
4.0 Water Rights in Nevada	2
4.1 Water Right Priority and Appropriation Statutes and Regulation	2
4.2 Nevada State Engineer Regulatory Actions.....	3
4.3 Water Right Ownership	3
5.0 Marlette Water System	3
5.1 Franktown Creek Decree	3
5.2 Marlette Lake Water Rights.....	3
5.3 Marlette System Surface Water Rights.....	4
5.4 Contract Between State of Nevada and Storey County	6
6.0 Water Rights within Storey County	6
6.1 Tracey Segment Water Rights	6
6.2 Dayton Valley Lake Water Rights.....	7
6.3 Domestic Groundwater Use.....	7
7.0 Water Production and Facilities.....	8
7.1 Storey County Water System Facilities	8
7.2 Storey County System Demands	8
7.2.1 Raw Water Delivery	8
7.2.2 Water Treatment Plant Production.....	9
7.2.3 Customer Meter Records	9
7.3 Water Demand Factors	10
7.4 Unaccounted For Water	10
7.5 Water Storage Facilities	11
CHAPTER 2: SOURCE WATER RELIABILITY	13
1.0 Purpose.....	13
2.0 Water Resource Availability and Management	13
2.1 Estimated Use Within Plan Area	13
2.2 Surface Water	13
2.3 Groundwater	13
3.0 Threats to Existing and Future Water Resources.....	15
3.1 Drought and Climate Change.....	16
3.2 Regulatory Actions	17

3.3	Contamination.....	18
3.3.1	Surface Water	18
3.3.2	Groundwater	18
3.3.3	Distribution System	18
3.4	Conveyance Interruptions	18
4.0	Remaining Capacity Analysis.....	19
4.1	Remaining Storage Capacity.....	19
4.2	Remaining Supply Capacity	19
4.3	Remaining System Capacity	20
5.0	Long-Term Strategies	22
5.1	Water Rights	22
5.1.1	Surface Water	22
5.1.2	Groundwater	22
5.1.3	Best Management Practices	24
5.2	Resource Management.....	24
5.3	Dedication Rates	24
5.4	Water Conservation Plan	25
5.5	Water Resource Planning.....	25
CHAPTER 3: MANAGEMENT OF WATER RESOURCES		26
1.0	Purpose.....	26
2.0	Future Demands	26
2.1	Vacant Parcels and Land Use	26
2.2	Demand Factors and Total Buildout Demands	32
3.0	Buildout Impacts.....	33
3.1	Infrastructure Improvements.....	33
3.1.1	County Water System	33
3.1.2	American Flat	34
3.1.3	Mark Twain.....	34
3.1.4	VC Highlands	35
3.1.5	Siphon Upgrades.....	37
3.1.6	Water Treatment Plant Upgrades.....	37
3.1.7	Project Summary.....	37
3.2	Water Rights	38
4.0	Future Management	39
4.1	Future Water Resources	39
4.2	Regionalization	39
5.0	Future Water Management Planning	39
6.0	Conclusion	40
Bibliography		41
Appendix A.....		Storey County 2016 Master Plan
Appendix B		Storage and Supply Calculations
Appendix C		Opinions of Probable Cost

LIST OF TABLES

Table ES-1: County Delivery Limits per 2002 Contract (Supply Contract, 2002).....	ii
Table ES-2: Vacant Parcel Land Use.....	iv
Table ES-3: Plan Area Water Demands.....	iv
Table ES-4: Water System Projects.....	v
Table 5: Current Population and Household Size.....	2
Table 6: Marlette System Water Rights.....	5
Table 7: County Delivery Limits per 2002 Contract (Supply Contract, 2002).....	6
Table 8: Domestic Pumpage Estimates.....	7
Table 9: Monthly Raw Water Deliveries (Acre-Feet).....	9
Table 10: Residential Customer Demand.....	10
Table 11: Commercial Customer Demand.....	10
Table 12: Total Customer Demand.....	10
Table 13: System Demands.....	11
Table 14: Water Storage Facilities.....	12
Table 15: Existing Customer Base System Capacity Analysis.....	20
Table 16: Existing System Maximum Capacity Analysis (864 Additional Connections).....	21
Table 17: Storage + Supply Calculations Summary for Storey County Systems.....	21
Table 18: Water Demand Factors.....	27
Table 19: Vacant Parcel Land Use.....	33
Table 20: Plan Area Water Demands.....	33
Table 21: Water Treatment Plant Capacity Upgrade Needs.....	38
Table 22: Water System Projects.....	38
Table 23: Water System Planning.....	41

LIST OF FIGURES

Figure 1: Storey County 2016 Master Plan Planning Areas.....	x
Figure 2: Plan Area.....	xi
Figure 3: Monthly Average Water Treatment Plant Production (2016 – 2019).....	9
Figure 4: Annual Percentage of Revenue Water.....	12
Figure 5: Comstock Vacant Parcels.....	29
Figure 6: Highlands Vacant Parcels.....	30
Figure 7: Mark Twain Vacant Parcels.....	31
Figure 8: American Flat Land Use.....	32
Figure 9: Highlands Water System Improvements.....	37

INTRODUCTION

1.0 PURPOSE

The purpose of this Water Resource Plan (Plan) is to provide Storey County (County) with a documented plan and policy related to the County's ability to provide a sustainable water supply to its customers even during periods of extended drought. This Plan also addresses the requirements of Nevada Revised Statute (NRS) Chapter 287 as amended by Senate Bill (SB) No. 150 (2019) to require governing bodies to develop and maintain a water resource plan by 2029.

2.0 BACKGROUND

On January 21, 2020, the Storey County Board of County Commissioners awarded a contract to Farr West Engineering to prepare a Water Resource Plan. This Plan is separated into three chapters, with each addressing a specific component of the Plan as follows:

- Chapter 1 – Water Demands, Sources, and Management
- Chapter 2 – Source Water Reliability and System Capacity
- Chapter 3 – Future Demand and Water Management

3.0 SCOPE OF WATER RESOURCE PLAN

Storey County is located in the Western portion of Northern Nevada. The County is bordered by Washoe County to the west and north and Lyon County to the east and south. The County is a mountainous area which sits above the Reno metropolitan area and is bounded by the Truckee River to the north. There are eight distinct land use areas in the County including Comstock (Virginia City, Gold Hill, and American Flat), Highlands (Virginia City Highlands and Highland Ranches), Lagomarsino, Lockwood-Mustang, McCarran, Painted Rock, Northeast, and Mark Twain. The County is considered rural but includes areas with high-tech industry.

3.1 PLAN AREA

This Plan will focus on the populated areas of Virginia City, Gold Hill, American Flat, Virginia City Highlands, Highland Ranches, and Mark Twain Estates in the southern portion of the County (Plan Area). A map of the Plan Area is provided in Figure 2. The major water supply for this portion of the County is supplied by the Marlette Lake Water System (Marlette System). The Marlette System is owned and operated by the State of Nevada (State). Pursuant to Nevada Revised Statute (NRS) 331.160, the Public Works Division (NPWD) is responsible for the supervision and administration of the system which includes transmission and storage of water in Carson City, Washoe County, and Storey County. The Marlette System provides water to the County for customers in Virginia City, Gold Hill, and American Flat. The County also delivers water to residents of Silver City which is in Lyon County. The remaining populated areas within the Plan Area are supplied by individual domestic wells.

Because the County does not provide water service in other portions of the County, those areas are outside the scope of this Plan. In the future, it is anticipated that the Canyon General Improvement District (GID) and the Tahoe Reno Industrial GID (TRI GID) will complete similar water resource plans which can be considered for potential incorporation into this Plan as Appendices.

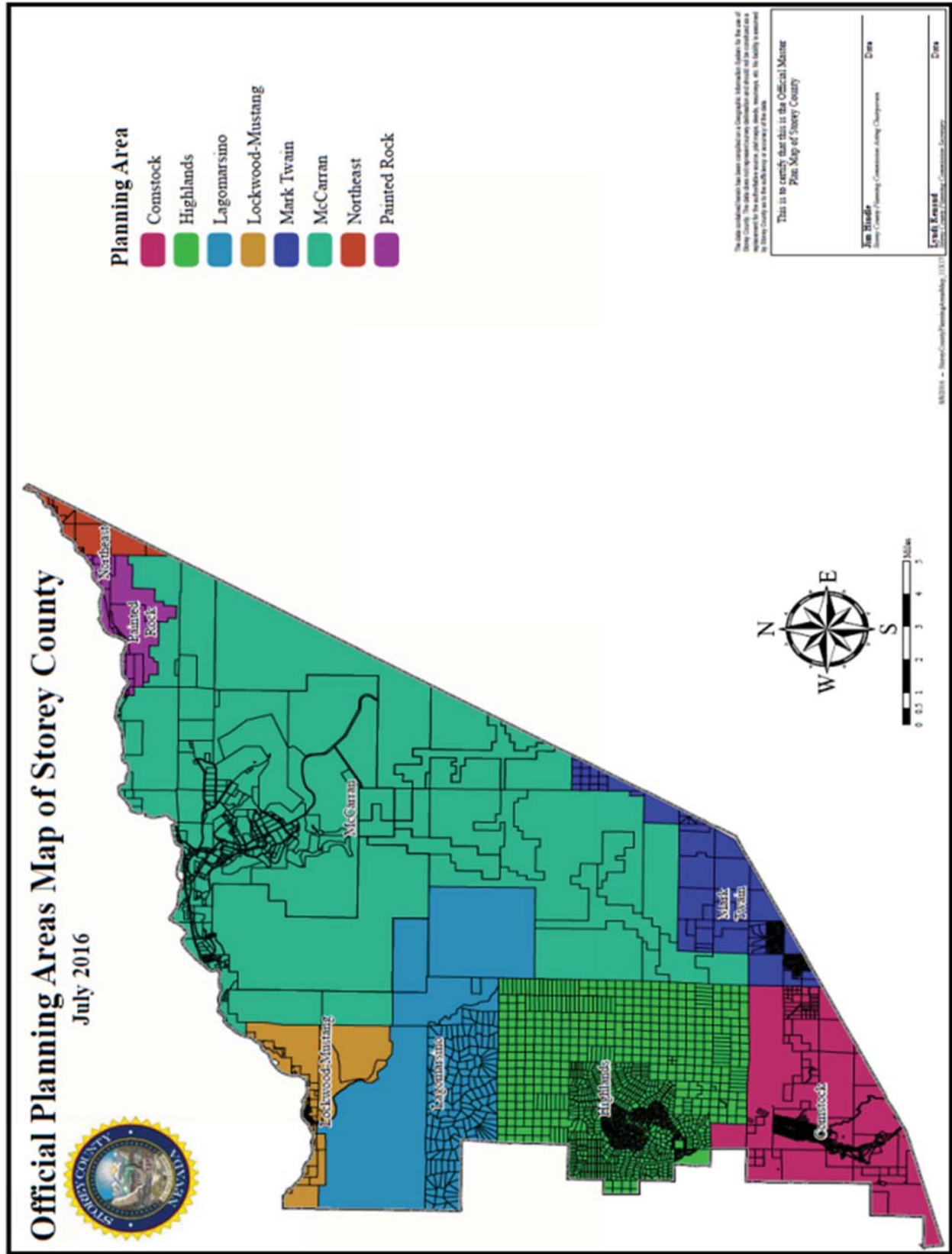
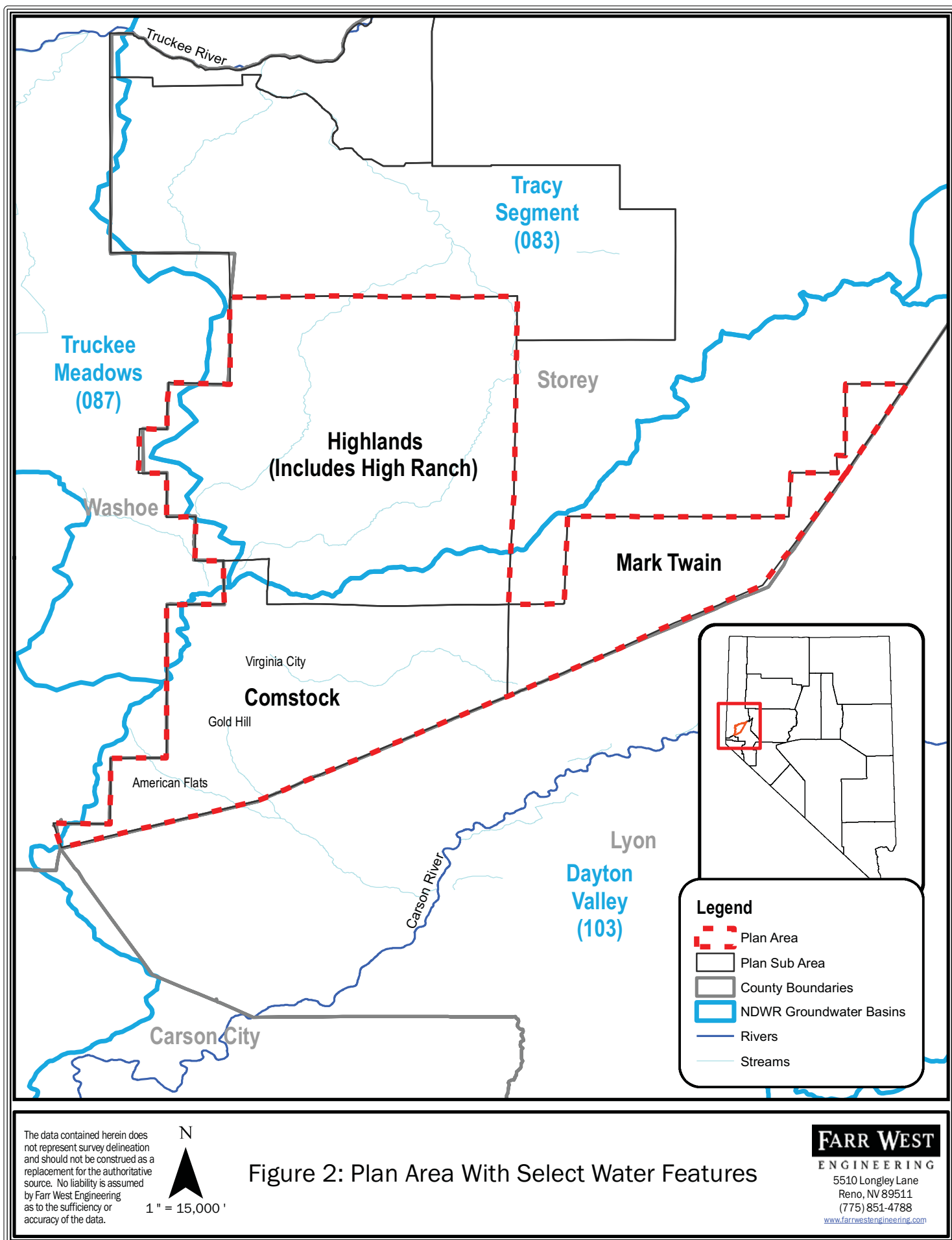


Figure 1: Storey County 2016 Master Plan Planning Areas



3.2 NEED FOR A WATER RESOURCE PLAN

The County does not own the water rights to what is currently its only water supply. In addition, the contract between the County and the State for continued delivery of water from the Marlette System is currently being negotiated for renewal. This Plan will review current water demands within the Plan Area and project water demands into the future based on buildout scenarios. This analysis will assist the County in determining the amount of water which may be needed to serve customers in the future and ensure that there are adequate supplies to do so.

This Plan is the County's first water resource plan, and it is recommended that this Plan be updated every five to ten years to address issues due to potential changes in Nevada water law, economic growth, land use planning, water quality, and water quantity. Additionally, NRS 278.0228 requires that governing bodies update their water resource plan no less than every ten years. This Plan will provide the basis for future updates and help guide the County in decisions related to water resources including future investments in the water system and water sources.

The County completed its Master Plan in 2016. The 2016 Master Plan states, "Nearly every community in the county is faced with water supply challenges." Water resource planning is tied directly to master planning efforts, and these two planning efforts are intended to complement each other. Information from the 2016 Master Plan was used in this Plan.

CHAPTER 1: WATER DEMANDS, SOURCES, AND MANAGEMENT

1.0 PURPOSE

The purpose of this chapter is to summarize current water demands, water sources and water management strategies within the Plan Area. As described in the Introduction, the Plan Area consists of the populated areas in the southern portion of the County including Virginia City, Gold Hill, American Flat, Virginia City Highlands, Highland Ranches and Mark Twain Estates and is shown on Figure 2. The Storey County Water System currently serves customers in Virginia City and Gold Hill and delivers water to Silver City in Lyon County. Other communities within the Plan Area rely on individual wells to meet demands. This chapter presents an analysis of current water uses and demands to establish estimates and assumptions which will form the basis for the Plan.

2.0 SUMMARY OF COMMUNITIES

The Comstock Area, located at the southern end of the County, includes Virginia City, the Divide, Gold Hill and American Flat. This area was originally developed in the late 1800s and considerable measures are employed to maintain the rich historical character while promoting business, tourism, and the rural Nevada lifestyle. The Highlands Area, located north of the Comstock, is a residential estate community surrounded by undeveloped lands. This is a rural community which is relatively close to the conveniences of the Reno metropolitan area. There are no commercial uses within the Highlands. The Mark Twain Area is also a residential estate community surrounded by undeveloped lands and is at the southern border of the County. Mark Twain abuts Lyon County and is near the growing suburban area of Dayton.

2.1 STOREY COUNTY WATER CUSTOMERS

The County currently serves approximately 803 metered customers. The majority of customers (666) are within Virginia City, 51 within Gold Hill, and 86 are within Silver City. The County serves approximately 207 commercial customers and the remaining 596 are residential.

2.2 ESTIMATED POPULATION WITHIN PLAN AREA

The County's 2016 Master Plan includes a population summary based on data from 2014. This information is reproduced in Table 5 below along with an estimate of current population provided by the State Demographer. The population estimate for Storey County for 2019 was 4,258. The Demographer also provides estimates for Gold Hill and Virginia City. The 2019 population of the other areas in Table 5 were estimated based on the Demographer's information and 2014 population estimates from the 2016 Master Plan. The estimated population of the Plan Area is 3,346 persons.

Table 5: Current Population and Household Size

Area	2014	2019
Storey County	3,974	4,258
Gold Hill	201	206
Virginia City	832	904
Highlands	1,398	1,498
Mark Twain	689	738
Lockwood/River	979	1,049
Household Size	2.1	2.1

ⁱ Sources: (Storey County, 2016); (Demographer, 2020)

3.0 WATER RESOURCES

The major water supply within the Plan Area is the Marlette Lake Water System (Marlette System). The Marlette System is owned and operated by the State of Nevada (State). Pursuant to Nevada Revised Statute (NRS) 331.160, the Public Works Division (NPWD) is responsible for the supervision and administration of the system which includes transmission and storage of water in Storey County, Carson City, and Washoe County. Currently, Carson City and Storey County are the only two customers of the Marlette System.

The Marlette System provides water to the County to supply customers in Virginia City and Gold Hill. The County also delivers water to Silver City located in Lyon County. The remaining populated areas are supplied by individual domestic wells.

4.0 WATER RIGHTS IN NEVADA

The Nevada Division of Water Resources (NDWR) is the regulatory authority for water rights in the State of Nevada. The Nevada State Engineer (NSE), as head of this division, approves or denies water right applications, establishes limitations to water usage and manages dam safety operations within the State.

4.1 WATER RIGHT PRIORITY AND APPROPRIATION STATUTES AND REGULATION

The legal process to acquire water rights and transfer those rights to the subject property is defined by Nevada Revised Statutes (NRS) Chapters 533 and 534, Nevada Administrative Code (NAC), and internal office policy. All water, whether above or below the surface of the ground is owned by the public. Nevada water right law is based on the prior appropriation doctrine, otherwise known as “first in time, first in right.” By filing an application to appropriate through the office of the Nevada State Engineer (NSE), surface water resources have been appropriated since 1905 and groundwater resources in Nevada have been appropriated for use since 1939. The priority date assigned to each water right establishes what water rights can be exercised from a source depending on available water at a given time.

Another pillar of Nevada water right law is the concept of beneficial use. Beneficial use is the basis, measure, and limit to the water right. This means that only the portion of the water right that can be used beneficially is established as the perfected, or certificated water right. To allow water right owners flexibility to place their rights to beneficial use, there is a process to change or move the permitted location of these water rights to meet project demands. Furthermore, if the beneficial use of the right was initiated prior to the 1905 or 1939 appropriation dates for surface water and groundwater, respectively, those rights are deemed vested water rights and are thus more senior than rights appropriated after 1905 or 1939.

For general purposes, statutes for groundwater rights and surface water rights are in separate chapters in the NRS. While these rights have generally been administered separately, current legislative actions have established conjunctive use management requirements that the Nevada State Engineer must adhere to. For

the purposes of this Plan, we will consider groundwater rights and surface water rights separate, though long-term water right management should consider future conjunctive use implications.

4.2 NEVADA STATE ENGINEER REGULATORY ACTIONS

Dayton Valley and the Tracey Segment Hydrographic Basins are within the Plan Area. The NSE has designated both groundwater basins under Orders 471 and 688 in Dayton Valley and Order 705 in the Tracey Segment. These designation Orders provide the NSE additional regulatory tools to manage groundwater appropriation such as designation of preferred/non-preferred uses and processing applications out of filing order.

The Dayton Valley Hydrographic Basin is considered over-appropriated. NSE Ruling 5823 established the perennial yield between 8,000 and 20,000 acre-feet annually (AFA) and approximately 24,495 AFA are currently appropriated. The Tracey Segment Hydrographic Basin is nearing the perennial yield of 11,500 AFA according to NSE Ruling 5747, with approximately 11,230 AFA appropriated. For planning purposes, the ability to obtain new appropriations for groundwater in either hydrographic basin is considered limited.

4.3 WATER RIGHT OWNERSHIP

Water rights in the Marlette System have been held by different parties over the years. Reports of Conveyance which update water right ownership must be submitted to NDWR, and deeds that transfer ownership are recorded in the respective County Recorder's office. Water right ownership processes are important to understand especially as the County does not own the water rights to the Marlette System. Currently, the State owns all water rights associated with Marlette System approved for use within the County which are described below. Each of the water rights owned by the State defines the place of use as Virginia City, Gold Hill, Silver City, and Carson City. Prior to the State being able to deliver water to locations not currently included as the place of use, an application to expand the place of use would have to be submitted and approved by the NSE.

5.0 MARLETTE WATER SYSTEM

The Marlette System dates back to the 1870's and includes several water sources. The following is a summary of the Marlette System sources and water rights.

5.1 FRANKTOWN CREEK DECREE

The Franktown Creek Decree defines the water rights to streams on the eastern slope of the Sierra Nevada Mountains which are associated with the Marlette System. The decree is the result of a 1951 petition by the Franktown Creek Irrigation District to the State Engineer to determine the relative rights of claimants to the waters of Franktown Creek. At the time of the decree, the water rights to the Marlette System were held by Marlette Lake Company. The decree states that the water source for Marlette Lake Company is, "Hobart Creek (tributary to Franktown Creek) and certain waters in the Franktown Creek Watershed proper having sources in the eastern slopes of the Sierra Nevada Mountains at and above Red House" (Franktown Creek Decree, 1961). The decree also states that the Marlette Lake Company had the right to store water in the 110-acre foot Hobart Reservoir. Water stored in Hobart Reservoir is released to supplement flows in the natural channel. The amount of the Claim was limited to 10 cubic feet per second (cfs) based on the capacity of the flumes downstream from Red House (Affirmation, 1963). This water right is described as Franktown Decree Claim V-02419 and is deemed "vested" since the beneficial use of this water right was initiated prior to March 1, 1905. The specific priority and volume for these rights will be determined in the future should Franktown Creek undergo an adjudication.

