

**City of Carson City
Agenda Report**

Date Submitted: December 3, 2010

Agenda Date Requested: December 16, 2010

Time Requested: 15 minutes

To: Mayor and Supervisors

From: Public Works

Subject Title: Action to adopt Resolution No. _____, a resolution approving and authorizing the Mayor to sign an Interlocal Agreement by and between Carson City and the State of Nevada, Department of Administration, Division of Buildings and Grounds Addressing Cooperative Training and Transition for the Operation, Maintenance, and Repair of the Marlette Water System; and Operation, Maintenance, and Repair of the Stewart Water Treatment Plant and Distribution System. (Burnham).

Staff Summary: This agreement provides for a transition and training period for Carson City to assume future Operation, Maintenance, and Repair of the Marlette Water System; and Operation, Maintenance, and Repair of the Stewart Water Treatment Plant and Distribution System. The State and Carson City are working on a final agreement for the City to assume full responsibility from the State and it is anticipated that a final agreement will provide for the City to assume full control on or about July 1, 2011. The agreement is mutually beneficial as savings will accrue to both entities.

Type of Action Requested: (check one)
(XXX) Resolution () Ordinance
() Formal Action/Motion () Other

Does This Action Require A Business Impact Statement: () Yes (XXX) No

Recommended Board Action: I move to adopt Resolution No. _____, a resolution approving and authorizing the Mayor to sign an Interlocal Agreement by and between Carson City and the State of Nevada, Department of Administration, Division of Buildings and Grounds Addressing Cooperative Training and Transition for the Operation, Maintenance, and Repair of the Marlette Water System; and Operation, Maintenance, and Repair of the Stewart Water Treatment Plant and Distribution System.

Explanation for Recommended Board Action: This agreement provides for Carson City and the State to work cooperatively for a transition and training period for Carson City to assume future Operation, Maintenance, and Repair of the Marlette Water System and Stewart Water Treatment Plant and Distribution System. The State and Carson City are working on a final agreement for the City to assume full responsibility from the State and it is anticipated that a final agreement will provide for the City to take over full operation on or about July 1, 2011. This agreement provides for the State to provide two employees to work with City water production staff during the transition period to allow for a smooth assumption of the facilities in July of 2011. The final transfer agreement is in process of being negotiated with the State and it is anticipated that it will be brought to the Board for approval after the first of the year. The result of the final cooperative agreement is that both entities will benefit from reduced costs for operation of the water systems. In addition Carson City will be able to integrate the operation into its existing water production operation and benefit from maximizing water yield from the Marlette system. Over time this will benefit the City by increasing high quality water into the City system and allowing for increased recharge to the underground aquifer.

Applicable Statue, Code, Policy, Rule or Regulation: NA

Fiscal Impact: Costs are contained within existing water fund budget.

Explanation of Impact: NA.

Funding Source: Water Fund

Alternatives: Do not approve and direct staff otherwise.

Supporting Material: Interlocal Agreement between Carson City and the State of Nevada, Department of Administration, Division of Buildings and Grounds.

Prepared By: Andrew Burnham, Public Works Director

Reviewed By:


(Department Head)


Date: 12-7-10


(City Manager)

Date: 12/7/10


(District Attorney)

Date: 12/7/10


(Finance Director)

Date: 12/7/10

Board Action Taken:

Motion: _____

1) _____
2) _____

Aye/Nay

(Vote Recorded By)

RESOLUTION NO. _____

RESOLUTION ADOPTING AND APPROVING AN INTERLOCAL AGREEMENT BY AND BETWEEN CARSON CITY AND THE STATE OF NEVADA, DEPARTMENT OF ADMINISTRATION, DIVISION OF BUILDINGS AND GROUNDS ADDRESSING COOPERATIVE TRAINING AND TRANSITION FOR THE OPERATION, MAINTENANCE, AND REPAIR OF THE MARLETTE WATER SYSTEM; AND OPERATION, MAINTENANCE, AND REPAIR OF THE STEWART WATER TREATMENT PLANT AND DISTRIBUTION SYSTEM