5.2 MARLETTE LAKE WATER RIGHTS

Marlette Lake was originally constructed in 1873. A tunnel was constructed through Herlan Peak to connect Marlette Lake to Franktown Creek and Hobart Reservoir. Marlette Lake had an initial capacity of about 3,400 acre-feet (AF) when it was constructed in 1873. The dam was subsequently raised to its current height in 1959 to bring the capacity to approximately 11,500 AF. Prior to purchase by the State, discussed further below, there were no documented water rights associated with Marlette Lake as the original construction pre-dated the statutory requirements to file an application. Marlette Lake water rights are currently subject to an agreement between the State's Building and Grounds Department and Nevada Department of Wildlife. The agreement limits annual diversions to maintain a minimum water surface elevation necessary for spawning of the for the Lahontan Cutthroat Trout and could impact water resource availability should the County require water from Marlette Lake in any given year.

5.3 MARLETTE SYSTEM SURFACE WATER RIGHTS

In 1963, Marlette Lake Company sold all property, water rights, easements and improvements associated with the Marlette System to the State. This included Marlette Lake, all water rights included in the Franktown Creek Decree (i.e., waters above Red House Diversion Dam and Hobart Lake), Five Mile Reservoir and waters of Mill Creek, Tunnel Creek and others draining into the North Flume. Following the purchase of these rights, the State filed additional water right applications. A summary of these water rights is provided in Table 6.

Table 6: Marlette System Water Rights

Owner of Record	App	Cert	Priority Date	App Status	Source	Source Description	Type of Use	Div. Rate (cfs)	Duty (AFA/S)	AF Storage
Marlette Drainage										
Nevada Building and Grounds Division	24877	8855	1/22/1969	Certificate	Stream	Marlette Creek and Lake	Municipal	0.000	90.79	3,000
Nevada Building and Grounds Division	30896	--	12/8/1976	Permit	Stream	Marlette Creek and Lake and Tributary	Municipal	0.000	3,000.00	0
Hobart Drainage										
Nevada Building and Grounds Division	24876	8801	1/22/1969	Certificate	Underground	Tunnel	Municipal	0.710	514.00	0
Nevada Building and Grounds Division	30895	10786	12/8/1976	Certificate	Underground	Tunnel	Municipal	0.836	631.89	0
Nevada State Lands Division	V02419	--	1/8/1871	Decree	Stream	Hobart Creek	Municipal	10.000	7,240.14 ⁱ	-

i – Not to exceed. Volume not specified in Franktown Decree.

5.4 CONTRACT BETWEEN STATE OF NEVADA AND STOREY COUNTY

As described in this section, all water rights for the Marlette System are owned by the State and administered by NPWD. The State has provided water to Storey County since 1963. Historically, the State has entered into 10-year contracts with the County for delivery of Marlette System water. This is currently the only supply available to County water customers located in Virginia City, Gold Hill, and Silver City. Currently, the County and the State are negotiating a new contract. While this occurs, the entities have agreed to operate under the terms of the prior contract dated October 23, 2002 (2002 Contract).

The 2002 Contract includes a table summarizing the maximum amount of raw water to be supplied to the County each year through 2021. A portion of this information is reproduced in Table 7. It is important to note that this is for illustrative purposes only and does not represent any indication of current negotiations between the State and County.

Table 7: County Delivery Limits per 2002 Contract (Supply Contract, 2002)

Year	June, July, Aug., & Sept. Daily Peak Limit (gallons per day)	Remaining Month Daily Peak Limit (gallons per day)	Annual Use Limit (acre-feet)
2015	833,500	533,500	448.2
2016	846,500	546,500	456.1
2017	859,500	559,500	464.0
2018	872,500	572,500	471.9
2019	885,500	585,500	479.8
2020	898,500	598,500	487.7
2021	911,500	611,500	495.6

6.0 WATER RIGHTS WITHIN STOREY COUNTY

There are other water users within the southern portion of Storey County which rely on water rights to groundwater, springs, and small streams. These water rights are currently not permitted for municipal purposes and are instead for use by individuals or companies for mining and milling, stock water, irrigation, environmental, domestic, and quasi-municipal purposes. A more specific study or analysis is needed to determine if these rights may be available to the County for M&I uses in the future.

6.1 TRACEY SEGMENT WATER RIGHTS

The County is listed as the owner of two groundwater rights within the Tracey Segment Hydrographic Basin. These water rights are permitted for use in the Canyon General Improvement District (GID)¹ water system, although the GID maintains a separate holding of rights which are used to provide service to its non-County facility customers. Permit No. 80870, and Permit 50553, Certificate No. 18224 are for quasi-municipal and domestic uses to support County facilities and uses within the GID service area. These water rights represent approximately 48.5 AF in two production wells. For planning purposes, the balance of water rights above what is being used to support County facilities in the GID service area could be transferred to another location within the Tracey Segment Hydrographic Basin. A more specific study or analysis is needed to determine the exact balance of these rights that may be available to the County for use in the basin.

¹ The canyon GID is outside of the Water Resource Plan study area.

6.2 DAYTON VALLEY WATER RIGHTS

A review of water rights appropriated by Storey County in the Dayton Valley Hydrographic Basin indicates four previous applications, which have been cancelled or denied, that sought water rights to support fire protection and storage for treated effluent. The applications and permits contain limited information as to the nature of the cancellation or denial, but several attempts to appropriate water since the 1980s may indicate a need for this water.

Recommendations for applying for and permitting water rights to support fire protection needs and distribution of treated effluent will be developed in subsequent chapters.

6.3 DOMESTIC GROUNDWATER USE

A water right is not required for a domestic well to serve a single-family dwelling. Groundwater use for domestic purposes is not to exceed 2 AF per year. There are portions of three hydrographic basins within the Plan area including Tracy Segment, Dayton Valley and a small portion of the Truckee Meadows as shown in Figure 2. NDWR documents the number of domestic wells within each groundwater basin and then estimates domestic use at 1 AF per year for each domestic well. Based on current County GIS data, the number of single-family residences with a domestic well within the Plan area was determined, and the same assumption of 1 AF per year for each domestic well was applied. Table 8 summarizes the volume of committed groundwater resources associated with domestic wells² (i.e., 2 AF per domestic well) and the estimated volume pumped for the entire basin and for the portions within the Plan area.

Table 8: Domestic Pumpage Estimates

Basin	NDWR Values for Basin ⁱ		Plan Area Estimates ⁱⁱ	
	Committed Volume (AF)	Estimated Annual Use (AF)	Committed Volume (AF)	Estimated Annual Use (AF)
Dayton Valley	3,012	1,506	744	372
Tracy Segment	1,460	730	1,064	532
Truckee Meadows	3,498	1,749	80	40

ⁱ This information is based on the Water Year 2017 Pumpage Inventories for the Dayton Valley, Tracy Segment and Truckee Meadows Hydrographic Basins.

ⁱⁱ The Plan Area estimates are based on a query of the NDWR Well Log Database dated November 15, 2019 and downloaded from the NDWR website on February 26, 2020 along with Storey County assessor parcel data.

² Domestic wells are exempt from water right permitting requirements in the State of Nevada unless the maximum demand of the user exceeds 2 acre-feet annually.

7.0 WATER PRODUCTION AND FACILITIES

As described above, the County's primary water source is surface water which originates from the Marlette System which consists of two reservoirs, several catchment basins, and a diversion dam on Hobart Creek at Red House. The current capacity of the flumed pipe diverting water at Red House Dam is about 7 cfs. From the Red House Division Dam, the pipe discharges to the Lakeview Tank. At this location, water can be directed towards Carson City or Storey County.

7.1 STOREY COUNTY WATER SYSTEM FACILITIES

Water for the County is delivered through a seven-mile inverted siphon which transitions to a pipeline. The County's ownership of the system begins at the location where the siphon crosses under Interstate 580 at Lakeview, north of Carson City. The transmission line discharges to the Five-Mile Reservoir and/or the Five-Mile Tank. The transmission main from the Lakeview Tank to Five-Mile is currently operated at a flow rate up to 320 gallons per minute³ (gpm). During normal operations, the transmission line discharges directly to Five-Mile Reservoir which fills the tank or continues northeast to the Bullion Tank then through the water treatment plant at the south end of Virginia City.

The water treatment plant is a filtration plant used to meet surface water treatment requirements and has a capacity of 1.2 MGD⁴. The treated water is then pumped into the Hillside storage tanks. From the Hillside tanks, the water flows directly into the distribution system and can also fill the Taylor Tank and Divide Tank. Water from the Divide Tank is used to supply Gold Hill and also fills the Silver City Tank to supply the community of Silver City.

7.2 STOREY COUNTY SYSTEM DEMANDS

Within the County's system, water flows are metered at numerous locations that can be considered when analyzing the system demands. For the purpose of this Plan, water meter data for deliveries to the County's system at the Lakeview Tank (source), water treatment plant and customer service connections (end user) were reviewed and analyzed.

7.2.1 Raw Water Delivery

Raw water from the Marlette System is measured by a flow meter at the Lakeview Tank. The County is billed for raw water provided by the State based on readings at this meter. Table 9 summarizes raw water deliveries to the County during 2016 through 2019. During this time, the County used an average of approximately 221 AF per year.

³ If 320 gpm were to be delivered continuously, this would be equal to approximately 516 AFA. The maximum capacity of the siphon is estimated at 738 gpm (1,190 afa) but the flows are throttled down with valves below the Lakeview Tank.

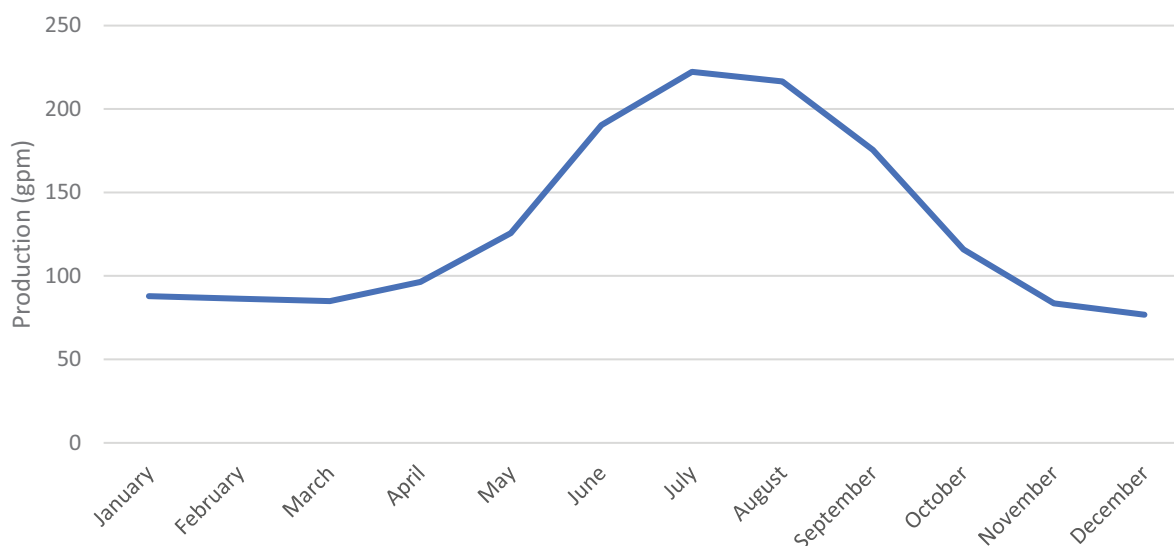
⁴ Based on design capacity flow rate of 875 gpm.

Table 9: Monthly Raw Water Deliveries (Acre-Feet)

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
2016	12.3	11.2	13.3	14.3	16.8	26.7	34.5	30.9	27.3	16.9	11.6	12.0	227.7
2017	11.9	11.1	13.0	11.3	18.0	30.5	33.1	31.4	25.3	16.8	13.2	18.4	234.0
2018	11.7	7.5	13.0	14.4	19.4	27.7	31.8	34.2	25.8	18.6	11.4	9.6	225.1
2019	9.0	9.4	9.9	10.6	18.9	23.6	28.1	27.0	23.1	16.5	11.8	9.1	196.9
Avg.	11.2	9.8	12.3	12.6	18.2	27.1	31.8	30.9	25.4	17.2	12.0	12.3	220.9

7.2.2 Water Treatment Plant Production

The water treatment plant was constructed in 1997 and consists of three filters. Figure 3 shows the monthly average flow rate through the water treatment plant during 2016 through 2019. The average production at the treatment plant during this time period was 210 AF per year which equals an average flow rate of 131 gpm. The monthly average treatment plant flows also provide the seasonal demand curve. This seasonal demand curve is typical and shows increased system demand during warmer months when yard irrigation occurs and tourist activity increases. Reduced demand occurs during the cooler, non-irrigation months when tourism slows off its summer and fall peak. Maximum summer production is 2.9 times greater than minimum wintertime production.

**Figure 3: Monthly Average Water Treatment Plan Production (2016 – 2019)**

7.2.3 Customer Meter Records

Deliveries to the majority of customers in the County's systems are metered. Currently, the County Public Works shop and the sewer treatment plant are not metered. Table 10 through Table 12 summarizes the daily average and maximum water use, in addition to the flow rate, based on monthly customer records provided by the County for 2018 through 2021. The average demand during this time period was approximately 153,100 gallons per day, or 106.3 gpm. Residential customers accounted for 60 percent of this demand, at 92,800 gallons, or 64.5 gpm, on average. Commercial customers accounted for the other 40 percent at 60,300 gallons, or 41.8 gpm, on average. There was approximately 25 percent of the non-peak daily flow limit from the Marlette System, in 2020.

Between 2018 and 2021, the average maximum day demand was 284,110 gallons per day, or 197.3 gpm. This was approximately 30 percent of the summertime daily flow limit from the Marlette System, in 2020. Residential customers used 167,600 gallons of maximum day demand, on average, or 116.4 gpm. Commercial customers used 116,500 gallons of maximum day demand, equating to 80.9 gpm, on average.

Table 10: Residential Customer Demand

Year	Daily Average		Maximum	
	Delivery (kgal)	Flow Rate (gpm)	Delivery (kgal)	Flow Rate (gpm)
2018	88.0	61.1	177.5	123.3
2019	84.1	58.4	158.6	110.1
2020	95.4	66.2	154.4	107.2
2021	103.8	72.1	179.9	124.9
Average	88.0	61.1	177.5	123.3

Table 11: Commercial Customer Demand

Year	Daily Average		Maximum	
	Delivery (kgal)	Flow Rate (gpm)	Delivery (kgal)	Flow Rate (gpm)
2018	55.6	38.6	102.6	71.3
2019	53.1	36.9	96.3	66.9
2020	62.1	43.1	122.4	85.0
2021	70.2	48.8	144.6	100.4
Average	55.6	38.6	102.6	71.3

Table 12: Total Customer Demand

Year	Daily Average		Maximum	
	Delivery (kgal)	Flow Rate (gpm)	Delivery (kgal)	Flow Rate (gpm)
2018	143.7	99.8	280.2	194.6
2019	137.2	95.3	254.9	177.0
2020	157.5	109.4	276.8	192.2
2021	174.0	120.9	324.5	225.3
Average	143.7	99.8	280.2	194.6

7.3 WATER DEMAND FACTORS

Water demands for a system are typically presented in four ways:

- Average Annual Demand (AAD),
- Average Day Demand (ADD),
- Maximum Day Demand (MDD), and

- Peak Hour Demand (PHD).

For the purposes of this Plan, system water demand factors are based on the WTP flow meter data. As stated above, the average production at the WTP, or AAD, was 210 AF per year. Therefore, the average flow rate (ADD) during the study period of 2016 through 2019 was 131 gpm. Based on the monthly flow data provided, the daily flow during the maximum month was 1.75 times greater than the average day flow. Because daily data are not available, a more conservative peaking factor of 2.0 is used for this Plan. PHD is also based on an assumed PHD peaking factor of 4.0 x ADD. Table 13 summarizes the system demands which will be used in this Plan.

Table 13: System Demands

System Demand	Demand Volume or Flow	Peaking Factor
AAD	210 AF per year	N/A
ADD	131 gpm	N/A
MDD	262 gpm	2.0 x ADD
PHD	524 gpm	4.0 x ADD

Based on the customer meter analysis presented in Section 7.2.3, the average water consumption for residential customers is 0.17 AF per year while commercial customers average 0.33 AF per year. An average connection demand of 0.30 AF (0.19 gpm or 268 gpd) per residential connection and 0.50 AF (0.31 gpm or 446 gpd) per commercial connection will be used in this Plan to estimate future water demands.

7.4 UNACCOUNTED FOR WATER

Unaccounted for water (UAFW) is the difference between the quantity of water purchased/produced and the quantity of water delivered to customers or billed. UAFW is not the same as water loss, as losses are only a component of UAFW. Figure 4 shows the percentage of revenue water which is the counterpart to UAFW and is calculated by dividing the customer meter volume by raw water deliveries. From 2016 through 2019, revenue water fluctuated between 65 and 75 percent on an annual basis, with a non-weighted average of 70 percent.

There are numerous factors that can contribute to UFAW or non-revenue water including waterline leaks, evaporative losses at Five-Mile Reservoir⁵, process losses at the water treatment plant, system flushing, unmetered connections, fire hydrants and unmetered construction water usage. The Divide Reservoir¹, which holds 1.5 million gallons of treated water and is used for fire protection, is another connection which is not metered. The Divide Reservoir is located in Virginia City and is on an automatic fill which regularly offsets evaporation, and larger refills occur following use for fire protection. In addition, during the period of 2016 through 2019, several large construction projects took place including a sewer system improvement project, a water main extension/replacement project and construction of the courthouse parking lot with retaining walls. All of these would contribute to the volume of unmetered or unbilled water. It is recommended that the County pursue a comprehensive water loss analysis or audit to confirm the primary contributor(s) to system non-revenue water and reduce this volume below 15 percent of all water purchased from the Marlette Water System.

⁵ Average annual evaporative losses at the Five-Mile and Divide Reservoirs are estimated at 1.24 and 0.74 acre-feet, respectively. Combined, these losses make up less than one percent of average annual raw water deliveries.

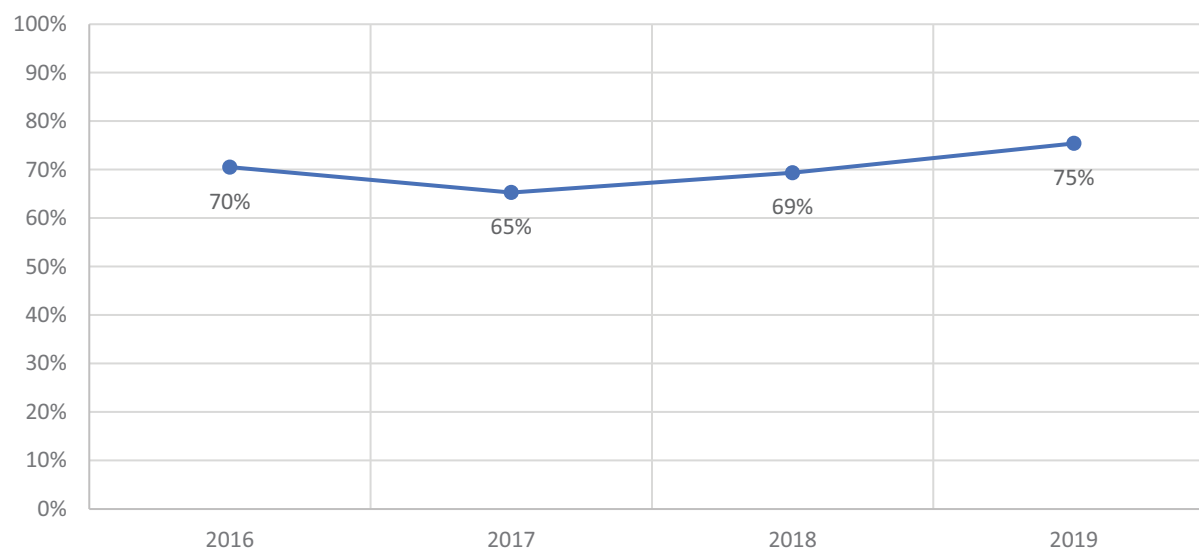


Figure 4: Annual Percentage of Revenue Water

7.5 WATER STORAGE FACILITIES

The County uses non-potable and potable water storage facilities to operate the water system. Table 14 summarizes the capacity of each of the tanks and reservoirs in the County's System. The potable water tanks are designed to provide operational, emergency and fire storage (see NAC 445A.6674 through 6675); however, the Divide Reservoir is used to store water for wildland fire protection purposes only. Additional information and analysis regarding the benefit of water storage is provided in Chapter 2.

Table 14: Water Storage Facilities

Tank	Raw/Potable	Operational Capacity (gal)
Five Mile Reservoir	Raw	5,600,000
Five Mile Tank	Raw	500,000
Bullion Tank	Raw	1,400,000
Total Raw Water Storage =		7,500,000
Hillside Tank No. 1	Potable	500,000
Hillside Tank No. 2	Potable	500,000
Taylor Tank	Potable	200,000
Divide Tank	Potable	115,000
Silver City Tank	Potable	160,000
Total Potable Water Storage =		1,475,000
Divide Reservoir ⁱ	Potable	1,552,000

ⁱ The Divide Reservoir is located at the south end of Virginia City. The reservoir is filled with potable water; however, it is currently only used for wildland fire protection purposes only and does not contribute to system storage volumes.

CHAPTER 2: SOURCE WATER RELIABILITY

1.0 PURPOSE

The purpose of this chapter is to assess the availability, capacity and quality of each water source used within the Plan Area as shown on Figure 2. Additionally, this chapter identifies risks associated with each source and provides strategies to mitigate those potential threats. This chapter also includes an analysis of remaining capacity of Storey County Water System facilities.

2.0 WATER RESOURCE AVAILABILITY AND MANAGEMENT

Water resources within the Plan Area are less than current demand. The County lies in the rain shadows created by the Sierra Nevada Mountains and the Virginia Range. Average annual precipitation in the Plan Area is approximately 12.5 inches per year based on a Western Regional Climate Center station located in Virginia City (WRCC, 2020). Annual recharge of area aquifers is limited due to inadequate elevation of the Plan Area and adjoining areas for significant recharge. The primary source of recharge occurs within the upslope mountain block and is attributed to snowpack melt and infiltration from winter storms. Recharge from drainages can provide an additional source of recharge depending on the slope and soil permeability. The Highlands is dependent on local recharge within the mountain block without significant impact from adjoining areas. The Mark Twain area water resources are impacted by mountain block (“upslope”) recharge, recharge conveyed by drainages and the Carson River watershed.

As a result of significant mining activities in the second half of the 19th century, an external water source was brought in to supply domestic and mining uses. This source of water is surface water, supplied by the Marlette Water System from the eastern slope of the Sierra in the Tahoe Basin and is conveyed through a reverse siphon transmission pipeline for approximately 7 miles. This section of the Plan will address the availability of water and current management practices for these existing resources.

2.1 ESTIMATED USE WITHIN PLAN AREA

Recent water use in the Plan Area is estimated to be 1,157 AF per year. Of this volume, 221 AF is raw water from the Marlette System used to serve Virginia City, Gold Hill, and Silver City. The remainder is unmetered groundwater used by private domestic wells. Utilizing a consumption rate of 1 AF per domestic well it is estimated that 588 AF is pumped in the Highlands, 333 AF in Mark Twain, and 15 AF in the American Flat area.

2.2 SURFACE WATER

The annual volume of water available under the Franktown Decree to NPWD is approximately 7,200 AFA. Based on the information in Chapter 1, the County can use up to 487.7 AF during 2020. This is more than double the County Water System’s current demand. Because water from the Franktown Decree can also be supplemented by water stored in Marlette Lake, the Marlette Water System is a very reliable water source for Virginia City, Gold Hill, and Silver City. However, the maximum volume of water available from the Marlette Water System is restricted by transmission pipeline capacity and impacted by annual snowpack, fishery management at Marlette Lake, and operating agreement limits.

Future water demands, including a buildout scenario, will be analyzed as part of this Plan in chapter 3. This analysis will assist the County in determining the future needs within the Plan Area. Due to groundwater limitations described in Section 2.3, the County must pursue amending its Contract with the State to allow delivery of water to American Flat, the Highlands and Mark Twain.

2.3 GROUNDWATER

In total, Storey County overlies portions of six groundwater basins with the Plan Area overlying portions of four basins. Most of the Highlands area lies within the Tracy Segment Basin (083) and the majority of the Comstock and Mark Twain areas lie within the Dayton Valley (103) Basin. Because of limited recharge and water right appropriations exceeding perennial yields, groundwater development within the Plan Area is limited to predominantly domestic wells. Groundwater availability for the wells varies annually depending on precipitation, pumping, and corresponding water in groundwater storage. As identified in the chapter 1, future groundwater development will be discussed for the Plan Area and not the entire County.

The Highlands area currently has approximately 588 domestic wells ranging in screen depths from about 53 to 1,500 feet below ground surface. A significant portion of the wells in the area have been deepened over time as the more wells that are added to the area require a greater amount of groundwater from the aquifer, thus resulting in a lowering of the water table. Extended dry periods including between the period between 2013 through 2015 also generally resulted in less water availability. More specifically, Highlands area residents have experienced drawdown ranging upwards of 240-feet in the past requiring wells to be deepened or replaced.

The United States Geologic Survey (USGS) has been contracted to conduct a study of this area and has presented preliminary data in 2019 and 2020. Initial data indicates that groundwater levels have declined approximately 50 to 165 feet within the past two decades (Smith, 2020) in some areas. The study will also evaluate water level trends in the Highlands, develop water table and water level change maps, characterize the fractured volcanic rock aquifer(s)⁶ hydraulic properties and estimate recharge rates. The resulting 5-year study, expected in 2022, will provide valuable data that will assist the County in water resource planning. The current groundwater availability in the Highlands is inadequate to support current demands and will not be able to support the buildout condition of the existing lots with cost effective wells. Some residents are currently relying on trucked water and private storage tanks. Although the upper elevations of the Highlands watershed may allow for natural recharge, capturing or diverting precipitation from surface water runoff for local recharge is either not allowed⁷ or is already included in determining the perennial yield of the basin and would not result in any additional appropriative right(s). A comprehensive study of the water quality in the Highlands area has not been completed to date, although data which has been made available indicates groundwater in the Highlands can have high concentrations of constituents including, but not limited to total dissolved solids and iron. In fact, most Highlands residents employ some form of filtration treatment technology in their homes for the removal of iron from their domestic well.

The Mark Twain area currently has approximately 333 domestic wells ranging in depths from about 80 to 700 feet below ground surface. The area is proximal to Dayton, Nevada which relies on municipal and domestic production wells that produce groundwater from the same alluvial aquifer. Some wells in the Mark Twain area north of the alluvial basin require wells completed in fractured rock aquifers that are typically more limited in capacity and recharge than the alluvial aquifer. Like the Highlands, extensive water quality data does not exist for this area, although wells adjacent to this area have not meet water quality standards required for community water systems in the past. Residents in this area have experienced wells going dry when the total depth of the well is 170-feet or less.

The Comstock area includes an area commonly referred to as American Flat, which presently supports approximately 15 domestic wells. Currently, a mine and heap-leach facility is located in American Flat. A company purchased residences in the area to house mine workers and guests. Originally, American Flat

⁶ Volcanic rock aquifers are known to offer reduced water storage capacity and provide very limited recharge as compared to aquifers in other geologic units.

⁷ A single surface water permit was found for Long Valley Creek for industrial purposes. Any additional appropriation would need to ensure that this senior right would not be negatively impacted by the proposed use. No surface water rights associated with Lagomarsino Creek were found on the NDWR database.

was part of the County water system and received treated surface water from the Marlette System. In 1964, American Flat was excised from the County water services and is now supported by groundwater through two domestic wells. With a total of 44 domestic wells lying within the Comstock area the amount of groundwater being used is small. Also, hydrogeology characteristics indicate that the costs associated with drilling higher capacity production wells will exceed the benefits that would be realized by developing groundwater resources in this area. Additionally, water quality in the Comstock is suspected to generally not meet drinking water maximum contaminant levels due to hydrothermal mineralization and historic (i.e., 19th century) anthropogenic contamination from mining processes. A current liability for the Storey County Water System is the absence of any formal agreement for providing water service to the community of Silver City (Lyon County). It is strongly recommended that Storey County and Lyon County work together to enter into an agreement which clearly defines Storey County's responsibility(s) to provide water service to future development in Silver City.

Because all existing wells in the Plan Area are domestic wells, which are owned and operated by private residents, the County's ability to have influence on the ongoing management of groundwater use may be limited. In the 2016 Master Plan, the County developed many objectives and policies regarding groundwater use within the Plan Area and it is recommended that the County enforce and build on these policies to protect the sustainability of current groundwater resources. The County shall provide education and guidance to private landowners that production from existing domestic wells in the Virginia Highlands is not sustainable and deepening of domestic wells is a cyclic, never-ending process. The County could require individual landowners to demonstrate that their proposed domestic well will not negatively impact adjacent landowners by enforcing a policy such as:

Policy: If a proposed domestic well is to be installed within a distance of approximately 1 mile of an existing domestic well(s), then water level data for existing well(s) within 1 mile of the proposed well should be reviewed and determined to have an annual average drawdown of less than 0.25 feet per year for a 10-year period. If the annual average drawdown is determined to be greater than 0.25 feet per year, drilling of additional domestic wells within the one-mile radius should not be allowed due to impacts to existing groundwater users. Additionally, after the installation of any new domestic well, water level data shall be collected and provided annually to the County. Water level trends should indicate an average steady decline of no greater 0.25 feet in the new domestic well for each of the past 10 years prior to the site being deemed sustainable for domestic use. If the well is not found to be sustainable, the residence will be required to abandon the well and receive water from an external source (i.e., delivery truck). The County reserves the right to increase or decrease the proposed allowable rate of 0.25 feet per year as aquifer conditions change over time.

Another proposed policy which will improve the sustainability of local aquifers and provide valuable data for the long-term understanding of aquifer conditions is the implementation of water meters on domestic wells. The proposed policy should include the following provisions:

Policy: Unless the residence is granted a waiver by Storey County, all domestic well users must install a meter to measure all water produced by the well. The meter must comply with County specifications and provide electronic direct read transfer of data to County Public Works equipment. The meters are to be used for quantifying the capacity of the limited aquifers in the County. The County may also use the meter data to enforce state limitations for the production of groundwater (i.e., 2 acre-feet annually maximum) or any future restrictions to domestic groundwater production.

Per Chapter 16 of the Storey County Code, land subdivision applications must also demonstrate that a sufficient volume of uncommitted water exists to serve the needs of the development as well as evidence that the use of water for the development will not adversely impact existing surrounding residents,

properties and uses. Procurement of the necessary water is not required until filing for final map at which point the sufficiency of the rights will be reviewed by the County and NDWR. This policy is beneficial to future groundwater sustainability. It is also recommended that the County continue to develop their groundwater management plan, through studies like this plan and by participating in more specific studies, to guide groundwater use in these areas. See appendix A for supporting information.

3.0 THREATS TO EXISTING AND FUTURE WATER RESOURCES

For the County to provide a reliable water supply to its Storey County Water System customers, it must consider any potential changes which may affect its water source and supply. Additionally, residents outside of the Water System's service area must also be aware of potential risks. The risks and threats presented in this section are typically out of a water supplier's and private well owner's control; however, proper management and planning can mitigate their impacts. This section identifies potential threats to water supplies within the Plan Area. Recommendations as to how the County and residents can mitigate these threats are discussed in this chapter and in chapter 3.

3.1 DROUGHT AND CLIMATE CHANGE

The Storey County Water System's only source of water is from the Sierra Nevada Mountains. The amount of water available to the County system through the Marlette Water System is directly dependent on seasonal storms and the snowpack on the East Slope of the Tahoe Basin and in the Marlette/Hobart Lake watershed and existing pipeline capacity at the siphon. Extended periods of below average precipitation are known to occur in the Tahoe Basin and on the eastern side of the Sierra Nevada which have the potential to reduce the amount of water available in any given year. However, this condition is mitigated by the upstream Marlette and Hobart storage reservoirs.

Extended periods of dry weather are especially known to affect the availability of groundwater within the Plan Area. As mentioned previously, the drought which occurred from 2013 through 2015 resulted in declining groundwater levels within the Virginia Highlands. Some homeowners had to deepen their wells to be able to pump the groundwater in this area. Drought also affects the Mark Twain area and the Dayton Valley. Groundwater in this area is affected by flows in the Carson River which has limited upstream storage resulting. Below average precipitation in the Carson River Watershed results in decreased surface and subsurface flows through the Dayton Valley which can impact groundwater levels.

In addition to droughts, which are temporary, climate change is expected to have lasting effects on the availability of future water supplies. Climate is used in reference to prevailing weather conditions in an area over a long period of time. No climate study or evaluation was undertaken for the purpose of this Plan; however, sources were reviewed and referenced regarding climate change and climate predictions. The California Department of Water Resources (CDWR) released a report entitled *California Climate Science and Data for Water Resources Management*. Although this report does not include Nevada, it does include the Tahoe and Carson Basins as part of the North Lahontan hydrologic region⁸. CDWR summarized the key climate vulnerabilities for the North Lahontan region as:

- Increased air and water temperatures would place additional stress on sensitive ecosystems and species;
- Loss of snowpack storage may reduce reliability of surface water supplies and result in greater demand on groundwater resources;
- Magnitude and frequency of extreme precipitation events may increase, resulting in greater flood risk; and

⁸ The Marlette Water System is directly adjacent to the North Lahontan hydrologic region which is bounded by the eastern border of the State of California.

- High temperature and longer dry seasons would increase wildfire risk.

Many of these vulnerabilities not only apply to the region of surface water supply in the Sierra Nevada Mountains but are also potential vulnerabilities in and around the Plan Area. CDWR provides a list of Resource Management Strategies that water suppliers can consider as tools to adapt to climate change. The following are CDWR recommended Resource Management Strategies for the climate vulnerabilities identified which are applicable to the County and Plan Area.

- Urban Water Use Efficiency: Practices that maximize use of available water supplies by reducing waste and increasing efficiency.
- Conveyance – Regional/Local: Improvement and maintenance of water conveyance systems to improve system reliability, protect water quality, increase available water supplies, and provide operational flexibility.
- Conjunctive Management and Groundwater Storage: Coordinated and planned use and management of surface water and groundwater resources to maximize the availability and reliability of water supplies.
- Surface Storage – Regional/Local: Human made, above-ground reservoirs to collect water for later release when needed. Surface storage has played a key role where the quantity, timing and location of water demand does not match the natural water supply availability.
- Drinking Water Treatment and Distribution: Development and maintenance of public water treatment and distribution facilities. Reliability, quality, and safety of the raw water supplies are critical to achieving this goal.

Although timing and magnitude of warming and other climate change factors are unknown, resource management strategies such those limited above will be useful considerations for climate change adaption. Through the County's planning efforts, it will be critical to continue assessing potential climate change strategies and implement them as feasible and needed.

3.2 REGULATORY ACTIONS

As discussed throughout this chapter, the County's water source(s) is governed by State and Federal regulatory guidelines, Nevada water rights law, the Franktown Decree and through agreements with the Marlette Water System. The water available to the County from the Marlette Water System is also utilized by other entities (e.g., Carson City, private irrigation companies) according to their appropriation and priority. Additional parties, agreements and decrees could also influence the quantity and availability of water resources should the County pursue groundwater development within the Plan Area in the future.

The NSE has the ability to regulate groundwater usage within a hydrographic basin by limiting water rights based on the priority dates of appropriations. If, in the NSE's judgement, the hydrographic basin is over-appropriated and being overdrawn, the NSE can issue a curtailment order. A curtailment⁹ order establishes which water rights can be exercised, and which cannot, to protect the long-term health of the aquifer. Being that the County's current groundwater right holdings are limited, any future appropriations would be very junior in priority and would be at a greater risk for curtailment. This risk could be mitigated if the County chooses to purchase senior groundwater rights as opposed to filing for new appropriations.

More importantly, the County should monitor the development of new regulations and determine whether they directly impact the County's current water supply or not. Conjunctive use regulations are currently being developed in the Humboldt Regional Hydrographic Basin which could have an impact to future water resources the County may or may not pursue. While previous legislative sessions have resulted in conjunctive use management statements, there are currently no regulations to guide how groundwater and

⁹ Domestic wells are also at risk to the curtailment process. Although bills including such provisions have not made it through past State of Nevada legislative sessions.

surface water interaction or conflict will work through the existing permitting process. If new conjunctive use management regulations are developed, it may impact the County's ability to acquire, change and exercise permitted and certificated groundwater rights.

Other potential regulatory actions that the County should consider include:

- Modification to activities and uses which impact basin inflows and outflows.
- Future reduction in water quality maximum contaminant limits.

3.3 CONTAMINATION

The County is committed to providing a high level of service with its drinking water system and is dedicated to ensuring that level of service in the future. This section focuses on protection of source water quality, which is also of importance to private well owners, and ensuring that negative impacts to water quality from anthropogenic and natural sources are minimized to the greatest extent possible.

3.3.1 Surface Water

Due to the location of the surface water source, which is above any major roads or railways, the source is less vulnerable to contamination. However, the County should still be aware of possible contamination events including, but not limited to, turbidity events and algal blooms as opposed to toxic spills. The water treatment plant is designed to treat surface water but understanding and maintain the highest quality of water possible arriving at the plant is important.

3.3.2 Groundwater

Changes to water quality of the groundwater sources in the Plan Area can occur in two ways:

1. The concentrations of naturally occurring constituents could change over time, or
2. Groundwater sources could become contaminated as a result of human activities.

Although the County does not currently utilize groundwater as a water source, constituents which could pose threats to the quality of groundwater are Arsenic, Gross Alpha, Uranium, Nitrate, Iron and Manganese. The County should encourage private well owners to send the County any water quality data to develop a database and monitor trends.

3.3.3 Distribution System

The County relies upon certified water treatment and distribution system operators who continually monitor water quality in the treatment and distribution systems. All testing and monitoring are done in conformance with established health and safety standards and under an operating permit with the Nevada Division of Environmental Protection – Bureau of Safe Drinking Water. The County prepares an annual water quality Consumer Confidence Report which provides an overview of the previous year's drinking water quality data for the Storey County Water System.

3.4 CONVEYANCE INTERRUPTIONS

The materials which make up the siphon and transmission main which delivers water from the Marlette Water System to the Plan Area are approximately 150 years old and known to have vulnerabilities. In 2018, a portion of the line experienced a leak which required emergency repair to ensure continued delivery of water to Virginia City, Gold Hill, and Silver City. Although the County has 20 to 50 days¹⁰ of raw and potable water storage within its system, this event and others like it show the importance of regular monitoring and maintenance. Due to the age of the transmission main most parts or repairs must be

¹⁰ Range in values is dependent on average or max day water use

completed with custom fittings which are not only costly but require longer lead times. In order to increase system reliability and conveyance capacity it may become necessary to replace large portion of the siphon in the future.

4.0 REMAINING CAPACITY ANALYSIS

A remaining capacity assessment of the System is a critical resource for the County to use to make future development determinations. The System's capacity to convey and provide water to its customers and to future users is based on two primary factors:

1. A System's ability to operate within the parameters of Nevada Administrative Code (NAC) regulations; and,
2. Proper allocation of water rights with the NSE.

This section will focus on the existing System capacity and will convert remaining capacity estimates into residential connection counts. Remaining capacity evaluations will be made on a combined supply and storage basis as described further below. Key assumptions used for this analysis include:

- Water supply is based on 100% utilization of the siphon transmission main for a 24-hour period.
 - The theoretical flow capacity of the siphon transmission main is 738¹¹ gpm.
- Maximum fire demand is assumed to be 3,600 gpm for 2 hours for Virginia City and 1,500 gpm for 2 hours each for Silver City and Gold Hill. The largest fire demand, 3,600 gpm for 2 hours, will be used for the combined system analysis.
- Operating Storage is equal to the Average Day Demand (ADD) for 24 hours.
- Emergency Storage is 75% of the Operating Storage.
- The available potable storage within the system is assumed to be 1.475 Mgal¹².

4.1 REMAINING STORAGE CAPACITY

Typical capacity calculations use a combination of storage and supply to determine if a system meets NAC requirements. However, it is informative to analyze storage and supply capacity separately to better understand which of the two is the limiting factor in capacity. Current storage requirements are 762,000 gallons out of the existing 1,475,000 gallons of storage capacity. Based on the Maximum Day Demand (MDD) and operations and emergency supply requirements, the remaining storage capacity can support an additional 1,519 connections. This assumes that no water is being supplied via the siphon over a 24-hour period.

The individual systems comprising the larger County system, vary in their storage capacities. The Virginia City system has ample storage, while both Gold Hill and Silver City have sufficient storage to meet demands as they are currently. This leads to the Virginia City storage providing the bulk capacity for the larger County system.

4.2 REMAINING SUPPLY CAPACITY

Currently, the siphon that provides water to the County System is not metered, so a flow rate has been calculated. The siphon that provides water to the County System is primarily 10-inch threaded steel pipe. The majority of the pipeline was installed around 1875, with portions of the siphon replaced over the years. Due to the age and massive pressures experienced by the siphon in places, the siphon is never operated at its full capacity. The siphon begins at the Lakeview Tank, which controls the water diversions to both Carson City and Virginia City. Flow to the County Systems is controlled by an actuated flow control valve.

¹¹ Value listed is the theoretical capacity of the siphon. See Section 4.2 for further information.

¹² For this analysis, the capacities of the Hillside Tanks are assumed to be their future capacity of 500,000 gal each.

This valve is never fully opened. Anecdotal evidence shows that the average flow seen in the siphon is approximately 320 gpm. The theoretical, calculated capacity of the pipeline is 738 gpm.

Raw water is conveyed from the 5-Mile Reservoir to the Bullion tank in Virginia City by a 3-mile pipeline that is made up of a combination of newer 12-inch high-density polyethylene (HDPE) pipe and older 12-inch ductile iron pipe. This pipeline is capable of conveying over 2,000 gpm of raw water to the water treatment plant. The water treatment plant serving the system is rated at 1.26 MGD. This equates to a flow rate of 875 gpm. Therefore, the limiting factor in the overall transmission of raw water to the system is the siphon at 738 gpm. A 738 gpm flow rate equates to 4,528 connections in the County system. Removing the existing connections, leaves us with a system capacity of 3,862 possible connections.

Potable water is also transmitted from Virginia City to Gold Hill and then to Silver City. The Gold Hill system is fed by the Divide Tank off a separate 12-inch main. This pipe can convey up to 2,800 gpm if required. Silver City is fed by a single 4-inch main. This presents capacity issues in the system, as the main can only convey up to 315 gpm. Per the system hydraulic model, this flow rate is achieved when filling the Silver City Tank.

4.3 REMAINING SYSTEM CAPACITY

Minimum water system capacity requirements are established in NAC 445A sections 6672 through 66755. NAC 445A.6672(3) establishes specific water system capacity requirements for systems relying upon groundwater production wells to meet the following scenarios:

- (a) Maximum day demand + fire demand with all water sources functioning, or
- (b) Average day demand + fire demand with the most productive well out of service

NAC 445A allows for a combination of water supply wells and storage to satisfy the requirements. Since Storey County does not rely on wells for supply, scenario (b) was excluded from this analysis, and it is assumed that scenario (a) provides the appropriate assessment of system capacity for the County. Table 15 provides a summary of the available system capacity, storage requirements and excess storage capacity for the potable storage tanks in the County System. The analysis is based on a 24-hour period and considers the design ADD of 131 gpm as summarized in Table 15. It is assumed that each potable water tank is filled to its operational capacity at the beginning of the 24-hour analysis period.

Table 15: Existing Customer Base System Capacity Analysis

	MDD + Fire with All Sources	
Storage Type	Capacity Requirement (kgal)	Capacity Balance (kgal)
Potable Tank Storage		1,475
Siphon Supply in Excess of Demand ¹³		686
Available System Capacity		2,161
Fire Storage	432	1,729
Operating Storage	189	1,540
Emergency Storage	141	1,399

Based on this analysis, the system has the source and storage capacity to meet the requirements of NAC 445A.6672 and shows that there is a remaining system capacity of 1,399 kgal. Table 16 provides the capacity analysis considering the maximum number of additional connections based on the excess capacity shown in Table 16.

¹³ Siphon flowrate of 738 gpm used for capacity calculations.

Table 16: Existing System Maximum Capacity Analysis (864 Additional Connections)

	MDD + Fire with All Sources	
Storage Type	Capacity Requirement (kgal)	Capacity Balance (kgal)
Potable Tank Storage		1,475
Siphon Supply in Excess of Demand ⁷		-60
Available System Capacity		1,415
Fire Storage	432	983
Operating Storage	562	421
Emergency Storage	421	0

As shown, when the number of connections and resulting demands increase, the operating storage and emergency storage requirements increase correspondingly. Under the “MDD + Fire with All Sources” the existing supply infrastructure and potable storage tank system could support an additional 864 connections, assuming an average annual usage of 0.3 gpm per connection, without system expansion or improvement. This is the number of additional connections which results in a capacity balance of zero. For complete calculations, refer to Appendix B.

Additional analysis was performed on the individual systems comprising the larger Storey County Water System. Separate storage and supply calculations for Virginia City, Gold Hill and Silver City were completed to better understand where specific capacity issues may arise, as well as understand the hydraulic relationship between the three systems. A summary of the results can be found below in Table 17. The complete calculations can be found in Appendix B.

Table 17: Storage + Supply Calculations Summary for Storey County Systems

System	Total Storage (kgal)	Supply in Excess of Demand (kgal)	Total Required Storage (kgal)	Capacity Balance (kgal)	Capacity Remaining (EDUs)
Virginia City	1,200	750	706	1,244	768
Gold Hill	115	1,236	201	1,150	710
Silver City	160	412	215	357	220
Combined	1,475	686	761	1,398	864

As shown, two of the three individual systems have similar remaining capacities. However, the Silver City system is limited by its small storage and supply in comparison to its total required storage. The primary limiting factor being the small amount of storage in the area and is also exacerbated by the fact that the system is supplied via a 4-inch water main from Gold Hill. This restriction in combination with the small storage greatly reduces the ability to serve future connections in the area. However, in practice the three systems are operated as a single system. This allows upstream storage in Virginia City and Gold Hill to help alleviate the supply and storage issues in Silver City.

While the capacity remaining is represented in equivalent dwelling units (EDU), it does not require that all future development be comprised of residential uses. Rather, an EDU is a commonly used utility planning unit which is equal to the water demand of one single-family residence. If a proposed commercial or industrial development is projected to use ten times the amount of water as a single-family residence than that development would be allocated 10 EDUs of the remaining system capacity listed. It is recommended that the County require a proposed fixture unit count for all non-residential developments be provided at

the time of parcel map approval and/or building permit in order to convert projected water demands back to an EDU basis and evaluate available system capacity.

5.0 LONG-TERM STRATEGIES

Protection of existing and future water resources should be of utmost importance for the County and its residents. However, the strategic management of the County's resources becomes complicated due to the variety in water resource type (i.e., groundwater and surface water), the geographic distance between the communities in the Plan Area and the evolving regulatory environment, including Nevada water rights law. This section will review management approaches the County should consider both currently and in the future.

5.1 WATER RIGHTS

5.1.1 Surface Water

Storey County utilizes water from the Marlette Water System as its only source for providing water service to customers of the Storey County Water System. The Marlette Water System exercises water rights owned by the State of Nevada, under the Franktown Creek Decree which are contracted and delivered to the County. Because the County does not own any Decreed water rights, the delivery agreement and contract become especially important for dependable long-term water delivery. Furthermore, because the Marlette Water System is the sole source of water for the County system, the contract with the water system should allow for full utilization of the conveyance capacity of water system infrastructure and all for expansion to cover potential "growth" in the water system, especially in areas like the Highlands or Mark Twain where groundwater resources are limited.

While improbable, the Carson River is another source of surface water which could provide water service should the County intertie their water system with Lyon County Dayton Utilities. The County does not currently own any surface water rights associated with the Carson River system and it is not recommended for the County to purchase or accept dedication of Carson River rights at this time. The benefits and challenges of utilizing the Carson River as a future water source will be detailed in chapter 3.