WHEREAS, any two or more public agencies may enter into cooperative agreements for the performance of any governmental function pursuant to NRS 277.080 to 277.180, inclusive; and

WHEREAS, NRS 277.110 provides that every such agreement must be by formal resolution or ordinance of the governing body of each public agency included and must be spread at large upon the minutes, or attached in full thereto as an exhibit, of each governing body; and

WHEREAS, the parties to the Interlocal Agreement by and between Carson City and the State of Nevada, Department of Administration, Division of Buildings and Grounds Addressing Cooperative Training and Transition for the Operation, Maintenance, and Repair of the Marlette Water System; and Operation, Maintenance, and Repair of the Stewart Water Treatment Plant and Distribution System, desire to adopt and approve such agreement as required by NRS 277.110. A copy of the agreement is attached to this Resolution as Exhibit "B"; and

WHEREAS, both parties to the Interlocal Agreement by and between Carson City and the State of Nevada, Department of Administration, Division of Buildings and Grounds Addressing Cooperative Training and Transition for the Operation, Maintenance, and Repair of the Marlette Water System; and Operation, Maintenance, and Repair of the Stewart Water Treatment Plant and Distribution System are public agencies as defined by NRS 277.100; and

NOW, THEREFORE, BE IT RESOLVED that the terms and conditions of the Interlocal Agreement by and between Carson City and the State of Nevada, Department of Administration, Division of Buildings and Grounds Addressing Cooperative Training and Transition for the Operation, Maintenance, and Repair of the Marlette Water System; and Operation, Maintenance, and Repair of the Stewart Water Treatment Plant and Distribution System are hereby adopted and approved; and

BE IT FURTHER RESOLVED that the Interlocal Agreement by and between Carson City and the State of Nevada, Department of Administration, Division of Buildings and Grounds Addressing Cooperative Training and Transition for the Operation, Maintenance, and Repair of the Marlette Water System; and Operation, Maintenance, and Repair of the Stewart Water Treatment Plant and Distribution System shall be spread at large upon the minutes or attached in full thereto as an exhibit, and that a copy of this Resolution shall be sent to the U.S. Department of the Interior U.S. Geological Survey.

Upon motion by Supervisor _____, seconded by Supervisor _____, the foregoing Resolution was passed and adopted this _____ day of 2010 by the following vote:

AYES: _____ NAYS: _____

ABSENT: _____ ABSTAIN: _____

Resolution No. _____

Robert L. Crowell, Mayor
Carson City, Nevada

ATTEST:

Alan Glover, Clerk
Carson City, Nevada

INTERLOCAL COOPERATIVE AGREEMENT BETWEEN PUBLIC AGENCIES

**State of Nevada, Department of Administration, Division of Buildings
and Grounds and Carson City, a Consolidated Municipality**

Addressing Cooperative Training and Transition for the Operation, Maintenance and
Repair of the Marlette Water System; and Operation and Testing of the Stewart Water
Treatment Plant and Distribution System

THIS AGREEMENT (hereinafter the Agreement) is entered into this ____ day of
____, 2010, by and between STATE OF NEVADA, by and through its Department of
Administration, Buildings and Grounds Division (hereinafter "STATE"), and CARSON
CITY, a Consolidated Municipality and political subdivision of the State of Nevada
(hereinafter "CARSON").