5.1.2 Groundwater

The Plan Area overlies two primary hydrographic areas or basins from a water resource regulatory standpoint in the Tracy Segment and the Dayton Valley basin. Each of these areas has separate Orders and Rulings by the Nevada State Engineer that shape the regulatory options and environment the County must work within regarding groundwater resource development and use. For example, the Dayton Valley Hydrographic area has the benefit of a Domestic Well Credit Order (see page 23), whereas the Tracy Segment does not currently have that provision under the designation Order. Additionally, the County only owns less than 50 AF in the Tracey Segment with the point of diversion and place of use currently tied to the Canyon General Improvement District.

Also discussed in Section 2.3, the availability of groundwater resources in both the Highlands and Mark Twain areas is extremely restricted and their ability to continuously meet domestic use demands has become more and more limited over the last 20 years. The following information is meant to provide a planning level summary of short and long-term alternatives which the County may consider when evaluating providing future groundwater resources to its residents.

Change in Point of Diversion/Place of Use

Storey County owns approximately 48.58 acre-feet within the Tracey Segment Hydrographic Basin under Permit No. 50533, Certificate 18224, and 80870. These water rights currently support an elementary school, park, and the Lockwood Fire Station. The amount of water needed to support these facilities in the

Lockwood area should be identified and allocated appropriately with the Canyon General Improvement District. Any remainder in right could then be utilized within the Tracey Segment to support other County purposes. The balance of any right which could be moved is not expected to be large enough to support new development or a new public water system in the Highlands.

The future concept that this change could support could be to provide a single point of service within the Highlands community which residents whose wells had failed could access drinking water. This alternative may also require the construction of a new well, installation of water treatment equipment, construction of storage facilities, water system and water right permitting activities which are expected to range between 1.2 and 5 million dollars¹⁴ and span 12 to 36 months.

This alternative is not currently an option for the Mark Twain area due to the lack of existing rights owned by the County in the Dayton Valley basin.

Appropriate New Rights

An alternative to moving existing rights from one location to another is to file an application to appropriate new rights in either the Tracey Segment or Dayton Valley Basins. Review of the hydrographic basin summaries prepared by the NDWR show both the Tracey Segment and Dayton Valley as over-appropriated, with mining and milling identified as the preferred use in the Dayton Valley Basin. For these reasons, new appropriations for new municipal purposes should be considered unlikely. In the event a new appropriation is approved, it would be junior in priority date and would face additional challenges to be used to support to new development. Additionally, the infrastructure requirements (i.e., well, tank, distribution piping) proposed by the first alternative would still be required by this option as well.

Purchase Water Rights

Since new appropriations for groundwater are assumed to be limited based on total appropriation in each valley, purchasing existing water rights becomes the remaining option. Based on the cost associated with researching, confirming, purchasing, and developing these water rights, Farr West only recommends that the County pursue a water rights purchase for small quantities of rights to support existing development which may require a community water supply for an indefinite period of time. While this option may be the quickest to implement and receive reduced interest from other parties than that of new appropriations, it may also be the costliest with an approximate price tag of \$1.5 to \$8 million dollars¹⁵ and take anywhere from 12 to 18 months to implement.

In the case of new development being served by an existing system or the formation of a new water system, operated by Storey County or General Improvement District, Farr West recommends the County require developers to dedicate the necessary rights to support the proposed uses.

Domestic Well Credit Program

The Domestic Well Credit Order in Dayton Valley provides the ability for the owner of a Domestic Well on a lot that was created prior to July 1, 1993, to plug and abandon the Domestic Well and be provided water service from a water supplier using a credit to provide service to the property. The Order could be used to allow the County to develop a community water system in the Mark Twain area, but these credits cannot be transferred or sold like a water right after they have been issued. The benefit to this alternative is that new water rights would not be required and the overall impact to the water resource would be the same as the current condition. To provide a new water system in this area, a production well would still need to

¹⁴ Opinions of probable costs are planning level in nature (-50% to +100%) and are for a single point of use alternative. Costs associated with installing a distribution system are not included.

¹⁵ Cost of water rights are planning level estimates which projects a range of \$400,000 to \$3,000,000 depending on which basin (Tracey Segment, Dayton Valley, or both) the rights are purchased in. Estimates are based on a volume of 100 AF.

be permitted and constructed, storage tanks and distribution piping would be required to provide water service to the residents who forfeited their right to a domestic well. However, these types of conversion projects are rare due to the significant costs associated with the infrastructure improvements.

This alternative is not currently an option for the Highlands area due to the lack of existing Order in the Tracy Segment basin issued by the NSE. The County could apply to the NSE for an Order; however, the significant cost of associated infrastructure may still be prohibitive.

5.1.3 Best Management Practices

Farr West recommends Storey County allocate annual budget and staff time to continue to participate in regional planning groups, like the Carson River Subconservancy District and Truckee Meadows Water Authority Advisory Committee meetings or planning sessions. Involvement with these groups will allow the County to stay informed on regional policy changes and potentially provide insight into other water resource management strategies. Additionally, staying engaged with water right permit changes in basins which contribute to the Marlette Water System and inside of and adjacent to the Tracey Segment and Dayton Valley Hydrographic Basins will assist the County in maintaining their current and future water right interests.

Storey County owns two water right permits that are currently managed by Canyon General Improvement District. Farr West recommends that the County allocate budget and staff time to monitor due dates and water usage for these rights to maintain their good standing. In the event additional water rights are acquired or dedicated to the County, due dates for Proof of Completion of Work and/or Proof of Beneficia Use should be pursued and maintained.

5.2 RESOURCE MANAGEMENT

Some of the water right strategies, particularly the Domestic Well Credit Order in Dayton Valley, have long term impacts to Storey County residents. Domestic wells are the only source of water for many parcels in the County and while this land was originally developed with the understanding that these residents were to be responsible for their own water supply, it has become common for governing bodies to be forced into with providing water service or mitigating groundwater impacts in areas which groundwater conditions have changed significantly over time. To mitigate the potential for this outcome it is recommended that the County encourage local, private groups to be proactive in protecting the aquifer which supplies their groundwater wells. Examples of action that benefits aquifer sustainability has been provided throughout this chapter and Plan.

As shown in this chapter, the surface water from the Marlette Water System is the most available, highest quality source which the County has access to. Water from the Marlette Water System is critical for long-term sustainability in Storey County because it is the only source that is currently permitted with the NSE and is capable of regular deliveries. The County should place upmost importance on renewing the contractual agreement with the Marlette Water System and should pursue the contractual ability to transmit quantities of water that are commensurate with the investment the County has placed in its water system infrastructure and meets the long-term demands of the Comstock and surrounding areas far into the future.

5.3 DEDICATION RATES

Outside of the provisions for the division of lands within Chapter 16 of the Storey County Code, the County does not maintain a minimum water rights dedication for single unit residential development served by the County Water System. Farr West recommends a water right budget or allocation be applied to each existing connection or lot within the service area and for these values to be maintained on a digital ledger kept by either the Public Works or Planning Department. This will allow the County to accurately budget and manage water rights contracted from the Marlette Water System and provide the County the ability to justify water use factors and rates in future planning studies and communication with the NSE. Developing a

dedication rate would allow the County to include factors such as drought protection, unanticipated public uses, and system loss into allocations per connection. Benefits from representative dedication rates include maximizing volumes put to beneficial use, a correct assessment of water right needs related to future development, better land use planning and more accurate utility planning resulting in properly phased and sized infrastructure improvement projects.

5.4 WATER CONSERVATION PLAN

Water conservation planning is an important component to improving system sustainability well into the future. In fact, per chapter 540.121 of the NRS, each supplier of water must adopt a plan of water conservation which is in accordance with the requirements of NRS 540.141 and these plans should be updated at least every five years. These plans are typically geared to increase public awareness of the limited water resources which supply their region, and the impact conservation can have on the quality and quantity of water which is available long term. Additionally, these plans typically set near and long-term water use goals, present contingency plans for when water supplies are compromised and recommend water efficiency standards for new development. Another component of these plans is the evaluation of installing meters on all connections and the development of a tiered rate structure which encourages conservation. It is important to note that any modification to the rate structure should be included as part of a formal rate study which evaluates how changes to the rate structure impacts future water system revenues and expenses, including estimating a reduction in water use. The County is currently in the process of updating their Water Conservation Plan in 2021.

5.5 WATER SYSTEM FACILITY PLAN

The purpose of a water utility facility plan is to assess current and future system deficiencies and develop a capital improvement program to identify the projects needed to keep the system operating and in compliance. Once this program is defined the utility can identify future funding sources and associate the costs of the improvements to capacity replacement and capacity expansion. The most recent facility plan was completed in 2011 and it is recommended that the County pursue completing a plan by 2024.

5.6 WATER SYSTEM RATE AND CONNECTION FEE STUDY

Over the past 10 years, Storey County has evaluated the water utility user rates multiple times in the form of a formal rate study or as a rate analysis. One item which has not been updated as part of these studies is the connection fee for the County Water System. Currently, the County collects a hook-up fee based on the cost of providing the water meter and the physical connection to the water system, however this fee does not include any consideration for “buying in” to the available capacity of the system nor does it include a “water availability” charge. It is recommended that once the capital improvement program is defined as part of the facility plan that a formal rate and connection fee study be performed to recommend a representative fee for all future development.

5.7 WATER RESOURCE PLANNING

Per chapter 278.0228 of the NRS, all governing bodies shall develop and maintain a Water Resource Plan which:

- Evaluates all known sources of water,
- Quantifies current and future water demands,
- Analyzes the sufficiency of water sources in terms of quality and quantity, and
- Provides a plan for obtaining additional water of sufficient quality and quantity.

This plan must be updated at least once every ten years and shall be submitted to NDWR to be kept on file. Upon completion, this plan will satisfy this requirement and should be formally adopted by the Storey County Board of County Commissioners prior to being submitted to the NDWR. It is also recommended

that the County update this plan at least once every seven years as conditions can change over time and the information presented in a WRP is critical to ensuring the sustainability of a water utility. As a comparison the Truckee Meadows Water Authority updates its WRP on a five-year cycle.

CHAPTER 3: MANAGEMENT OF WATER RESOURCES

1.0 PURPOSE

This chapter is based on the findings from the third technical memorandum in a series of three which documented the analysis and findings of the 2021 Storey County Water Resource Plan (Plan). The specific purpose of this chapter is to estimate potential buildout demands as a result of future development within the Plan Area. This chapter will also identify the impacts to the Storey County Water System at the buildout condition which includes improvements to existing infrastructure and water right holdings. Future utility and water resource planning efforts will also be discussed.

2.0 FUTURE DEMANDS

Future demands for the Plan Area were generated from applying water demand factors against parcel size (i.e., acreage) or unit count. This analysis used the designated land use¹⁶, as of December 2020, for vacant parcels and applied a water demand factor as listed in Table 18. The Plan Area was broken up into the same four separate areas as used in Chapters 1 and 2 and shown on Figure 2. These areas are referred to as:

- The Comstock,
- VC Highlands,
- Mark Twain, and
- American Flat.

Additionally, Farr West held a workshop with Storey County staff on December 9, 2020, which detailed the methodology used for generating these future demands and presented preliminary results for future connections and improvement project alternatives.

Table 18: Water Demand Factors

Land Use	Demand Factor	Notes
Single-Family Residential	0.3 AFA/connection	Includes rural residential and forestry connections
Multi-Family Residential	0.9 AFA/connection	Assumes 3 units per parcel
Commercial	1.50 AFA/acre	Assumes 3 commercial connections per acre
Industrial	1.12 AFA/acre	Based on 1,000 gallons per day
Special Planning Zone	0.3 AFA/connection	Average connection demand determined from Chapter1

2.1 VACANT PARCELS AND LAND USE

Vacant parcel land use determinations were primarily pulled from County GIS data, however land use determinations for all areas were updated per the 2016 Storey County Master Plan. Due to the rural nature of the County, there were a large number of vacant parcels outside of the Plan Area that were not considered as a part of this analysis due to their distance from current water system infrastructure and a high barrier of cost to reach these areas through additional infrastructure. It should be noted that a vacant parcel analysis was not performed for Silver City, as it lies in Lyon County and future land uses are not under the

¹⁶ Vacant parcel land use determinations were primarily pulled from County GIS data, however land use determinations for all areas were updated per the 2016 Storey County Master Plan.

responsibility of Storey County. Future demands for Silver City were limited to the remaining system capacity of 105.3 acre-feet per annum (AFA) determined in chapter 2 of this Plan.

The vacant parcels in the Comstock area can be found in Figure 5. Vacant land uses within the Comstock include single-family residential, multi-family residential, commercial, industrial, forestry, and special planning zones. The special planning zone parcels are limited to railroad and mining uses. However, both designations were considered as potential future water users and assigned a single EDU per parcel as a worst-case scenario for buildout demands.

The vacant parcels in VC Highlands are comprised of entirely residential parcels, ranging in area from 1 acre to 40 acres. No matter the parcel size, all vacant parcels within the loop consisting of HWY 341, Lousetown Road, and Cartwright Road were included in this analysis and were counted as one EDU per parcel. There are 269, 10-acre parcels surrounding this looped area that are reasonable to include in future planning efforts but were excluded from this plan due to the diminishing cost-benefit relationship in adding this small number of connections. Figure 6 shows the parcels considered for the analysis as well as surrounding parcels.

The analysis of the Mark Twain area included land uses which reflect future changes as outlined in the 2016 Master Plan (see Appendix A). The area consists of single-family residential, rural residential, forestry, and industrial. Figure 7 shows the vacant parcels and zoning in the study area that was considered for this analysis.

The American Flat area southwest of Gold Hill currently has no existing development beyond a mining operation and two single family residences. However, future development potential was identified in the 2016 Master Plan. The land uses identified in the 2016 Master Plan were used for this area as shown in Figure 8. The area is primarily forestry with 252 acres of industrial. Similar to the Mark Twain area, the 240 acres of BLM forestry lands were removed from this analysis. For residential and special planning zone parcels, individual parcels were counted as possible future water service connections for this analysis. For rural residential parcels, a factor of 40 acres per future connection was used. Commercial and industrial parcels were counted as total acreage for the analysis and a water usage per acre demand factor listed in Table 18 was applied to the parcel area. Forestry parcel connections were assigned the same EDU value as rural residential parcel connections.

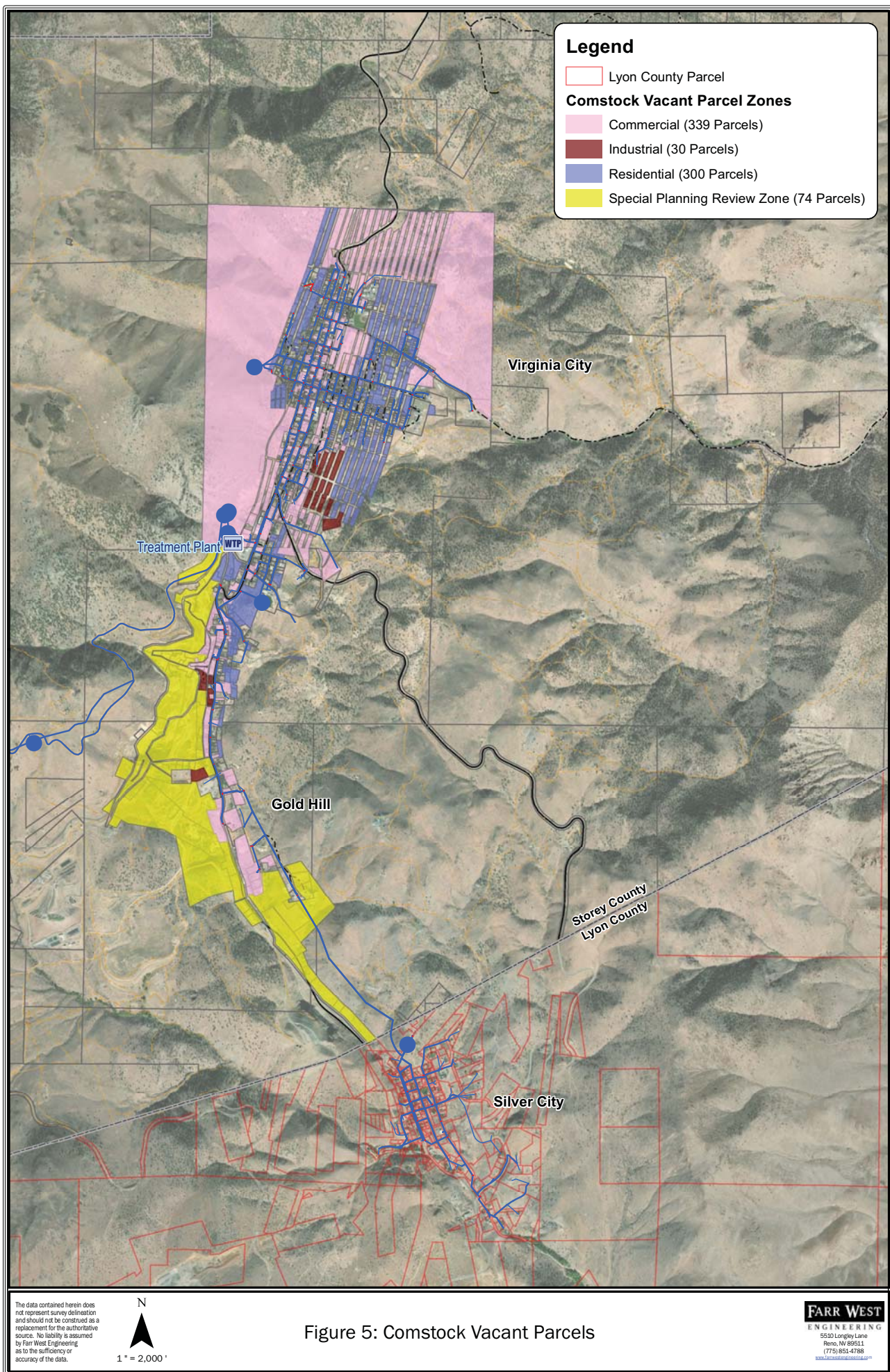
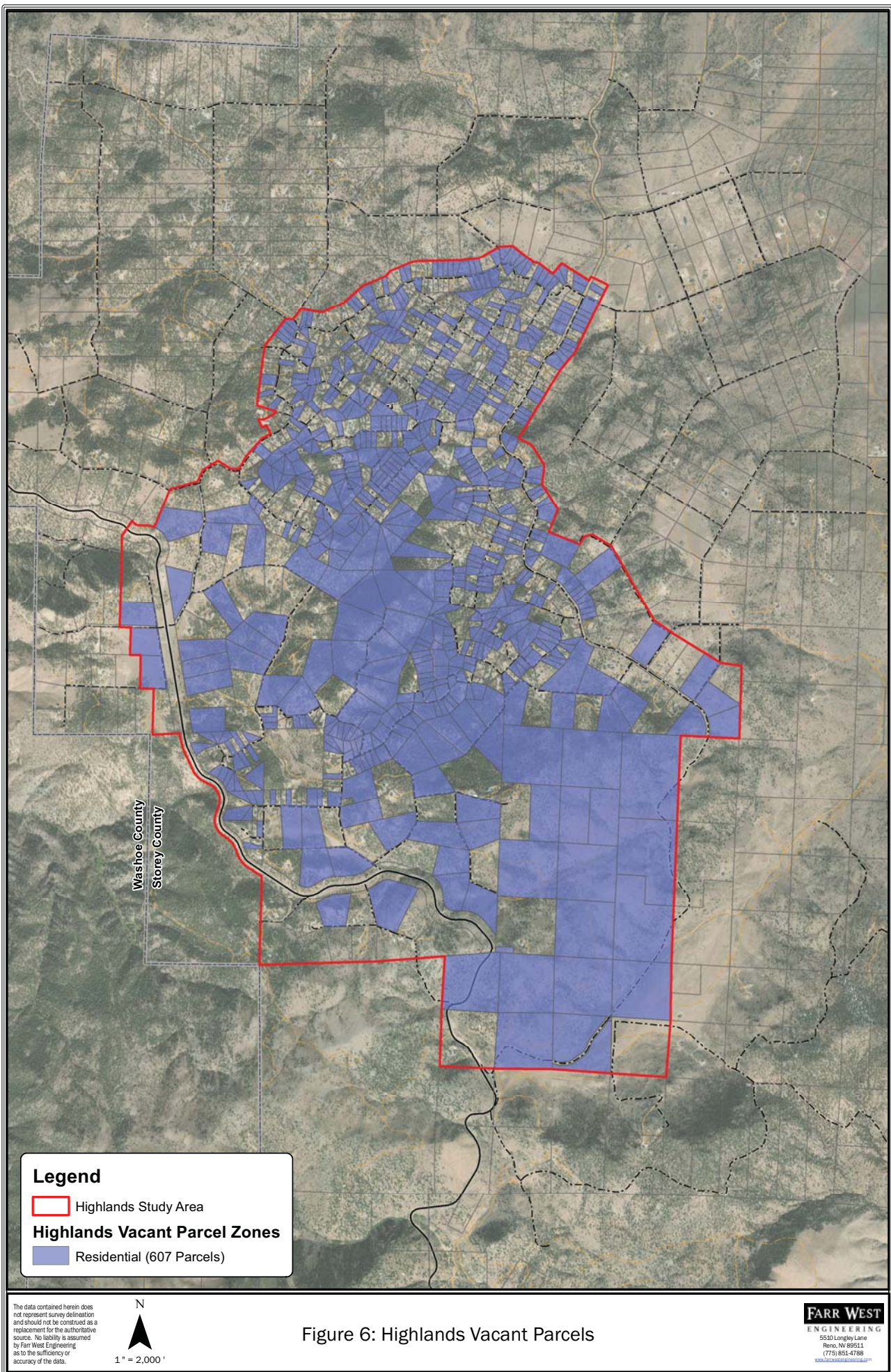
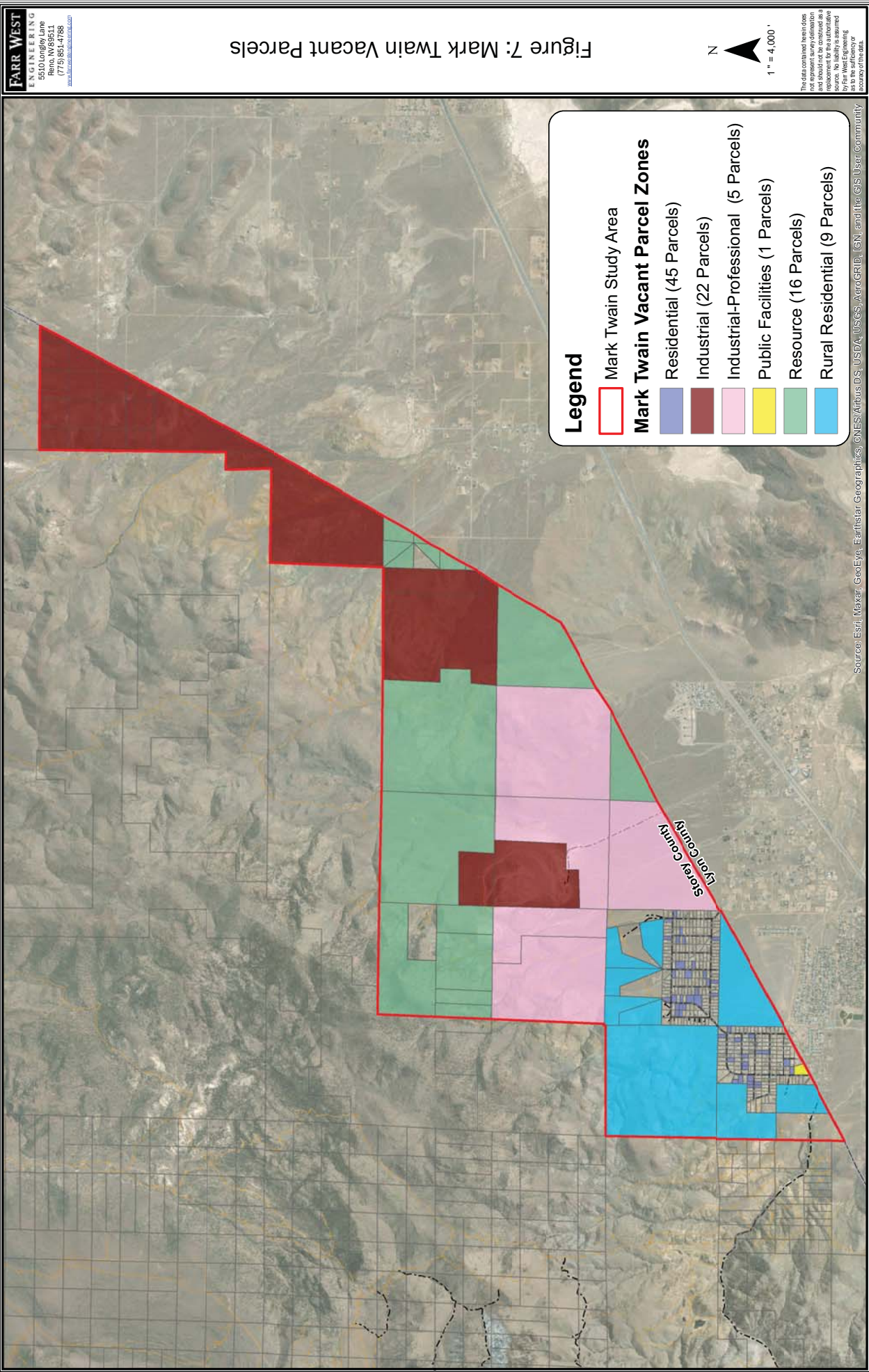


Figure 5: Comstock Vacant Parcels



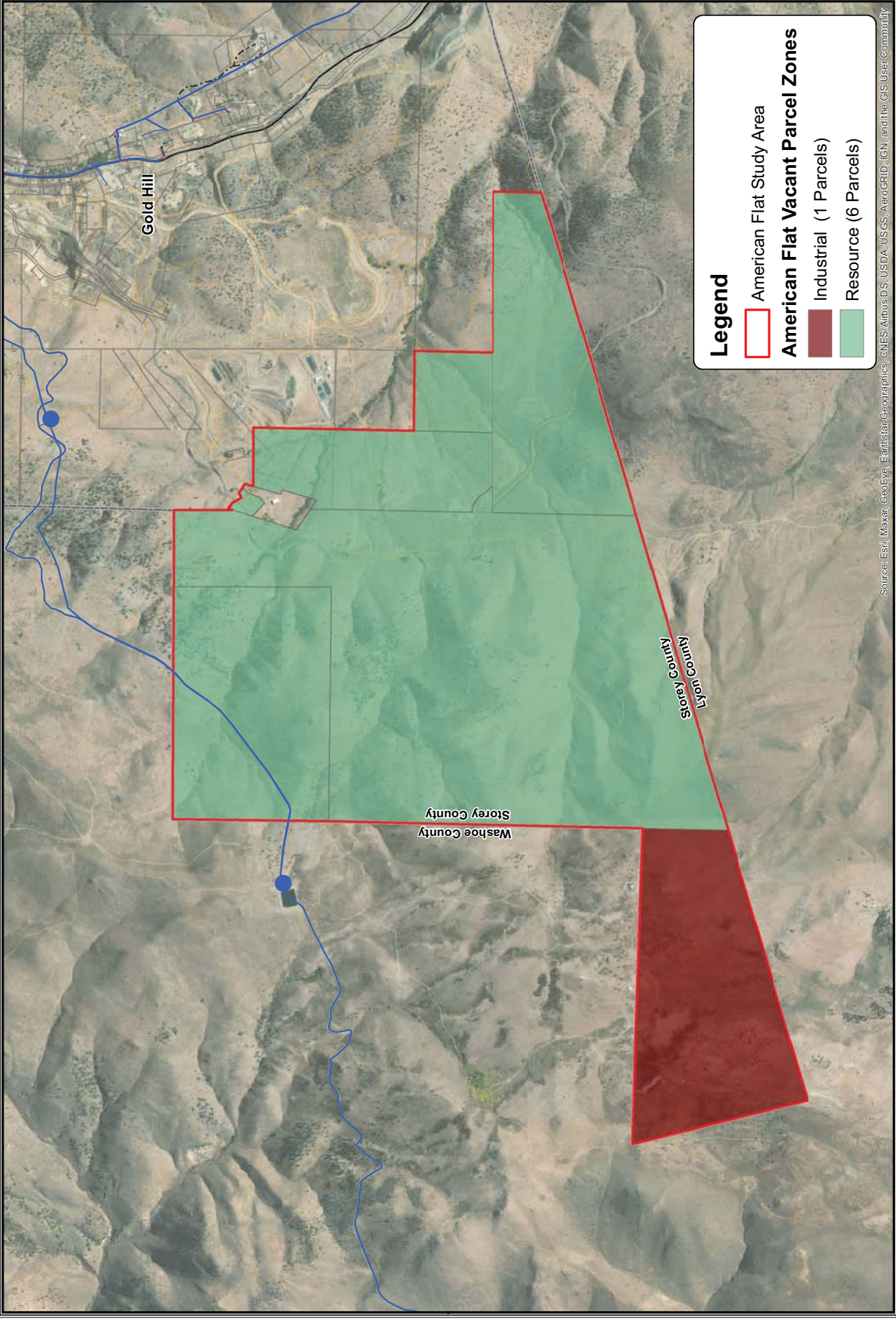


FARR WEST
ENGINEERING
5510 Longley Lane
Reno, NV 89511
(775) 851-4788
WWW.FARRWESTENGINEERING.COM

Figure 8: American Flat Vacant Parcels

N
1" = 1,500'

The data contained herein does not constitute a warranty, representation or endorsement by Farr West Engineering, Inc. for any use other than that intended by Farr West Engineering, Inc. and should not be construed as a replacement for the authoritative information provided by the National Geospatial Intelligence Agency or the U.S. Geological Survey.



Legend

American Flat Study Area

American Flat Vacant Parcel Zones

Industrial (1 Parcels)

Resource (6 Parcels)

Source: Esri, Maxar, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Table 19: Vacant Parcel Land Use

	Comstock	Highlands	Mark Twain	American Flat	Total
Single-Family Residential (ERUs)	293	607	74	-	974
Multi-Family Residential (ERUs)	21	-	-	-	21
Commercial (Acres)	132	-	-	-	132
Industrial (Acres)	19	-	4,327	252	4,598
Forestry (ERUs)	11	-	23	31	65
Special Planning Zone (parcels)	74	-	-	-	74

2.2 DEMAND FACTORS AND TOTAL BUILDOUT DEMANDS

Demand¹⁷ factors were applied to the vacant parcels in each area according to their land use. Although the average water usage per residential customer was determined to be 0.17 AFA per connection in Chapter 1, the projected unit water demand for residential uses or EDUs was adjusted to 0.3 AFA for this Plan. Multi-family residential assumes three units per parcel. Customer meter data also showed that commercial customers used 0.33 AFA on average. This volume was scaled up to 0.5 AF per commercial connection or 1.5 AF per acre for all vacant parcels zoned commercial for future water demand projections.

Industrial water usage was calculated on a per acre basis. The industrial demand factor was selected based on an analysis of Tahoe Reno Industrial Center, south Washoe County, and Douglas County water usages. Demand factors were then applied to all vacant parcels within the plan area. Table 20 below shows the existing demand, additional demand based on land use, and buildout demand.

Table 20: Plan Area Water Demands

Area	Existing Demand (AFA)	Additional Demand (AFA)	Buildout Demand (AFA)
Comstock	221	456 ⁱ	677 ⁱ
Highlands	176 ⁱⁱ	182	358
Mark Twain	100 ⁱⁱ	4,875	4,975
American Flat	4.5	291	296
Total	502	5,804	6,306

i - Includes 105.3 AFA for Silver City

ii – Existing demand was calculated by allocating 0.3 AF per existing residential connection.

¹⁷ All demands or demand factors in this chapter are average day demands unless noted otherwise.

3.0 BUILDOUT IMPACTS

To supply the volume of water that will be required to meet maximum day demands of the entire Plan Area at buildout, the County will need to have sufficient conveyance capacity in their water system infrastructure as well as have the volume of water rights needed to provide over 6,000 acre-feet of water on an annual basis. For further context, this volume of water correlates to a maximum day demand flow rate of 7,802 gpm or require transmission (i.e., siphon) and water treatment facilities (WTP) designed to deliver more than 11 million gallons per day (MGD). Due to the large disparity between the makeup of the current system and a system capable of providing more than 11 MGD to its customers, this Plan will only propose future improvement projects which eliminate current system deficiencies or will interconnect no more than one satellite area per any given development scenario or alternative.

3.1 INFRASTRUCTURE IMPROVEMENTS

Farr West developed improvement project(s) for each water system need in the future to provide a picture for what the connection or development of specific areas will have on the current system. These project alternatives were discussed and workshopped with County staff on December 9, 2020. All project cost estimates were prepared according to Class 5 methodology according to AACE International using conceptual or planning level engineering criteria to size significant project components.

3.1.1 County Water System

The County Water System consists of the water treatment plant, five storage tanks and distribution mains throughout Virginia City, Gold Hill, and Silver City. Overall, the system has aging infrastructure, areas with inadequate fire flow and static pressures in excess of 190 psi. Through previous master planning and recent hydraulic modeling analysis four projects were identified which would resolve current deficiencies¹⁸. These projects are:

- B St. & Union St. Water Main Replacement Project
- Divide Water Main Upsizing Project
- Silver City Transmission Main Replacement Project

After all these projects are completed, the County Water System will be able to meet or exceed all standard performance criteria/requirements as set forth by the Nevada Administrative Code 445A (NAC 445A) and enforced by the Nevada Division of Environmental Protection – Bureau of Safe Drinking Water (BSDW). Complete opinions of probable cost totaling approximately \$6.0 million dollars can be found in Appendix C.

If the Comstock area were to buildout per the current land use designations, Average Day Demand (ADD) and Maximum Day Demand (MDD) would increase to 413 and 825 gpm, respectively. System demands on this order would exceed current siphon capacity and would reduce WTP excess capacity to only four percent of total rated capacity. For this reason, the two additional recommended improvement projects would be:

- 12-inch diameter Parallel Siphon (from US 580 to Top of Siphon)
- WTP Capacity Improvement Project (1.26 MGD to 1.5 MGD)

The estimated total cost of all improvements required to meet the buildout condition for the existing Comstock service area is just more than \$18 million dollars with \$12.4 million being attributed to the Siphon and WTP projects.

¹⁸ The Silver City distribution system has been previously identified as deficient and in need of replacement in the 2011 Master Plan. An engineering design has been completed for these improvements and the Lyon County Utilities Department has assumed the role as sponsor for the construction of this project.

3.1.2 American Flat

The proposed development of the American Flat area as shown on Figure 8 would increase system demands by approximately 291 acre-feet annually or an additional 367 gpm during MDD. Water service would be supplied to the area via 3,100 linear feet (lf) of 12-inch diameter transmission main in addition to 750,000 gallons in above ground storage. In total these supply and storage improvements would cost approximately \$3.9 million dollars¹⁹.

This area would be supplied water through the Gold Hill pressure zone from the County Water System and would require the following additional improvements:

- 12-inch diameter Siphon replacement (from Lakeview Tanks to Top of Siphon)
- WTP Capacity Improvement Project (1.26 MGD to 2.2 MGD)

The estimated total cost of these additional County Water System improvements is approximately \$27.7 million dollars with \$6.3 million being associated with the pipeline installed between Lakeview Tanks and US 580 (i.e., Marlette Water System ROW).

3.1.3 Mark Twain

As stated in chapter 1, there are 333 existing connections in the Mark Twain area which would increase system demands by 100 acre-feet annually or an additional 124 gpm (0.2 MGD) during MDD. In order to supply water to serve the existing residential uses in the Mark Twain area via the existing County Water System, a 5.2-mile, 12-inch diameter transmission main would need to be constructed in 6-Mile Canyon Dr. along with a 500,000-gallon terminal tank. Additionally, an 8-inch diameter distribution system would also need to be installed to provide water service to the existing residences. The estimated cost of the improvements needed to supply potable water to the 333 connections is approximately \$30 million dollars.

Upgrades to the transmission siphon and WTP would also be required to meet NRS supply capacity requirements. These improvements would be:

- 12-inch diameter Siphon replacement (from Lakeview Tanks to Top of Siphon)
- WTP Capacity Improvement Project (1.26 MGD to 2.2 MGD)

The estimated cost of these additional County Water System improvements is just more than \$53 million dollars with \$6.3 million being installed between Lakeview Tanks and US 580 (i.e., Marlette Water System ROW).

3.1.4 VC Highlands

The area known as VC Highlands is home to approximately 588 residential structures which receive potable water service from individual domestic wells. If these existing residences were to be connected to the County Water System, it is estimated that system demands would increase by 176 acre-feet annually or an additional 219 gpm (0.3 MGD) during MDD. The infrastructure needed to supply water to the existing residents of the Highlands is:

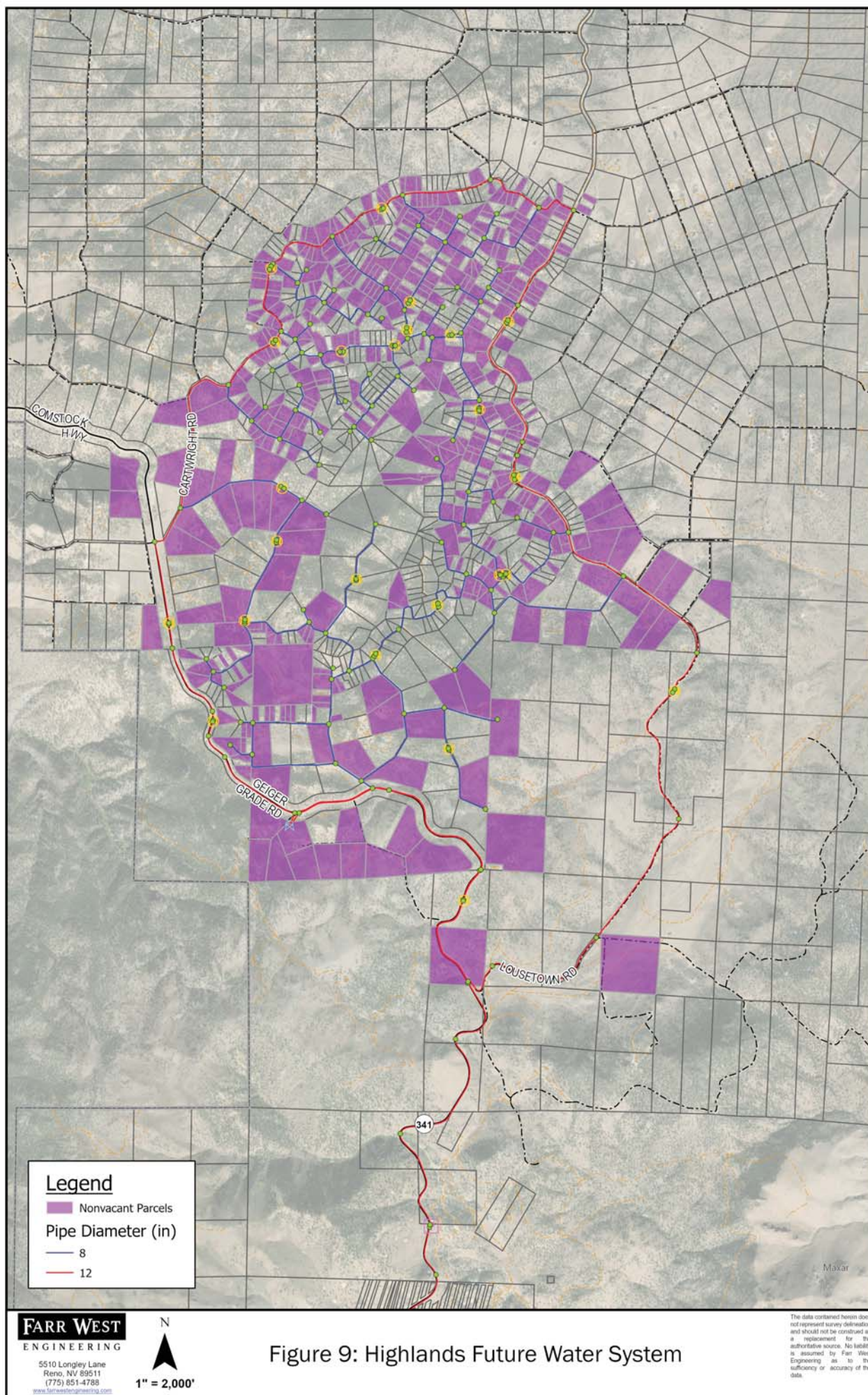
- 5.5 mile, 12-inch diameter transmission main between Virginia City and the top of Geiger Grade
- A 100 hp booster pump station located at the north end of the current County Water System
- 30 miles of 8 and 12-inch distribution main as shown on Figure 9
- 588 water meters and service lines
- 650,000-gallon water storage tank

¹⁹ The cost to install the distribution system in the American Flat area is not included in this total. It is assumed that the cost of these improvements would be borne by the developer/development.

In total, it is estimated that the cost of these improvements would exceed \$70 million dollars, with the transmission and storage portion totaling \$15.8 million. Due to the increase in system demands, upgrades to the transmission siphon and WTP would also be required to meet NRS supply capacity requirements. These improvements would be:

- 14-inch diameter Siphon replacement (from Lakeview Tanks to Top of Siphon)
- WTP Capacity Improvement Project (1.26 MGD to 1.6 MGD)

These additional water supply improvements would increase total project costs by \$25 million dollars and bring project totals to approximately \$95 million dollars. If the County were to size all infrastructure detailed in this section to accommodate complete buildout of the Highlands area the total cost of improvements increases from \$95 million to \$126 million dollars.



3.1.5 Siphon Upgrades

In review, the transmission siphon between Lakeview Tanks and the Top of Siphon does not have the conveyance capacity to supply enough water to meet the buildout condition for any of the scenarios evaluated in this Plan. At a minimum, a new 12-inch pipeline would need to be installed parallel to the existing main between US 580 and the Top of Siphon in order to meet buildout demands for the current service area. For all other scenarios, the entire line would need to be replaced between the Lakeview Tanks and the Top of Siphon with a 12, 14, or 16-inch diameter pipeline. Since different portions of the pipeline are owned and maintained by different parties (i.e., Marlette Water System and Storey County), it is reasonable to assume that each party would contribute funding for their portion of the improvements. The approximate split of ownership based on pipeline length is 61 percent for Storey County and 39 percent for the Marlette Water System.

3.1.6 Water Treatment Plant Upgrades

Like the upgrades to the siphon transmission main, the 1.26 MGD Water Treatment Plant will also need to be expanded to supply the volume of water needed at buildout for all development scenarios or alternatives studied in this Plan. Table 21 below details the additional capacity needed at the Water Treatment Plant to meet each development scenario.

Table 21: Water Treatment Plant Capacity Upgrade Needs

Development Scenario	Increase in Treatment Capacity (MGD)
Comstock Service Area Buildout	0.3
Comstock Service Area Buildout + American Flat Buildout	1.0
Comstock Service Area Buildout + Mark Twain (Ex.)	1.0
Comstock Service Area Buildout + Highlands (Ex.)	0.6
Comstock Service Area Buildout + Highlands Buildout	1.0

3.1.7 Project Summary

Per the findings of this Plan, the County will need to invest between \$6.0 and \$126 million dollars in water system improvement projects to maintain system compliance and supply water to new areas (e.g., Highlands, American Flat, Mark Twain). Table ES-4 lists a probable cost for each project that the County can reference for future long-term capital planning applications. These opinions of probable cost were developed using conceptual designs and cost data and should be refined as part of a preliminary engineering process prior to securing financing or allocating funds for their design and construction.

Table 22: Water System Projects

Project	Probable Cost ⁱ
Existing System Deficiencies	\$6.0 M
Comstock Service Area Buildout	\$12.4 M
Comstock Service Area Buildout + American Flat Buildout	\$27.7 M
Comstock Service Area Buildout + Mark Twain Ex. Residents Only	\$53.4 M
Comstock Service Area Buildout + Highlands Ex. Residents Only	\$95 M
Comstock Service Area Buildout + Highlands Buildout	\$126 M

i – All costs are presented in 2022 dollars and are Class 5 per AACEI

3.2 WATER RIGHTS

In addition to constructing the infrastructure necessary to provide water service at buildout, the County will need to maintain or acquire a sufficient volume of water rights to be able to serve the number of connections projected at buildout. The calculations provided below estimate what the minimum volume of water rights will need to be held in the interest of the County according to the land uses studied in Section 2.0.

Existing number of Residential Connections (County Water System)	596
Existing number of Commercial Connections (County Water System).....	207
Existing number of EDUs	998
Volume of water rights dedicated for existing development.....	1,118 AF
(assumes 1.12 ac-ft per EDU)	
Future EDUs (Highlands Ex. Domestic Wells).....	588
Future EDUs (Mark Twain Domestic Wells).....	333
Future EDUs (American Flat Domestic Wells).....	15
Future EDUs (Vacant - Single and Multi-Family Residential)	995
Future EDUs (Vacant - Commercial + Industrial) ²⁰	10,694
Future EDUs (Vacant - Other: Forestry + Special Planning) ²	139
Total Future EDUs	12,764
Water rights needed for all future development + conversion of existing domestic well owners to County Water System (assessed at 1.12 ac-ft per EDU)	8,783 AF
Estimated Domestic Well Credits (assessed at 2 acre-ft per DW)	(1,872 AF)
Total Water Rights Needed	6,911 AF

Per the 2002 contract, Storey County has reserved up to 495.6 acre-feet of water from the Marlette Water System in 2021²¹. This total is only slightly more than half of the volume that would typically be dedicated to support the existing 803 connections of the Storey County Water System. Considering the conversion of existing domestic well owners to the Storey County Water System and the absolute development of all vacant parcels according to approved land uses, Storey County may need to acquire right to upwards of 6,911 acre-feet of water to support permitting of the proposed developments.

Since Storey County does not maintain a ledger tracking historic water right dedications, this study assumes a dedication rate of 1.12 acre-feet per EDU²² for all calculations being presented in this section. This value has been commonly used across the state in the past to support the permitting of one residential unit with

²⁰ EDU counts for non-residential uses were calculated by dividing the projected average annual demand from Section 2 by a value of 0.3 AF/EDU.

²¹ Projecting out the annual increases in water made available to Storey County for the next 20 years results in an estimate of 653.6 acre-feet from the Marlette Water System in 2041.

²² This is a high estimate. Dedication rates of 1.12 AF/EDU have created large volumes of unexercised commitments of water rights throughout the state and the NSE's office has supported reduced dedication requirements over the past 10-20 years when there is adequate data to support a reduced rate.

the Nevada State Engineer's (NSE) office. If the County would like to have this unit volume reduced for future dedications it is recommended that the County prepare a more specific document summarizing their water use profile and proposed dedication rates and engage the NSE's office prior to passing new ordinance.

4.0 FUTURE MANAGEMENT

As shown in Section 3.2, the County will need to acquire or be dedicated almost 14 times the amount of water they have currently secured via contract with the Marlette Water System to meet buildout demands in all four areas studied as part of this Plan. If the County were to only provide water service to the Comstock area this volume gets reduced to approximately 4 times the currently contracted volume for a total of 2,178 acre-feet. In either scenario it will be necessary for the County to secure additional water in addition to modifying how the system is operated based on the number of customers and size of the service area in the future.

4.1 FUTURE WATER SOURCES

Chapter 2 found that the only viable water source for the County Water System is the Marlette Water System, and all future volumes of water should be acquired from this source. Additionally, chapter 2 also found that the current conveyance capacity of the siphon transmission main was limited to 738 gallons per minute (gpm) or 1,190 acre-feet annually. This stated capacity will be able to provide nearly all the future water needs of the Comstock area, however the addition of either the Highlands or Mark Twain areas will present the need for additional transmission mains to be constructed.