WITNESSETH:

WHEREAS, NRS 277.110 authorizes any two or more public agencies to enter into
agreements for joint or cooperative action; and

WHEREAS, STATE owns or otherwise controls rights to water generated in the
Marlette Lake, Hobart Reservoir, and east slope drainage areas and owns, operates,
maintains and repairs the Marlette Water System and appurtenances necessary to collect,
convey, store, and distribute such raw water; and

WHEREAS, STATE also owns or otherwise controls rights to water within the
Stewart Facility Complex and owns, operates, maintains and repairs the Stewart Water
System and appurtenances necessary to collect, convey, treat via the Stewart Water
Treatment Plant, store and distribute such treated water to the Stewart Facility; and

WHEREAS, the Marlette Water System is generally relied upon by STATE, CARSON, Virginia City, Gold Hill and Silver City as a source of water for municipal and other beneficial purposes; and

WHEREAS, CARSON receives the majority of the raw water produced by the Marlette Water System and pays State the majority of the costs to operate and maintain the water system; and

WHEREAS, STATE and CARSON have been cooperatively making capital system upgrades to the Marlette Lake Water System; and

WHEREAS, CARSON operates, maintains and repairs its own water production, treatment, distribution and SCADA Control systems which includes receiving raw water from the Marlette Water System; and

WHEREAS, CARSON provides treated water service to Carson City customers, including State owned facilities and buildings located throughout CARSON; and

WHEREAS, STATE and CARSON have determined CARSON has the necessary resources and staffing and that it would be mutually beneficial to the parties for CARSON to assume the operation, maintenance and repair responsibilities of the Marlette Water System and the operation, maintenance and testing of the Stewart Water Treatment Plant and Distribution Facilities (hereinafter the "Systems"), with STATE remaining responsible for the cost of repairs to the Systems; and

WHEREAS, State shall maintain ownership, control and oversight of the Systems but State and CARSON intend to negotiate and finalize a formal Interlocal Agreement for the turnover of the operation of the Systems to CARSON who shall bear all costs associated therewith, which Agreement is anticipated to commence on or about July 1, 2011; and

WHEREAS, State and Carson desire to provide for a cooperative evaluation, training and transition period prior to CARSON's potential assumption of the duties and responsibilities of the Systems, as outlined above.

NOW, THEREFORE in consideration of the foregoing and other covenants contained herein, the parties mutually agree as follows:

1. STATE RESPONSIBILITIES.

A. STATE agrees to provide State's current two (2) water system employees to cooperatively train and assist CARSON staff for the transfer of duties pertaining to the Systems during the training and transition period through June 30, 2011.

B. STATE will continue to provide supervision, control and all of the funding for the salaries and benefits of the State's two employees and all other expenses related to the operation and maintenance of the Systems as currently provided and contained within the appropriate STATE budgets for the Systems through June 30, 2011.

C. STATE agrees to perform all of the duties and responsibilities of STATE set forth in the Marlette Lake Water System and Stewart Water Treatment Plant and Distribution Facilities Transition Plan, attached hereto as Exhibit A.

2. CARSON RESPONSILBILITIES.

A. CARSON agrees to cooperate with State in the supervision of State's two employees during the period through June 30, 2011 and to cooperatively train and assist CARSON staff in the operation and maintenance of the System's during the training and transition period through June 30, 2011.

B. CARSON agrees to perform all of the duties and responsibilities of CARSON set forth in the Marlette Lake Water System and Stewart Water Treatment Plant and Distribution Facilities Transition Plan, attached hereto as Exhibit A.

C. Except as otherwise provided in this paragraph, CARSON agrees that until the proposed Interlocal Agreement for the operation of the Systems, as described above, is approved by both parties no modification or transfer of control systems (SCADA), equipment, personnel or responsibilities will occur. CARSON and State agree that CARSON will acquire additional licenses for the SCADA that are required during the term of this Agreement.

3. REQUIRED APPROVAL. This Agreement does not become effective unless and until approved by appropriate action of the governing body of each party and the Attorney General of the State of Nevada as required pursuant to NRS 277.140.

4. TERM. This Agreement shall be effective from the Effective Date through June 30, 2011 unless sooner terminated as set forth herein.

5. TERMINATION. The parties expressly agree that this Agreement shall be terminated immediately if for any reason the Executive Branch of the State of Nevada, the Nevada State Legislature or CARSON's funding ability to satisfy this Agreement is withdrawn, substantially limited or impaired.