Another water source potentially available to the County could be the Carson River or groundwater rights in hydrographic basins 103, 104 or 105. To receive water supplies from these sources the County Water System would need to be interconnected with the Dayton and/or Mound House Water System(s), owned and operated by the Lyon County Utilities Department (LCUD). The connection to these systems can occur via a transmission main along 6-Mile Canyon Road and/or State Highway 341. Depending on the volume of water which will be supplied by these new connections, additional infrastructure in the LCUD or Carson City water systems may need to be installed prior to entering into any operating agreement with the associated utilities. An array of future utility management and operational strategies exist depending on how the new water source would be used and should be studied further prior to pursuing and water rights acquisitions or construction of any infrastructure improvements related to these water sources. These strategies include, but are not limited to: emergency backup supply, primary water supply for portion of water system, seasonal supply for greater water system, and an active wholesale connection between utilities.

Chapter 2 also found that the ability for existing groundwater sources to meet existing domestic uses has become more and more limited over the past 20 years and are not viable to support proposed development in the future. However, if the County were to pursue the interconnection of the County Water System to the Highlands or Mark Twain areas there is some merit to constructing a new community well which can be used seasonally (as conditions allow) and in emergencies. Additional water rights for this proposed water source should also not necessary since the conversion of domestic wells to the County Water System should provide domestic well credits which could be used to support permitting of the new community well.

4.2 REGIONALIZATION

If Storey County were to pursue interconnection of the County Water System with the Dayton/Mound House System, it would present the significant benefit of regionalizing water supplies for both the Comstock and surrounding areas. Regionalization of water supplies provides redundancy during periods of severe drought, during water system infrastructure failure, or when the quality or quantity of a water supply has diminished.

5.0 FUTURE WATER MANAGEMENT PLANNING

By implementing a proactive approach to water management planning, Storey County will ensure a reliable and resilient water utility well into the future. To do this the County needs to complete and update a variety of different planning efforts over a five to seven fiscal year (FY) cycle. While the intent and findings of each study is different, proper planning builds off the information developed in one plan to another and provides recommendations which improve the overall sustainability of the water system. An example of this would be developing a representative capital improvement program (CIP) as part of a water system master plan update. This CIP would subsequently ensure that accurate user and connection fees were being collected so that future capital funding needs were being met. Additionally, the rate study would also develop a user fee structure which promotes conservation and improves source water sustainability. This section summarizes key planning efforts required in the future and offers a recommendation for when these documents should be completed.

Table 23: Water System Planning

Plan	Year Completed	Recommended Update
County Strategic Plan	2020	2030
Water Resource Plan	2022	2027
Water System Master Plan	2011	2023
Rate Study	2011, 2020	2025
Water Conservation Plan	-	2022

6.0 CONCLUSION

This chapter has found that the development of all vacant parcels according to current land uses within the current service area boundary will nearly triple current average water use and require significant improvements to County Water System infrastructure. Beyond a projected cost of \$18.4M for these improvements, the County will also need to secure approximately 2,000 acre-feet of water from the Marlette Water System (or other) to support permitting of the proposed development(s). Additionally, if the County was to pursue connecting additional areas into the current service area improvement project costs may exceed \$100M and the need for additional water triples to more than 6,500 acre-feet beyond the volume the County has currently reserved with the Marlette Water System.

Completion of this Water Resource Plan is a significant step for the County towards improving water system sustainability. The findings of this Plan can be used to:

- support the acquisition of additional water resources,
- properly evaluate future land development proposals,
- improve capital planning exercises including the identification of future funding sources, and
- maintain regulatory compliance with NDEP the Nevada State Engineer's Office.

BIBLIOGRAPHY

- Affirmation of the Second Judicial District's Franktown Creek Decree, 4386 (Nevada Supreme Court April 24, 1963).
- Demographer, N. S. (2020). Certified Population Estimates of Nevada's Counties, Cities and Towns 2000 to 2019. Nevada: Nevada Department of Taxation.
- Franktown Creek Irrigation Company v. Marlette Lake Company, 4386 (Supreme Court of Nevada September 27, 1961).
- Smith, D. W. (2020, April 14). *Evaluation of water-level decline and aquifer properties in the Virginia City Highlands and Highland Ranches Volcanic Rock aquifer system, Storey County, Nevada*. Retrieved from USGS: https://www.usgs.gov/centers/nv-water/science/evaluation-water-level-decline-and-aquifer-properties-virginia-city?qt-science_center_objects=0#qt-science_center_objects
- Storey County. (2016). *Storey County Master Plan*. Storey County.
- Supply Contract. (2002, October 23). *Contract between the State of Nevada and Storey County to Supply Raw Water from the Marlette Lake Water System*. Carson, Nevada.
- WRCC. (2020, April 14). *Virginia City, Nevada (268761)*. Retrieved from Western Regional Climate Center: <https://wrcc.dri.edu/cgi-bin/cliMAIN.pl?nv8761>



Board of Storey County Commissioners

Agenda Action Report

**Meeting date: 11/21/2023 10:00 AM -
BOCC Meeting**

Estimate of Time Required: 30 min.

Agenda Item Type: Discussion/Possible Action

- **Title:** Review and possible approval of first reading of Bill No. 137, Ordinance No. 23-325, an ordinance amending Storey County Code Chapter 2 Administration and Personnel, Section 2.22.060 Qualifications of Appraisers, to revise Subsection 2.22.060(F) allowing a qualified appraiser to be placed on the list of county appraisers if the appraiser demonstrates an ability to obtain professional liability insurance as required by the county, and other properly related matters.
- **Recommended motion:** I (commissioner) motion to approve first reading of Bill No. 137, Ordinance No. 23-325, an ordinance amending Storey County Code Chapter 2 Administration and Personnel, Section 2.22.060 Qualifications of Appraisers, to revise Subsection 2.22.060(F) allowing a qualified appraiser to be placed on the list of county appraisers if the appraiser demonstrates an ability to obtain professional liability insurance as required by the county, and other properly related matters. This motion includes a finding that a special hearing and business impact statement are not required because the proposed action does not impose a direct or significant economic burden upon a business, or directly restrict the formation, operation, or expansion of a business in Storey County.
- **Prepared by:** Austin Osborne

Department:

Contact Number: 775.847.0968

- **Staff Summary:** This proposal will enable Storey County to build a larger pool of qualified property appraisers from which to choose on a rotating basis for the appraisal of properties that the county intends to purchase, sell, rent, or lease.
- Storey County is required by NRS to maintain a list of qualified property appraisers to perform appraisals of properties that the county intends to purchase, sell, lease, or rent. The county finds it difficult to recruit and maintain appraisers on its list due to a requirement in county code that such appraisers must maintain costly liability insurance whether they are or are not actively engaged in appraisals or other work for the county.
- A proposed amendment to Storey County Code Section 2.22.060(F) will enable an appraiser to be placed on the list of appraisers if the appraiser demonstrates an ability to obtain professional liability insurance as required by the county. If the code is amended, an appraiser will only be required to demonstrate active liability insurance when the appraiser is retained to perform appraisals or other work for the county.

- A special hearing and business impact statement are not required because the proposed action does not impose a direct or significant economic burden upon a business, or directly restrict the formation, operation, or expansion of a business in Storey County.

- **Supporting Materials:** See attached

- **Fiscal Impact:** None

- **Legal review required:** TRUE

- **Reviewed by:**

_____ Department Head

Department Name:

_____ County Manager

Other Agency Review: _____

- **Board Action:**

☐ Approved	☐ Approved with Modification
☐ Denied	☐ Continued

Bill No. 137

Ordinance No. 23. 325

Summary

An ordinance amending Storey County Code Chapter 2 Administration and Personnel, Section 2.22.060 Qualifications of Appraisers, to revise Subsection 2.22.060(F) allowing a qualified appraiser to be placed on the list of county appraisers if the appraiser demonstrates an ability to obtain professional liability insurance as required by the county, and other properly related matters.

Title

An ordinance amending Storey County Code Chapter 2 Administration and Personnel, Section 2.22.060 Qualifications of Appraisers, to revise Subsection 2.22.060(F) allowing a qualified appraiser to be placed on the list of county appraisers if the appraiser demonstrates an ability to obtain professional liability insurance as required by the county, and other properly related matters.

(Amendments are shown in blue underlined italics and black strike-out.)

The Board of County Commissioners of the County of Storey, State of Nevada, does ordain:

SECTION 1: Storey County Code Section 2.22.060 is hereby amended to provide as follows:

Chapter 2.22 - COUNTY'S LIST OF QUALIFIED APPRAISERS

2.22.060 - Qualifications of appraisers.

In order for an appraiser to be placed on the county's list of qualified appraisers, the appraiser must meet at least the following requirements:

- A. Hold a general appraiser certificate from the Nevada Real Estate Division.
- B. Have five years of experience in appraising real property in northern Nevada.
- C. Provide a resume describing the appraiser's qualifications, certifications, years of experience, and professional expertise.
- D. Provide an estimation of the time it will take for the appraiser to complete appraisal projects.
- E. Provide a list of fees charged by the appraiser.
- F. ~~Provide a copy of and maintain a policy of professional liability insurance as required by the county.~~ Ability to obtain professional liability insurance as required by the county.
- G. Be willing to indemnify the county of errors, omissions and negligence.
- H. Meet any other criteria the board determines to be necessary.

~~(Ord. No. 18-288, § 1, 8-21-2018)~~

	Board of Storey County Commissioners Agenda Action Report	
Meeting date: 11/21/2023 10:00 AM - BOCC Meeting	Estimate of Time Required: 15 min.	
Agenda Item Type: Discussion/Possible Action		

- **Title:** Consideration and possible approval accepting property appraiser Anthony J. Wren and Associates as a qualified appraiser from the list of Storey County appraisers to provide appraisal of properties located at 175 North C Street and 208 North D Street, Virginia City, Storey County, Nevada, of which the county has expressed potential interest in purchase and/or trade for the purpose of constructing and/or expanding Fire Station 71.
- **Recommended motion:** I (commissioner) motion to approve accepting property appraiser Anthony J. Wren and Associates as a qualified appraiser from the list of Storey County appraisers to provide appraisal of properties located at 175 North C Street and 208 North D Street, Virginia City, Storey County, Nevada, of which the county has expressed potential interest in purchase and/or trade for the purpose of constructing and/or expanding Fire Station 71.
- **Prepared by:** Austin Osborne

Department: **Contact Number:** 775.847.0968

- **Staff Summary:** The Storey County Fire Protection District expressed interest and has caused the initiation of expanding and/or rebuilding Fire Station 71 in Virginia City. Storey County, however, is the owner of Fire Station 71, and the project must be undertaken by the county, not the fire district.
-
- Storey County received approximately \$3.75 million in federal appropriations for this project. The total project is estimated by the Storey County Fire Protection District Chief to be \$6-7 million. The project may be contingent on procuring vacant land in the immediate area. There are several vacant parcels adjacent to Fire Station 71 that may be suited for this project. Two potential parcels include 175 North C Street which abuts Fire Station 71 at its north boundary, and 208 North D Street which is situated nearby at the northeast corner of C Street and Mill Street. Other vacant parcels in the vicinity, including those which are currently owned by Storey County, are also being evaluated for this project.
-
- Earlier this year, the county approached the owner of 175 North C Street and executed a certified appraisal by Anthony J. Wren and Associates, the only certified appraiser on the

county's list of appraisers at the time. A conditional offer aligned with the appraisal was presented to the owner of the vacant parcel, but the conditional offer was not accepted.

-
- Since then, the county has added Mark Stafford Real Estate Appraisers to the list of appraisers pursuant to Storey County Code 2.22. With more than one appraiser now on the list of county appraisers, the board is asked to certify both appraisers to potentially perform appraisals of the above referenced parcels.
-
- Storey County Code 2.22 requires that the county to assign appraisers to projects in order of its list of qualified appraisers. Anthony J. Wren and Associates was the most recently used appraiser on this project; therefore, Mark Stafford Real Estate Appraisers would be chosen to perform the next appraisal of a county project. Anthony J. Wren and Associates would be the next potential appraiser to perform such work as needed.

- **Supporting Materials:** See attached

- **Fiscal Impact:** Yes

- **Legal review required:** TRUE

- **Reviewed by:**

_____ Department Head

Department Name:

_____ County Manager

Other Agency Review: _____

- **Board Action:**

☐ Approved	☐ Approved with Modification
☐ Denied	☐ Continued

ANTHONY J. WREN AND ASSOCIATES

REAL PROPERTY CONSULTANTS

Tony Wren MAI, SRA
CERTIFIED GENERAL APPRAISER
TWRENMAISRA@AOL.COM

P.O. BOX 20867
Reno, Nevada 89515
Phone (775) 329-4221
Fax (775) 329-5382

Susan A. Wren
CERTIFIED RESIDENTIAL APPRAISER
SAW12345@AOL.COM

11-10-2020

Austin Osborne
Manager
Storey County
P.O. Box 176
Virginia City, NV 89440

RE: Approved appraiser list

Austin,

Per my email on 11-10-2020, I would like to remain on your approved appraiser list.

I meet all your requirements to appraise in all districts.

Please see attached qualifications and insurance.

Sincerely,



Anthony J. Wren MAI, SRA
Certified General Appraiser #A.0000090-CG

QUALIFICATIONS OF ANTHONY J. WREN, MAI, SRA REAL ESTATE APPRAISER

PROFESSIONAL DESIGNATIONS: MAI – Member Appraisal Institute* 1991
 SRPA – Senior Real Property Appraiser* 1987
 SRA – Senior Residential Appraiser* 1984

* These are no longer considered to be acronyms by the Appraisal Institute

PROFESSIONAL INVOLVEMENT:

- Re-Appointed by the Governor of Nevada to serve on the Nevada State Board of Taxation, Current Member 11/19 to 10/23
- Appointed by the Governor of Nevada to serve on the Nevada State Board of Taxation, Current Member 5/16 to 10/19
- Appointed by the Governor of Nevada to serve on the Nevada State Board of Equalization, Chairman as of January 2009 3/08 to 3/12
 Reappointed to a new term and Chair 3/12 to 10/15
- Appointed by the Governor of Nevada to serve on the Nevada Commission of Appraisers 9/94 to 6/97 and 7/97 to 6/00
- President, Commission of Appraisers of Real Estate, State of Nevada (1996, 1998)
- Expert Witness for Nevada District Court, Washoe, Storey, Clark and Elko Counties
- Member of the Appraisal Institute, National Board of Realtors, and Reno/Carson/ Tahoe Board of Realtors
- Over 44 years of Appraisal Experience

APPRAISAL LICENSE: Nevada Certified General Appraiser
 #A.0000090-CG

REAL ESTATE BROKERAGE: Nevada Real Estate Brokerage Licensed Broker
 Anthony J. Wren #B.0023456.INDV.

OFFICES HELD: *Member* Young Advisory Council SREA,
 San Diego & San Francisco, CA 1989 & 1991
Education Chairman, Reno/Tahoe/Carson Chapter
 Appraisal Institute 1993

<i>Board of Directors, Reno/Carson/Tahoe Chapter Appraisal Institute</i>	1993-2007
<i>President, Reno/Carson/Tahoe Chapter 189</i>	1988-1989
<i>First Vice President, Reno/Carson/Tahoe Chapter 189</i>	1987-1988
<i>Secretary, Reno/Carson/Tahoe Chapter 189</i>	1986-1987
<i>President, Reno/Carson/Tahoe Chapter 189</i>	2000

Appraisal Instruction

Several USPAP Update Courses taught through	2020
Business Practices and Ethics	2020
15-Hour National USPAP	2018
Comparison Valuation of Small, Mixed-Use Properties	2011
Income Valuation of Small, Mixed-Use Properties	2011
15-Hour National USPAP Course	03/23/07
15-Hour Standards of Professional Practice (Seattle, WA)	03/22/07
7-Hour National USPAP Update (Las Vegas, NV)	03/02/07
7-Hour National USPAP Update (Chicago, IL)	04/15/05
7-Hour National USPAP Update (Reno, NV)	02/24/05
USPAP Update 2003 – Standards & Ethics for Professionals	09/05/03
Business Practices and Ethics	07/25/03
7-Hour National USPAP Update Course	05/02/03
15-Hour National USPAP	03/22/03
Appraisal Procedures	05/19/01
Sales Comparison Valuation of Small, Mixed-Use Properties	03/31/01
Standards of Professional Practice, Part B (USPAP)	02/10/01
Income Valuation of Small, Mixed-Use Properties	02/19/00
Standards of Professional Practice, A, B, & C, USPAP	1992–2003
Reno, NV, Casper, WY, Eugene, OR, Sacramento, CA, Las Vegas, NV	
Income Valuation of Small Mixed Use Properties	
(Reno, NV)	1998
(Casper, WY)	1999
(Sacramento, CA)	1999
Residential Case Study, Course 210	(Las Vegas, NV) 10/97
Alternative Residential Reporting Forms	(Buffalo, WY) 09/97
(Polson, MT)	09/97
Data Confirmation and Verification	(Richland, WA) 11/96
(Riodoso, NM)	09/96
(Reno, NV)	03/96
(Savannah, GA)	12/95
Understanding the Limited Appraisal	(Savannah, GA) 12/95
(Tucson, AZ)	09/94
110 "Real Estate Appraiser Principles"	(Minneapolis, MN) 07/99

(Sacramento, CA)		05/95
(Wenatchee, WA)		09/94
(St. Louis, MO)		02/94
(Las Vegas, NV)		05/94
URAR Update	(Casper, WY)	01/94
	(Reno, NV)	12/93
1A2 Basic Valuation Procedures	(Las Vegas, NV)	05/92
Course 207B, Income Valuation Appraising	(Reno, NV)	Fall 1989
Truckee Meadows Community College	(Reno, NV)	Spring 1989

APPRAISAL COURSES AUDITED:

Case Studies in Real Estate Valuation	1991
Cost Valuation of Small, Mixed-Use Properties	1988
Income Valuation of Small Mixed-Use Properties	
Sales Comparison Valuation of Small, Mixed-Use Properties	

APPRAISAL COURSES SATISFACTORILY CHALLENGED:

A1: Course 1210 Residential Case Studies	(1993)
A1: Course 410 Standards of Professional Appraisal Practice	(1991)
A1: Course 420 Ethics of the Professional Appraisal Practice	(1991)
A1: Course 420 Ethics of the Professional Appraisal Practice	(1991)
SREA: Course 301 Special Applications of Real Estate Analysis	(1989)
SREA: Course 202 Applied Income Property Valuation	(1985)
SREA: Course 201 Principles of Income Property Appraising	(1984)
SREA: Course 101 An Introduction to Appraising Real Property	(1983)
SREA: Course 102 Applied Residential Property Valuation	(1983)

Classes Taken Online

Introduction to the Uniform Dataset (2 hours)	2019
USPAP Instructor Recertification Course 2018-2019 (4 hours)	2018
USPAP Instructor Recertification Course 2016-2017 (4 hours)	2016
USPAP Instructor Recertification Course 2014-2015 (4 hours)	2014

Classes Attended

Uniform Appraisal Standards for Federal Land Acquisition	2017
2018-2019 Instructors Recertification Course (USPAP)	2017
Architectural Styles and the UAD	2017
Constructing the Profession Report	2017
FHA SFR Appraising -Handbook 4000.1	2017
Comprehensive Square Foot Calculations	2017
2016-2017 USPAP Instructor Recertification Course	2015
Business Practice and Ethics Instructor Training	2015
Tahoe Litigation Conference	2014
Evaluating Residential Construction	2014
Appraisal Review General	2012
Uniform Appraisal Standards for Federal Land Acquisitions (Phoenix, AZ)	12/17 & 18/09
Valuation of Easements and Other Partial Interests (Reno, NV)	12/04/09
General Market Analysis and Highest & Best Use (Las Vegas, NV)	08/31/09 – 09/03/09
Introduction to International Valuation Standards (Online)	08/01/31 – 08/31/09
Valuation of Green Residential Properties (Phoenix, AZ)	02/19/09

REO Appraisal: Appraisal of Residential Property Foreclosures (Las Vegas, NV)	10/11/08
Forecasting Review	10/10/08
AQB Awareness Training for Appraisal Institute Instructors (Online)	08/15/07
Committee CE Credit (Chapter Level)	12/31/09
AQB USPAP Instructor Recertification Course (Dedham, MA)	02/24/07
AQB USPAP Instructor Recertification Course (Tucson, AZ)	12/04/04
Water Rights in Nevada	2/01/03
Training & Development Conference	08/26/03
AQB USPAP Instructor Recertification (San Francisco, CA)	10/30/02
Appraisal Continuing Education	12/10/02
Property Flipping and Predatory Lending Seminar	10/17/01
2001 USPAP Update for Instructors & Regulators-CA (San Diego, CA)	12/09/00
Lake Tahoe Case Studies in Commercial Highest & Best Use (Sacramento, CA)	10/20/00
Supporting Sales Comparison Grid Adjustments for Residential Properties (Reno, NV)	09/29/00
Case Studies in Commercial Highest and Best Use (Reno, NV)	07/28/00
Tools For Teaching Excellence, Day 1	07/09/00
USPAP Update for Instructors and Regulators (Las Vegas, NV)	07/08/00
Tools For Teaching Excellence, Day 2	07/10/00
Residential Consulting	03/31/00
Residential Consulting	2000
FHA's Home buyer Protection Plan & the Appraisal Process Seminar	1991
Affordable Housing Valuation Seminar	1997
Alternative Residential Reporting Forms	1986
Business Valuation Part 1	1996
Understanding Limited Appraisals – General	1995
Data Confirmation & Verification Methods	1995
Mandatory Faculty Workshop	1995
Appraising 1- to 4-Family Income Properties	1995
Investment Techniques with the HP-17/19II Calculator	1994
Fair Lending and the Appraiser	1994
Mock Trial	1994
Electronic Spreadsheet Workshop	1994
Basic Argus Training (Spreadsheets)	1994
Investment Techniques with the HP-17/19II Calculator	1994
FNMA URAR Update	1993
Maximizing the Value of an Appraisal Practice	1993
Litigation Valuation	1992
101 "Instructors Clinic	1990
Comprehensive Appraisal Review	1990

Meetings Attended

Committee Credit – National	12/31/00
-----------------------------	----------

FORMAL EDUCATION:

University of Texas at Arlington (No Degree)	1974
Casper College (No Degree)	1973
Peacock Military Academy (High School)	1972



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

01/13/2020

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER RIVERTON INSURANCE AGENCY CORP PO Box 236 605 Main St., Suite 102 Riverton NJ 08077		CONTACT NAME: Tina Gambacort PHONE (A/C, No, Ext): (800) 882-4410 FAX (A/C, No): (858) 273-8026 E-MAIL ADDRESS: tina.gambacort@aliains.com	
INSURED Anthony J Wren MAI, SRA 3500 Lakeside Court # 208 Reno OK 89509		INSURER(S) AFFORDING COVERAGE INSURER A: Stratford Insurance Company INSURER B: INSURER C: INSURER D: INSURER E: INSURER F:	
		NAIC # 40436	

COVERAGES**CERTIFICATE NUMBER:** CL2011304894**REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
	COMMERCIAL GENERAL LIABILITY ☐ CLAIMS-MADE ☐ OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: ☐ POLICY ☐ PROJECT ☐ LOC OTHER:						EACH OCCURRENCE \$ DAMAGE TO RENTED PREMISES (Ea occurrence) \$ MED EXP (Any one person) \$ PERSONAL & ADV INJURY \$ GENERAL AGGREGATE \$ PRODUCTS - COMP/OP AGG \$ \$
	AUTOMOBILE LIABILITY ☐ ANY AUTO ☐ OWNED AUTOS ONLY ☐ SCHEDULED AUTOS ☐ HIRED AUTOS ONLY ☐ NON-OWNED AUTOS ONLY						COMBINED SINGLE LIMIT (Ea accident) \$ BODILY INJURY (Per person) \$ BODILY INJURY (Per accident) \$ PROPERTY DAMAGE (Per accident) \$ \$
	UMBRELLA LIAB ☐ OCCUR EXCESS LIAB ☐ CLAIMS-MADE DED ☐ RETENTION \$						EACH OCCURRENCE \$ AGGREGATE \$ \$
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) ☐ Y/N If yes, describe under DESCRIPTION OF OPERATIONS below		N/A				PER STATUTE ☐ OTH-ER ☐ E.L. EACH ACCIDENT \$ E.L. DISEASE - EA EMPLOYEE \$ E.L. DISEASE - POLICY LIMIT \$
A	Professional Liability Errors and Omissions			REO0006467	02/01/2020	02/01/2021	Each Claim \$1,000,000 Aggregate \$2,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

Retro Date: Full Prior Acts

CERTIFICATE HOLDER**CANCELLATION**

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE



CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY)

11/11/2020

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER RCS INSURANCE/PHS 53601212 The Hartford Business Service Center 3600 Wiseman Blvd San Antonio, TX 78251		CONTACT NAME: PHONE (866) 467-8730 FAX (888) 443-6112 (A/C, No, Ext): (A/C, No): E-MAIL ADDRESS:															
INSURED ANTHONY WREN AND SUSAN WREN DBA ANTHONY J WREN & ASSOC. PO BOX 20867 RENO NV 89515-0867		INSURER(S) AFFORDING COVERAGE <table border="1"> <tr> <th>INSURER A :</th> <th>NAIC#</th> </tr> <tr> <td>Hartford Casualty Insurance Company</td> <td>29424</td> </tr> <tr> <td>INSURER B :</td> <td></td> </tr> <tr> <td>INSURER C :</td> <td></td> </tr> <tr> <td>INSURER D :</td> <td></td> </tr> <tr> <td>INSURER E :</td> <td></td> </tr> <tr> <td>INSURER F :</td> <td></td> </tr> </table>		INSURER A :	NAIC#	Hartford Casualty Insurance Company	29424	INSURER B :		INSURER C :		INSURER D :		INSURER E :		INSURER F :	
INSURER A :	NAIC#																
Hartford Casualty Insurance Company	29424																
INSURER B :																	
INSURER C :																	
INSURER D :																	
INSURER E :																	
INSURER F :																	

COVERAGES

CERTIFICATE NUMBER:

REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSR	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	COMMERCIAL GENERAL LIABILITY ☐ CLAIMS-MADE ☒ OCCUR ☒ General Liability			53 SBA TT2798	08/14/2020	08/14/2021	EACH OCCURRENCE \$2,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence) \$300,000 MED EXP (Any one person) \$10,000 PERSONAL & ADV INJURY \$2,000,000 GENERAL AGGREGATE \$4,000,000 PRODUCTS - COMP/OP AGG \$4,000,000
	GEN'L AGGREGATE LIMIT APPLIES PER: ☐ POLICY ☐ PRO-JECT ☒ LOC OTHER:						
	AUTOMOBILE LIABILITY ☐ ANY AUTO ☐ ALL OWNED AUTOS ☒ HIRED AUTOS ☐ SCHEDULED AUTOS ☒ NON-OWNED AUTOS						COMBINED SINGLE LIMIT (Ea accident) \$2,000,000 BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident)
	UMBRELLA LIAB EXCESS LIAB ☐ OCCUR ☐ CLAIMS-MADE ☐ RETENTION \$						EACH OCCURRENCE AGGREGATE
A	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below		N/A	53 SBA TT2798	08/14/2020	08/14/2021	PER STATUTE E.L. EACH ACCIDENT E.L. DISEASE -EA EMPLOYEE E.L. DISEASE - POLICY LIMIT
A	EMPLOYMENT PRACTICES LIABILITY			53 SBA TT2798	08/14/2020	08/14/2021	Each Claim Limit \$5,000 Aggregate Limit \$5,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

Those usual to the Insured's Operations.

CERTIFICATE HOLDER

Storey County
PO Box 176
VIRGINIA CITY NV 89440-0176

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

Susan L. Castaneda

© 1988-2015 ACORD CORPORATION. All rights reserved.

APPRAISER CERTIFICATE

STATE OF NEVADA DEPARTMENT OF BUSINESS AND INDUSTRY REAL ESTATE DIVISION

Change A change in the name of the business or the location of an office must be made to the Division within **ten days** after any change has been made. Attach this certificate, pocket card and original intern registrations, if any, to a completed change form (536) and location of records form (555).

Renewal As a courtesy, the Real Estate Division will send a renewal notice to your business address approximately 45 days prior to your renewal date. Renewal information is online at red.nv.gov.



Nevada Department of Business and Industry
Real Estate Division

CERTIFIED GENERAL APPRAISER

ANTHONY J WREN

Certificate Number

A.0000090-CG

Expiration Date

April 30, 2021

Certificate Location

ANTHONY J WREN
3500 LAKESIDE CT #208
RENO, NV 89509

Void Unless
Signed in Ink

APPRAISER CERTIFICATE

STATE OF NEVADA DEPARTMENT OF BUSINESS AND INDUSTRY

NOT TRANSFERABLE

REAL ESTATE DIVISION

NOT TRANSFERABLE

This is to Certify That : ANTHONY J WREN

Certificate Number: A.0000090-CG

Is duly authorized to act as a CERTIFIED GENERAL APPRAISER from the issue date to the expiration date at the business address stated here in, unless the certificate is sooner revoked, cancelled, withdrawn, or invalidated.

Issue Date: April 18, 2019

Expire Date: April 30, 2021

In witness whereof, THE DEPARTMENT OF BUSINESS AND INDUSTRY, REAL ESTATE DIVISION, by virtue of the authority vested in Chapter 645C of the Nevada Revised Statutes, has caused this Certificate to be issued with its Seal printed thereon. This certificate must be conspicuously displayed in place of business.

FOR: ANTHONY J WREN
3500 LAKESIDE CT #208
RENO, NV 89509

REAL ESTATE DIVISION

SHARATH CHANDRA
Administrator





STOREY COUNTY COMMISSIONERS' OFFICE

Storey County Courthouse
26 South "B" Street
P.O. Box 176 Virginia City, Nevada 89440
Phone: 775.847.0968 - Fax: 775.847.0949
commissioners@storeycounty.org

Jay Carmona, Chair
Clay Mitchell, Vice-Chair
Lance Gilman, Commissioner

Austin Osborne, County Manager

LIST OF QUALIFIED APPRAISERS

October 31, 2023

Re: Appraiser List for Storey County 2023

1. Anthony J. Wren, Anthony J. Wren and Associates Nevada Certified General Appraiser
#A.0000090-CG exp. 4/30/2025
2. Mark Stafford, Mark Stafford Real Estate Appraiser Nevada Certified General Appraiser
#A0000178-CG exp. 5/31/2025

This list will be updated annually and otherwise as needed.

Code of Ordinances



Storey County, Nevada - Code of Ordina... / Title 2 - ADMINISTRATION AND PERS... / Chapter 2.22 - COUNTY'S LIST OF QU...

Storey County, NV
Code of Ordinances

STOREY COUNTY, NEVADA MUNICIPAL CODE

SUPPLEMENT HISTORY TABLE

- Title 1 - GENERAL PROVISIONS
- ▼ Title 2 - ADMINISTRATION AND PERSONNEL
 - Chapter 2.04 - BOARD OF COMMISSIONERS
 - Chapter 2.08 - DISTRICT ATTORNEY
 - Chapter 2.10 - RECORDER/AUDITOR
 - Chapter 2.12 - PLANNING COMMISSION
 - Chapter 2.14 - BOARD OF HEALTH
 - Chapter 2.16 - DEPARTMENT OF PUBLIC WORKS
 - Chapter 2.18 - STREET EXCAVATION PERMITS
 - Chapter 2.20 - EMERGENCY SERVICES
 - ▼ Chapter 2.22 - COUNTY'S LIST OF QUALIFIED APPRAISERS
 - 2.22.020 - Purpose.
 - 2.22.040 - Requirements.
 - 2.22.060 - Qualifications of appraisers.
 - 2.22.080 - Appraiser list.
 - 2.22.100 - Selection of appraisers.
 - 2.22.120 - Sunset provision.
 - Chapter 2.24 - PUBLIC DEFENDER

Code of Ordinances

Chapter 2.32 - COMPENSATION FOR ELECTION OFFICERS

- Chapter 2.33 - FEES ON COURT ACTIONS TO SUPPORT PROGRAMS FOR COURT SECURITY
- Chapter 2.36 - MARRIAGE LICENSES ISSUED AFTER HOURS
- Chapter 2.40 - WELFARE AND INDIGENT SERVICES PROGRAM
- Chapter 2.44 - REGIONAL TRANSPORTATION COMMISSION
- Chapter 2.46 - STOREY COUNTY CHILD CARE
- Chapter 2.47 - JUSTICE OF THE PEACE
- Chapter 2.48 - NEVADA MINING MUSEUM
- Chapter 2.52 - ANTIDISPLACEMENT PLAN AND RELOCATION ASSISTANCE
- Chapter 2.54 - PRESERVATION OF HISTORICALLY SIGNIFICANT COUNTY PROPERTY
- Chapter 2.56 - STOREY COUNTY FIRE PROTECTION DISTRICT (474)
- Chapter 2.61 - DIRECTOR OF SECURITY/BAILIFF
- Chapter 2.65 - PROTECTION TO OFFICERS AND EMPLOYEES FOR DISCLOSURE OF IMPROPER GOVERNMENTAL ACTIONS
- Title 3 - REVENUE AND FINANCE
- Title 5 - BUSINESS LICENSES AND REGULATIONS
- Title 6 - ANIMALS
- TITLE 8 - HEALTH AND SAFETY
- TITLE 9 - PUBLIC PEACE, MORALS AND WELFARE
- Title 10 - VEHICLES AND TRAFFIC
- Title 12 - STREETS, SIDEWALKS AND PUBLIC PLACES
- TITLE 13 - PUBLIC SERVICES
- Title 15 - BUILDINGS AND CONSTRUCTION
- Title 16 - SUBDIVISIONS
- Title 16A - SUBDIVISION INTERIM DEVELOPMENT REGULATIONS

Code of Ordinances

➤ Title 17 - ZONING ORDINANCE

➤ Title 17A - LIMITING MASTER PLAN AMENDMENTS FOR AND APPROVALS OF PLANNED UNIT DEVELOPMENT

STATUTORY REFERENCES FOR NEVADA COUNTIES

RESOLUTION LIST AND DISPOSITION TABLE

ORDINANCE LIST AND DISPOSITION TABLE

CODE COMPARATIVE TABLE AND DISPOSITION LIST

< 2.20.100 - Violation—Penalty.

Chapter 2.24 - PUBLIC DEFENDER >

Chapter 2.22 - COUNTY'S LIST OF QUALIFIED APPRAISERS

2.22.020 - Purpose.

As required by state law, the board of county commissioners establishes these procedures for creating or amending a list of appraisers qualified to conduct appraisals of real property owned by the county and offered for sale or lease by the board.

(Ord. No. 18-288, § 1, 8-21-2018)

2.22.040 - Requirements.

Before the county may sell or lease county-owned property, the county manager or a department head authorized by the board to negotiate to sell or lease the property must obtain an appraisal or appraisals prepared by appraisers selected from a list established by [section 2.22.080](#).

(Ord. No. 18-288, § 1, 8-21-2018)

2.22.060 - Qualifications of appraisers.

In order for an appraiser to be placed on the county's list of qualified appraisers, the appraiser must meet at least the following requirements:

- A. Hold a general appraiser certificate from the Nevada Real Estate Division.
- B. Have five years of experience in appraising real property in northern Nevada.
- C. Provide a resume describing the appraiser's qualifications, certifications, years of experience, and professional expertise.

Code of Ordinances D. Provide an estimation of the time it will take for the appraiser to complete appraisal projects.

- E. Provide a list of fees charged by the appraiser.
- F. Provide a copy of and maintain a policy of professional liability insurance as required by the county.
- G. Be willing to indemnify the county for errors, omissions and negligence.
- H. Meet any other criteria the board determines to be necessary.

(Ord. No. 18-288, § 1, 8-21-2018)

2.22.080 - Appraiser list. ⋮

A list of appraisers will be established by the board as follows:

- A. The county manager or his designee will send notice to the current certified general appraisers with offices in northern Nevada requesting a response with their qualifications if they are interested in providing appraisals for the sale or lease of real property owned by Storey County.
- B. The county manager or his designee will review and compile a list of qualified appraisers and organize it in random order.
- C. After an appraiser has completed an appraisal, the appraiser will be rotated to the bottom of the list.
- D. The list may be amended by the county manager or his designee to remove names on written request from the appraiser, on information received from the state of Nevada that the appraiser is no longer active, or on the board's determination that there is a basis for removal.
- E. The list may also be amended to add names of qualified appraisers who subsequently request to be added to the list or whom are later solicited by the county manager or his designee and are qualified to conduct general appraisals.

(Ord. No. 18-288, § 1, 8-21-2018)

2.22.100 - Selection of appraisers. ⋮

When an appraisal is required, the county manager must submit the qualifications of the appraiser or appraisers at the top of the list established pursuant to section 2.22.080 to the board for verification of their qualifications. The submittal must be accompanied by a proposal from the appraiser(s) selected setting forth the time frame within which the appraiser will complete the appraisal, a fee quote, their qualification for the particular assignment and the disclosure statement required by NRS 244.2795(3). If the board does not accept an appraiser as qualified, the county manager shall submit the qualifications

Code of Ordinances of the next appraiser on the list for verification along with the accompaniment required of the appraiser.

This process shall continue until the board has verified the qualifications of the number of appraisers required to conduct the appraisal. An appraiser that is found not qualified for a job retains the same position on the list for the next job.

(Ord. No. 18-288, § 1, 8-21-2018)

2.22.120 - Sunset provision. ⋮

This ordinance is effective until the date of repeal of the state law requiring the board of county commissioners to obtain appraisals when offering any county-owned real property for lease or sale and to adopt an ordinance creating a list of appraisers.

(Ord. No. 18-288, § 1, 8-21-2018)

< 2.20.100 - Violation—Penalty.

Chapter 2.24 - PUBLIC DEFENDER >

Storey County



Board of Storey County Commissioners

Agenda Action Report

**Meeting date: 11/21/2023 10:00 AM -
BOCC Meeting**

Estimate of Time Required: 15 min.

Agenda Item Type: Discussion/Possible Action

- **Title:** Consideration and possible approval accepting property appraiser Mark Stafford Real Estate Appraisers as a qualified appraiser from the list of Storey County appraisers to provide appraisal of properties located at 175 North C Street and 208 North D Street, Virginia City, Storey County, Nevada, of which the county has expressed potential interest in purchase and/or trade for the purpose of constructing and/or expanding Fire Station 71.
- **Recommended motion:** I (commissioner) motion to approve accepting property appraiser Mark Stafford Real Estate Appraisers as a qualified appraiser from the list of Storey County appraisers to provide appraisal of properties located at 175 North C Street and 208 North D Street, Virginia City, Storey County, Nevada, of which the county has expressed potential interest in purchase and/or trade for the purpose of constructing and/or expanding Fire Station 71.
- **Prepared by:** Austin Osborne

Department:

Contact Number: 775.847.0968

- **Staff Summary:** The Storey County Fire Protection District expressed interest and has caused the initiation of expanding and/or rebuilding Fire Station 71 in Virginia City. Storey County, however, is the owner of Fire Station 71, and the project must be undertaken by the county, not the fire district.
-
- Storey County received approximately \$3.75 million in federal appropriations for this project. The total project is estimated by the Storey County Fire Protection District Chief to be \$6-7 million. The project may be contingent on procuring vacant land in the immediate area. There are several vacant parcels adjacent to Fire Station 71 that may be suited for this project. Two potential parcels include 175 North C Street which abuts Fire Station 71 at its north boundary, and 208 North D Street which is situated nearby at the northeast corner of C Street and Mill Street. Other vacant parcels in the vicinity, including those which are currently owned by Storey County, are also being evaluated for this project.
-
- Earlier this year, the county approached the owner of 175 North C Street and executed a certified appraisal by Anthony J. Wren and Associates, the only certified appraiser on the

county's list of appraisers at the time. A conditional offer aligned with the appraisal was presented to the owner of the vacant parcel, but the conditional offer was not accepted.

-
- Since then, the county has added Mark Stafford Real Estate Appraisers to the list of appraisers pursuant to Storey County Code 2.22. With more than one appraiser now on the list of county appraisers, the board is asked to certify both appraisers to potentially perform appraisals of the above referenced parcels.
-
- Storey County Code 2.22 requires that the county to assign appraisers to projects in order of its list of qualified appraisers. Anthony J. Wren and Associates was the most recently used appraiser on this project; therefore, Mark Stafford Real Estate Appraisers would be chosen to perform the next appraisal of a county project.

- **Supporting Materials:** See attached

- **Fiscal Impact:** Yes

- **Legal review required:** TRUE

- **Reviewed by:**

_____ Department Head

Department Name:

_____ County Manager

Other Agency Review: _____

- **Board Action:**

☐ Approved	☐ Approved with Modification
☐ Denied	☐ Continued

Mark E. Stafford

Real Estate Appraiser

PO Box 349
Virginia City, NV 89440

Phone 775-750-9078
e-mail mark@staffordappraisal.com

November 2, 2023

Austin Osborne
Storey County Manager
PO Box 176
Virginia City, NV 89440

RE: Appraiser's Statement of Qualifications-Comstock Historic District

Dear Mr. Osborne,

I am writing in response to your requested Statement of Qualifications (SOQ) for Professional Appraisal Services dated October 31, 2023 (attached). The following are my responses to items one through nine of said request.

1. Attached is my Appraiser Certificate issued by the Real Estate Division of the State of Nevada authorizing me to act as a Certified General Appraiser.
2. This SOQ applies to the Comstock Historic District.
3. I have been a full-time real estate appraiser in northern Nevada since 1977. During this period, I have appraised numerous properties in Storey County including the Comstock Historic District. Clients have included lenders, attorneys and Storey County on behalf of the Storey County Assessor.
4. Please find attached my Letter of Qualification.
5. The time required to complete an appraisal assignment is dependent on the complexity of the property appraised and the appraiser's current workload.
6. Fees charged by appraisers are dependent on the property type, valuation complexity, and responsibility assumed. Typically, when a potential client is seeking an appraisal, the appraiser provides an estimated time to complete the assignment and the proposed fee.
7. If hired by Storey County for fee assignments specific to this Qualified List of Professional Appraiser Services, I will obtain and maintain a professional liability insurance policy.

8. In addition to the Errors and Omissions policy noted above, the appraisal will be prepared in accordance with the regulatory standards set forth in the Uniform Standards of Professional Appraisal Practice (USPAP) as adopted by the State of Nevada.
9. I will strive to provide any additional professional information as may be required by Storey County.

Thank you for your consideration. If you require any further information, please contact me.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Mark E. Stafford', is written over a light gray rectangular background.

Mark E. Stafford, Certified General Appraiser
State of Nevada No. A.0000178-CG



STOREY COUNTY COMMISSIONERS' OFFICE

Storey County Courthouse
26 South "B" Street
P.O. Box 176 Virginia City, Nevada 89440
Phone: 775.847.0968 - Fax: 775.847.0949
commissioners @storeycounty.org

October 31, 2023

Re: Request for Qualified List of Professional Appraiser Services

Storey County requests Statements of Qualifications (SOQ) for Professional Appraiser Services for the following appraisal types: residential appraisal, general and commercial and/or industrial appraisal, ranch appraisal, open space appraisal, and water rights appraisal. The purpose is to establish an on-call list for various appraisal disciplines in Storey County.

Two lists of appraisers will be established. One list of appraisers will be compiled to apply to properties located within the Comstock Historic District (e.g., Virginia City, Gold Hill, American Flat, and surrounding areas), and a second list of appraisers will be compiled to apply to properties located outside of the Comstock Historic District.

Interested parties must:

1. Hold a general appraiser certificate from the Nevada Real Estate Division.
2. Submit a separate SOQ for each area of the county (Comstock Historic District and/or areas outside of the Comstock Historic District) that the appraiser wishes to perform appraisal services.
3. Have 5 or more years of experience in appraising real property in northern Nevada. To be placed on the list for the Comstock Historic District the appraiser must have 5 or more years of experience appraising real property within the Comstock Historic District or communities with similar historic mining district challenges and characteristics.
4. Provide a SOQ describing the appraiser's qualifications, certifications, years of experience, and professional expertise.
5. Provide an estimation of the time it will take for the appraiser to complete appraisal projects.
6. Provide a list of fees to be charged by the appraiser.
7. Provide a copy of, and maintain a policy of, professional liability insurance as required by Storey County.
8. Be willing to indemnify Storey County for errors, omissions, and negligence.
9. Meet any other criteria the Board of Storey County Commissioners determines to be necessary.

Please respond with a letter of interest by November 3, 2023, if you wish to be included on the County's list of appraisers. Please reach me anytime with questions or concerns.

Sincerely,
Storey County Manager's Office

APPRAISER CERTIFICATE

STATE OF NEVADA DEPARTMENT OF BUSINESS AND INDUSTRY

NOT TRANSFERABLE

REAL ESTATE DIVISION

NOT TRANSFERABLE

This is to Certify That : MARK E STAFFORD

Certificate Number: A.0000178-CG

Is duly authorized to act as a CERTIFIED GENERAL APPRAISER from the issue date to the expiration date at the business address stated here in, unless the certificate is sooner revoked, cancelled, withdrawn, or invalidated.

Issue Date: May 9, 2023

Expire Date: May 31, 2025

In witness whereof, THE DEPARTMENT OF BUSINESS AND INDUSTRY, REAL ESTATE DIVISION, by virtue of the authority vested in Chapter 645C of the Nevada Revised Statutes, has caused this Certificate to be issued with its Seal printed thereon. This certificate must be conspicuously displayed in place of business.

FOR: MARK E STAFFORD REAL ESTATE
APPRAISER
226 N B ST
VIRGINIA CITY, NV 89440

REAL ESTATE DIVISION

SHARATH CHANDRA
Administrator



Qualifications of
Mark E. Stafford
Real Estate Appraiser
226 N B St, PO Box 349
Virginia City, NV 89440
775-750-9078
mark@staffordappraisal.com

Education

Associate Degree in Applied Science: Business-Real Estate
Truckee Meadows Community College Reno, NV

**Courses Successfully
Completed**

Appraisal Institute (Includes former AIREA and SREA):
Real Estate Appraisal Principles
Residential Valuation
Standards of Professional Practice A & B
Capitalization Theory & Techniques A & B
Applied Income Property Valuation
Case Studies in Real Estate Valuation
Valuation Analysis & Report Writing

University of Nevada at Reno:
Real Estate Evaluation

International Association of Assessing Officers:
Fundamentals of Real Estate Appraisal-Course 101
Income Approach to Valuation-Course 102
Income Approach to Valuation II-Course 112
Appraisal of Land-Course 201
Real Property Modeling-Course 311
Assessment Administration-Course 400
Assessment of Personal Property-Course 500
USPAP (National)-Workshop 151

**Professional
Experience**

Nov 2018 – Present Self-Employed Virginia City, NV
Independent Fee Appraiser and Consultant

- Providing appraisal and consulting services for gaming, hospitality, industrial, commercial, utility-scale renewable energy projects and other special use properties. Contract appraiser for ad valorem valuation and consultation services to County Assessors throughout Nevada. Present and defend valuation appeals to County and State Boards of Equalization for governmental and corporate entities.

April 1997 – Nov 2018 Washoe County Assessor Reno, NV
Senior Appraiser

- Responsible for oversight of all valuation activities relating to gaming properties, telecommunication equipment and leaseholds, possessory interest leaseholds and business personal property. Conducted reappraisal of residential and commercial districts. Charged with appraising large commercial, income oriented, distress, and special-use properties. Supervised appraisal and clerical staff, review and present valuation appeals to Boards of Equalization.

Oct 1981 – April 1997 Self-Employed Northern Nevada
Independent Fee Appraiser

- Working from offices in Reno, Fallon, and Tonopah, appraising all property types throughout Nevada and northern California. Clients included financial institutions, governmental agencies, attorneys and private parties for bankruptcy, condemnation, estate, relocation, and financing purposes.

Professional Experience cont.	May 1980 – Oct 1981 Nye County Assessor Tonopah, NV Senior Appraiser - Supervised appraisal staff, valuation activities and procedures. Explained assessment procedures to property owners at town meetings. Defended values at Boards of Equalization. Restructured appraisal cycle districts and supervised implementation of Tax Reform Plan of 1981. Performed after-hours fee appraisals for banks, savings and loans, relocation companies, attorneys and others throughout Central Nevada. May 1977 – May 1980 M.E. (Eddie) Stafford, MAI Reno, NV Associate Appraiser - Prepared single and multi-family, vacant land and site appraisal reports primarily for financing purposes. Performed compliance inspections and researched comparative income, sales, and cost data.
Qualified as Expert Witness	Second Judicial District Court Reno Fifth Judicial District Court Tonopah United States Bankruptcy Court Reno Special Masters Hearings (Condemnation for sewer system) Reno Also testified at Churchill, Lander, Humboldt, Nye, Clark, Storey and Washoe County Boards of Equalization; Nevada State Board of Equalization
Appraisal Courses Taught	Principle & Theory of Real Estate Appraisal Truckee Meadows Community College, Reno-1982 to 1986 Northern Nevada Community College, Elko-1983 Advanced Problems of Real Estate Appraisal (Income Properties) Truckee Meadows Community College, Reno-1984 to 1987 IAAO Course 101: Fundamentals of Real Estate Appraisal, multiple IAAO Course 102: Income Approach to Valuation, multiple IAAO Course 112: Income Approach to Valuation II, multiple IAAO One-Day Forums: 931-Leases; 932-Income Statements; 991-Comparable Transactions; 960-Marshall-Swift Residential; 962-Marshall-Swift Commercial Numerous educational presentations for the Assessor's Association of Nevada Presentation on Gaming Properties at the IAAO International Conference
State Certification	Certified General Appraiser, State of Nevada No. A.0000178-CG Licensed Real & Personal Property Tax Appraiser, State of Nevada
Other	Former Co-Chair, Appraiser Certification Board, Nevada State Department of Taxation
Noteworthy Assignments Completed	Fast Food Franchises; Bank Buildings; Legal Brothels; Churches; Fitness Center; Truck Stop; Casinos and Hotel-Casinos; Water-righted ranches; Residential Subdivisions and Condominium Developments; Professional, Medical, and Dental Offices; Hotels, Motels, and Apartment Complexes of 100 plus units; Manufactured Housing & Recreational Vehicle Parks; Special Assessment Districts; Coal, Natural Gas, Geothermal and Solar Power Generating Facilities. Government property for public disposal; Condemnation appraisals for roadways, utility easements, proposed dam, and airport clear zones. Casino valuation consultant for the Detroit City Assessor's Office. Contract appraiser for Lander, Eureka, Mineral, Humboldt, Pershing, Churchill, and Storey County Assessor's Offices.



STOREY COUNTY COMMISSIONERS' OFFICE

Storey County Courthouse
26 South "B" Street
P.O. Box 176 Virginia City, Nevada 89440
Phone: 775.847.0968 - Fax: 775.847.0949
commissioners@storeycounty.org

Jay Carmona, Chair
Clay Mitchell, Vice-Chair
Lance Gilman, Commissioner

Austin Osborne, County Manager

LIST OF QUALIFIED APPRAISERS

October 31, 2023

Re: Appraiser List for Storey County 2023

1. Anthony J. Wren, Anthony J. Wren and Associates Nevada Certified General Appraiser
#A.0000090-CG exp. 4/30/2025
2. Mark Stafford, Mark Stafford Real Estate Appraiser Nevada Certified General Appraiser
#A0000178-CG exp. 5/31/2025

This list will be updated annually and otherwise as needed.

Storey County

Code of Ordinances



Storey County, Nevada - Code of Ordina... / Title 2 - ADMINISTRATION AND PERSONNEL / Chapter 2.22 - COUNTY'S LIST OF QUALIFIED APPRAISERS

Storey County, NV
Code of Ordinances

STOREY COUNTY, NEVADA MUNICIPAL CODE

SUPPLEMENT HISTORY TABLE

- Title 1 - GENERAL PROVISIONS
- ▼ Title 2 - ADMINISTRATION AND PERSONNEL
 - Chapter 2.04 - BOARD OF COMMISSIONERS
 - Chapter 2.08 - DISTRICT ATTORNEY
 - Chapter 2.10 - RECORDER/AUDITOR
 - Chapter 2.12 - PLANNING COMMISSION
 - Chapter 2.14 - BOARD OF HEALTH
 - Chapter 2.16 - DEPARTMENT OF PUBLIC WORKS
 - Chapter 2.18 - STREET EXCAVATION PERMITS
 - Chapter 2.20 - EMERGENCY SERVICES
 - ▼ Chapter 2.22 - COUNTY'S LIST OF QUALIFIED APPRAISERS
 - 2.22.020 - Purpose.
 - 2.22.040 - Requirements.
 - 2.22.060 - Qualifications of appraisers.
 - 2.22.080 - Appraiser list.
 - 2.22.100 - Selection of appraisers.
 - 2.22.120 - Sunset provision.
 - Chapter 2.24 - PUBLIC DEFENDER

Code of Ordinances

Chapter 2.32 - COMPENSATION FOR ELECTION OFFICERS

- Chapter 2.33 - FEES ON COURT ACTIONS TO SUPPORT PROGRAMS FOR COURT SECURITY
- Chapter 2.36 - MARRIAGE LICENSES ISSUED AFTER HOURS
- Chapter 2.40 - WELFARE AND INDIGENT SERVICES PROGRAM
- Chapter 2.44 - REGIONAL TRANSPORTATION COMMISSION
- Chapter 2.46 - STOREY COUNTY CHILD CARE
- Chapter 2.47 - JUSTICE OF THE PEACE
- Chapter 2.48 - NEVADA MINING MUSEUM
- Chapter 2.52 - ANTIDISPLACEMENT PLAN AND RELOCATION ASSISTANCE
- Chapter 2.54 - PRESERVATION OF HISTORICALLY SIGNIFICANT COUNTY PROPERTY
- Chapter 2.56 - STOREY COUNTY FIRE PROTECTION DISTRICT (474)
- Chapter 2.61 - DIRECTOR OF SECURITY/BAILIFF
- Chapter 2.65 - PROTECTION TO OFFICERS AND EMPLOYEES FOR DISCLOSURE OF IMPROPER GOVERNMENTAL ACTIONS
- Title 3 - REVENUE AND FINANCE
- Title 5 - BUSINESS LICENSES AND REGULATIONS
- Title 6 - ANIMALS
- TITLE 8 - HEALTH AND SAFETY
- TITLE 9 - PUBLIC PEACE, MORALS AND WELFARE
- Title 10 - VEHICLES AND TRAFFIC
- Title 12 - STREETS, SIDEWALKS AND PUBLIC PLACES
- TITLE 13 - PUBLIC SERVICES
- Title 15 - BUILDINGS AND CONSTRUCTION
- Title 16 - SUBDIVISIONS
- Title 16A - SUBDIVISION INTERIM DEVELOPMENT REGULATIONS

Code of Ordinances

➤ Title 17 - ZONING ORDINANCE

➤ Title 17A - LIMITING MASTER PLAN AMENDMENTS FOR AND APPROVALS OF PLANNED UNIT DEVELOPMENT

STATUTORY REFERENCES FOR NEVADA COUNTIES

RESOLUTION LIST AND DISPOSITION TABLE

ORDINANCE LIST AND DISPOSITION TABLE

CODE COMPARATIVE TABLE AND DISPOSITION LIST

< 2.20.100 - Violation—Penalty.

Chapter 2.24 - PUBLIC DEFENDER >

Chapter 2.22 - COUNTY'S LIST OF QUALIFIED APPRAISERS

2.22.020 - Purpose.

As required by state law, the board of county commissioners establishes these procedures for creating or amending a list of appraisers qualified to conduct appraisals of real property owned by the county and offered for sale or lease by the board.

(Ord. No. 18-288, § 1, 8-21-2018)

2.22.040 - Requirements.

Before the county may sell or lease county-owned property, the county manager or a department head authorized by the board to negotiate to sell or lease the property must obtain an appraisal or appraisals prepared by appraisers selected from a list established by [section 2.22.080](#).

(Ord. No. 18-288, § 1, 8-21-2018)

2.22.060 - Qualifications of appraisers.

In order for an appraiser to be placed on the county's list of qualified appraisers, the appraiser must meet at least the following requirements:

- A. Hold a general appraiser certificate from the Nevada Real Estate Division.
- B. Have five years of experience in appraising real property in northern Nevada.
- C. Provide a resume describing the appraiser's qualifications, certifications, years of experience, and professional expertise.

Code of Ordinances

D. Provide an estimation of the time it will take for the appraiser to complete appraisal projects.

E. Provide a list of fees charged by the appraiser.

F. Provide a copy of and maintain a policy of professional liability insurance as required by the county.

G. Be willing to indemnify the county for errors, omissions and negligence.

H. Meet any other criteria the board determines to be necessary.

(Ord. No. 18-288, § 1, 8-21-2018)

2.22.080 - Appraiser list.

⋮

A list of appraisers will be established by the board as follows:

- A. The county manager or his designee will send notice to the current certified general appraisers with offices in northern Nevada requesting a response with their qualifications if they are interested in providing appraisals for the sale or lease of real property owned by Storey County.
- B. The county manager or his designee will review and compile a list of qualified appraisers and organize it in random order.
- C. After an appraiser has completed an appraisal, the appraiser will be rotated to the bottom of the list.
- D. The list may be amended by the county manager or his designee to remove names on written request from the appraiser, on information received from the state of Nevada that the appraiser is no longer active, or on the board's determination that there is a basis for removal.
- E. The list may also be amended to add names of qualified appraisers who subsequently request to be added to the list or whom are later solicited by the county manager or his designee and are qualified to conduct general appraisals.

(Ord. No. 18-288, § 1, 8-21-2018)

2.22.100 - Selection of appraisers.

⋮

When an appraisal is required, the county manager must submit the qualifications of the appraiser or appraisers at the top of the list established pursuant to [section 2.22.080](#) to the board for verification of their qualifications. The submittal must be accompanied by a proposal from the appraiser(s) selected setting forth the time frame within which the appraiser will complete the appraisal, a fee quote, their qualification for the particular assignment and the disclosure statement required by NRS 244.2795(3). If the board does not accept an appraiser as qualified, the county manager shall submit the qualifications

Code of Ordinances of the next appraiser on the list for verification along with the accompaniment required of the appraiser.

This process shall continue until the board has verified the qualifications of the number of appraisers required to conduct the appraisal. An appraiser that is found not qualified for a job retains the same position on the list for the next job.

(Ord. No. 18-288, § 1, 8-21-2018)

2.22.120 - Sunset provision. ⋮

This ordinance is effective until the date of repeal of the state law requiring the board of county commissioners to obtain appraisals when offering any county-owned real property for lease or sale and to adopt an ordinance creating a list of appraisers.

(Ord. No. 18-288, § 1, 8-21-2018)

< 2.20.100 - Violation—Penalty.

Chapter 2.24 - PUBLIC DEFENDER >



Board of Storey County Commissioners Agenda Action Report

**Meeting date: 11/21/2023 10:00 AM -
BOCC Meeting**

Estimate of Time Required: 30 min.

Agenda Item Type: Discussion/Possible Action

- **Title:** Review and possible approval of first reading of Bill No. 138, Ordinance No. 23-326, an ordinance amending Storey County Code Chapter 5 Business License Required, Section 5.04.200 Fees and Exemption from Fees, to revise the list of certain base in-county business license fees from their current amount to a reduced amount being \$25.00 annually, Section 5.04.190 deleting conflicting language regarding fees set by resolution, and other properly related matters.
- **Recommended motion:** I (commissioner) motion to approve first reading of Bill No. 138, Ordinance No. 23-326, an ordinance amending Storey County Code Chapter 5 Business License Required, Section 5.04.200 Fees and Exemption from Fees, to revise the list of certain base in-county business license fees from their current amount to a reduced amount being \$25.00 annually, Section 5.04.190 deleting conflicting language regarding fees set by resolution, and other properly related matters. This motion includes a finding that a special hearing and business impact statement are not required because the proposed action does not impose a direct or significant economic burden upon a business, or directly restrict the formation, operation, or expansion of a business in Storey County.
- **Prepared by:** Austin Osborne

Department:

Contact Number: 775.847.0968

- **Staff Summary:** Commissioner Mitchell requested in a series of public meetings that the board consider reducing certain fees for in-county base general business licenses and for in-county general home-based business licenses. The scope of the proposal does not include business license fees related to employee counts, building square-footage, business license applications, privilege businesses and other special license fees, and out-of-county businesses.
- The establishment of business license fees is set forth in Storey County Code 5.04.200 enclosed herewith. Other applicable license fees are demonstrated in the enclosed table.
- A special hearing and business impact statement are not required because the proposed action does not impose a direct or significant economic burden upon a business, or directly restrict the formation, operation, or expansion of a business in Storey County.
- Revenue impacts that this action may have on the budget of the Virginia City Tourism Commission (VCTC) will be discussed with the tourism commission at its December 14, 2023, public meeting. Comments from the VCTC commissioners and other findings will

be shared with the Board of Storey County Commissioners before action is taken for second reading.

- The proposal also includes removal of Section 5.04.190 addressing business license fees by resolution because it may conflict with the remainder of the Title which sets fees by ordinance. County officials have worked together over the past two years on comprehensive updates to SCC Title 5 that will be ready for a presentation to the board and for consideration in 2024.
- Changes to the fee schedule are summarized in the following table.
-
- List of Business License Fees to be Reduced
-
- General/Regular License (County) From \$75 To \$25 Per Year
- General/Regular License (Sheriff) From \$75 To \$25 Per Year
- Home-Based (County) From \$100 To \$25 Per Year
- Home-Based (Sheriff) From \$100 To \$25 Per Year
- Contractor/Profess. From \$100 To \$25 Per Year
- Transportation From \$100 To \$25 Per Year
- Pawn Shops From \$250 To \$25 Per Year
- Mining/Excavation From \$475 To \$25 Per Year
- Other Category From \$ per category To \$25 Per category
- Notes:
- a. In-county businesses and base/regular business license fees only.
- b. This motion does not include Special Events Licenses.

- **Supporting Materials:** See attached

- **Fiscal Impact:** Yes

- **Legal review required:** TRUE

- **Reviewed by:**

_____ Department Head

Department Name:

_____ County Manager

Other Agency Review: _____

- **Board Action:**

☐ Approved	☐ Approved with Modification
☐ Denied	☐ Continued

Written Motion with Findings:

I (commissioner) motion to approve second reading of Bill No. 138, Ordinance No. 23-326, an ordinance amending Storey County Code Chapter 5 Business License Required, Section 5.04.200 Fees and Exemption from Fees, to revise the list of certain base in-county business license fees from their current amount to a reduced amount being \$25.00 annually, Section 5.04.190 deleting conflicting language regarding fees set by resolution, and other properly related matters. This motion includes a finding that a special hearing and business impact statement are not required because the proposed action does not impose a direct or significant economic burden upon a business, or directly restrict the formation, operation, or expansion of a business in Storey County.

This written motion with findings is hereby provided by Storey County Commission Chair Jay Carmona: _____ on _____, 2023.

Attest:

D. James Hindle
Clerk & Treasurer, Storey County

Bill No. 138

Ordinance No. 23. 326

Summary

An ordinance amending Storey County Code Chapter 5 Business License Required, Section 5.04.200 Fees and Exemption from Fees, to revise the list of certain base in-county business license fees from their current amount to a reduced amount being \$25.00 annually, Section 5.04.190 deleting conflicting language regarding fees set by resolution, and other properly related matters.

Title

An ordinance amending Storey County Code Chapter 5 Business License Required, Section 5.04.200 Fees and Exemption from Fees, to revise the list of certain base in-county business license fees from their current amount to a reduced amount being \$25.00 annually, Section 5.04.190 deleting conflicting language regarding fees set by resolution, and other properly related matters.

(Amendments are shown in blue underlined italics and black strike-out.)

The Board of County Commissioners of the County of Storey, State of Nevada, does ordain:

SECTION 1: Storey County Code Section 5.04.190 is hereby amended to provide as follows:

~~5.04.190—Increase or decrease of fees by resolution.~~

~~All fees established hereinafter in this chapter may be established, increased or decreased from time to time by resolution of the board of county commissioners.~~

~~(Ord. 196, 2005)~~

SECTION 2: Storey County Code Section 5.04.200 is hereby amended to provide as follows:

5.04.200 - Fees and exemptions from fees.

- A. Except for nonprofit organizations, upon application for a new business license, the applicant shall pay a nonrefundable twenty-five dollar application fee to cover the costs of the review and processing of the application.
- B. Every person, firm, association, or corporation required by this chapter to take out and pay for a license, shall take out and pay for a license for each of the kinds of

businesses enumerated in this article, and for each separate class of business or trade enumerated herein, and for each place where such business is carried on.

- C. Unless otherwise provided, the following periodic fees are imposed on the following kinds of business licenses:

General license	\$ 75.00 <u>\$25.00</u> per year
Independent contractors, professionals	100.00 <u>\$25.00</u> per year
Out-of-county businesses, contractors	<u>\$75.00</u> per year
Home businesses	100.00 <u>\$25.00</u> per year
Nonprofit <u>Non-profit</u>	<u>\$0</u> per year
Escort	\$250.00 per year
Massages, therapeutic services	<u>\$135.00</u> per year
Subdivision sales	<u>\$475.00</u> per year
Transportation companies	100.00 <u>\$25.00</u> per year
Pawn shops	250.00 <u>\$25.00</u> per year
Mining, excavation, earth-moving/processing companies	475.00 <u>\$25.00</u> per year

- D. Unless otherwise provided, the following fees are imposed on the following kinds of business licenses in addition to any other fees specified:

Commercial units, apartments, storage units, RV and MH spaces, pay parking lot spaces	\$ 2.00 per unit annually
---	---------------------------

Per gaming machine	<u>\$</u> 30.00 per quarter
Per gaming table	<u>\$</u> 150.00 per quarter
Alarm companies	<u>\$</u> 10.00 per alarm per quarter
Special events ive-day permit (excluding liquor)	<u>\$</u> 25.00 per vendor

E. Unless otherwise provided, the following fees for entertainment are imposed on the following kinds of business licenses and are exempt from any other fee schedules or the business licenses specified in this chapter.

1. Brothels and houses of ill fame shall be established pursuant to Storey County Code Chapter 5.16. 2. Cabarets or other places of live entertainment on the premises one hundred fifty dollars per year.
3. Fortunetellers, astrologer, clairvoyant, medium, palmist, phrenologist, or others who profess to foresee the future, seven hundred dollars per year; fortunetelling licenses shall be approved at the sole discretion of the board of county commissioners. Any employee in an establishment licensed under this section shall be subject to work permit requirements as provided in Storey County Code Section 5.08.020(G).

(Ord. 203 (part), 2006; Ord. 179 § 1(part), 2002; Ord. 161 § 2(part), 1999)

Proposed on _____, 2023.

by Commissioner _____

Passed on _____, 2023

.

Vote: Ayes: Commissioners _____

Nays: Commissioners _____

Absent Commissioners _____

Jay Carmona, Chair
Storey County Board of County Commissioners

Attest:

D. James Hindle
Clerk & Treasurer, Storey County

This ordinance will become effective on _____, 2023.



Board of Storey County Commissioners Agenda Action Report

**Meeting date: 11/21/2023 10:00 AM -
BOCC Meeting**

Estimate of Time Required: 0-5

Agenda Item Type: Discussion/Possible Action

- **Title:** For consideration and possible approval of business license second readings:
- A. Andrei Mihheikin – Home Based / 240 S. M ~Virginia City, NV
- B. Asphalt Protectors Inc. – Contractor / 14010 Mt. Anderson St. ~ Reno, NV
- C. Aurum Construction Strategies, LLC – Contractor / 232 West St. ~ Reno, NV
- D. Florence Fence Inc. – Contractor / 2597 Nowlin Rd. ~ Minden, NV
- E. Johnson Plumbing – Contractor / 131 Coney Island Dr. ~ Sparks, NV
- F. Leading Out Loud, Inc. – Home Based / 2330 Enterprise Rd. ~ Reno, NV
- G. Seiwa Giken Co., LTD – Out of County / Toyonaka-shi, Japan
- H. Sierra Manor Bakery – Home Based / 6 N. D St. ~ Virginia City, NV
- I. Supreme Concrete LLC – Contractor / 5295 Coggins Rd. ~ Reno, NV
- J. Sutlug Inc. – Food Truck / 500 A Truck Inn ~ Fernley, NV
- K. Virginia City Off Road Experience LLC – Home Based / 311 S. E. St. ~ Virginia City, NV
- L. Ziglift Material Handling – Contractor / 12640 Allard St. ~ Santa Fe Springs, CA
- **Recommended motion:** Approval.
- **Prepared by:** Ashley Mead

Department:

Contact Number: 775-847-0966

- **Staff Summary:** Second readings of submitted business license applications are normally approved unless, for various reasons, requested to be continued to the next meeting. A follow-up letter noting those to be continued or approved will be submitted prior to the Commission Meeting. The business licenses are then printed and mailed to the new business license holder.
- **Supporting Materials:** See attached
- **Fiscal Impact:** None
- **Legal review required:** False
- **Reviewed by:**

____ Department Head

Department Name:

_____ County Manager

Other Agency Review: _____

- **Board Action:**

☐ Approved	☐ Approved with Modification
☐ Denied	☐ Continued

Storey County Community Development



110 Toll Road ~ Gold Hill Divide
P O Box 526 ~ Virginia City NV 89440

(775) 847-0966 ~ Fax (775) 847-0935
CommunityDevelopment@storeycounty.org

To: Jim Hindle, Clerk's office
Austin Osborne, County Manager

November 08, 2023
Via Email

Fr: Ashley Mead

Please add the following item(s) to the **November 21, 2023**

COMMISSIONERS Consent Agenda:

SECOND READINGS:

- A. Andrei Mihheikin** – Home Based / 240 S. M ~Virginia City, NV
- B. Asphalt Protectors Inc.** – Contractor / 14010 Mt. Anderson St. ~ Reno, NV
- C. Aurum Construction Strategies, LLC** – Contractor / 232 West St. ~ Reno, NV
- D. Florence Fence Inc.** – Contractor / 2597 Nowlin Rd. ~ Minden, NV
- E. Johnson Plumbing** – Contractor / 131 Coney Island Dr. ~ Sparks, NV
- F. Leading Out Loud, Inc.** – Home Based / 2330 Enterprise Rd. ~ Reno, NV
- G. Seiwa Giken Co., LTD** – Out of County / Toyonaka-shi, Japan
- H. Sierra Manor Bakery** – Home Based / 6 N. D St. ~ Virginia City, NV
- I. Supreme Concrete LLC** – Contractor / 5295 Coggins Rd. ~ Reno, NV
- J. Sutlug Inc.** – Food Truck / 500 A Truck Inn ~ Fernley, NV
- K. Virginia City Off Road Experience LLC** – Home Based / 311 S. E. St. ~ Virginia City, NV
- L. Ziglift Material Handling** – Contractor / 12640 Allard St. ~ Santa Fe Springs, CA

Ec: Community Development
Commissioner's Office

Planning Department
Comptroller's Office

Sheriff's Office



Board of Storey County Commissioners Agenda Action Report

Meeting date: 11/21/2023 10:00 AM -
BOCC Meeting

Estimate of Time Required: 15 min.

Agenda Item Type: Correspondence

- **Title:** Correspondence: Letter from member of the public regarding Taylor Street.
- **Recommended motion:** No action.
- **Prepared by:** Austin Osborne

Department: **Contact Number:** 775.847.0968

- **Staff Summary:** Correspondence
- **Supporting Materials:** See attached
- **Fiscal Impact:** None
- **Legal review required:** TRUE
- **Reviewed by:**

_____ Department Head

Department Name:

_____ County Manager

Other Agency Review: _____

- **Board Action:**

☐ Approved	☐ Approved with Modification
☐ Denied	☐ Continued

Dear Austin,

11/4/23

Just want to suggest that the closed section of the road next to the "Merchantile" remain closed, and used as a walking path.

The "Pocket Mall" that was suggested for the corner lot next to the "Mechantile" several years ago could be built out with a larger foot print.

People come to this town to enjoy our boardwalks, so closing that small portion ^(of roadway) would be an improvement.

Just a thought,

P.S. Tom Gray said that his ^{Mark} patrons enjoy walking up that hill ... past the churches and into town. A closed road would make it safer for pedestrians.