6. LIMITED LIABILITY. The parties do not waive and intend to assert available NRS Chapter 41 liability limitations should it become necessary in implementing this Agreement.

7. INDEMNIFICATION.

a. To the fullest extent of NRS Chapter 41 liability limitations, each party shall indemnify, hold harmless and defend, not excluding the other's right to participate, the other from and against all liability, claims, actions, damages, losses and expenses, including, but not limited to, reasonable attorney's fees and costs, arising out of any alleged negligent or willful acts or omissions of the indemnifying party, its officers, employees and

agents. Such obligation shall not be construed to negate, abridge, or otherwise reduce any other right or obligation of indemnity, which would otherwise exist as to any party or person, described in this paragraph.

b. The indemnification obligation under this paragraph is conditioned upon receipt of written notice by the indemnifying party within thirty (30) days of the indemnified party's actual notice of any actual or pending claim or cause of action. The indemnifying party shall not be liable to hold harmless any attorney's fees and costs of the indemnified party's chosen right to participate with legal counsel.

8. INDEPENDENT PUBLIC AGENCIES. The parties are associated with each other only for the purposes and to the extent set forth in this Agreement, and in respect to performance of services pursuant to this Agreement, each party is and shall be a public agency separate and distinct from the other party and subject only to the terms of this Agreement. Nothing contained in this Agreement shall be deemed or construed to create a partnership or joint venture, to create relationships of an employer-employee or principal-agent, to convey ownership of any asset, or to otherwise create any liability for one agency whatsoever with respect to the indebtedness, liabilities, and obligations of the other agency or any other party.

9. ASSIGNMENT. None of the parties shall assign, transfer or delegate any rights, obligations or duties under this Agreement.

10. PUBLIC RECORDS. Pursuant to NRS 239.010, information or documents may be open to public inspection and copying. The parties will have the duty to disclose, unless a particular record is made confidential by law or a common law balancing of interests

11. INSPECTION & AUDIT.

a. Books and records. Each party agrees to keep and maintain under generally accepted accounting principles full, true and complete records, agreements, books and documents as are necessary to fully disclose to the State or United States Government, or their authorized representatives, upon audits or reviews, sufficient information to determine compliance with all state and federal regulations and statutes.

b. Inspection & Audit. Each party agrees that the relevant books, records (written, electronic, computer related or otherwise), including, but not limited to, relevant accounting procedures and practices of the party, financial statements and supporting documentations and documentation related to the work product shall be subject, at any reasonable time, to inspection, examination, review, audit and copying at any office or location where such records may be found, with or without notice, by the State Auditor, Employment Security, the Department of Administration Budget Division, the Nevada State Attorney General's Office or its Fraud Control Units, the State Legislative Auditor, and, with regard to any federal funding, the relevant federal agency, the Comptroller General, the General Accounting Office, the Office of the Inspector General, Carson City Internal Auditor or any of their authorized representatives.

c. Period of Retention. All books, records, reports, and statements relevant to this Agreement must be retained a minimum of three (3) years and for five (5) years if any federal funds are used in this Agreement. The retention period runs from the date of termination of this Agreement. Retention time shall be extended when an audit is scheduled or in progress for a period reasonably necessary to complete an audit and/or to complete any administrative and judicial litigation which may ensue.

12. OWNERSHIP. It is expressly understood that this Agreement does not provide any lien holder, ownership interest or any other rights to the Systems to CARSON.

13. CONFIDENTIALITY. Each party shall keep confidential all information, in whatever form, produced, prepared, observed or received by that party to the extent that such information is confidential by law.

14. PROPER AUTHORITY. The parties hereto represent and warrant that the person executing this Agreement on behalf of each party has full power and authority to enter into this Agreement and that the parties are authorized by law to engage in the cooperative action set forth in paragraph (1).

15. FORCE MAJEURE. Neither party shall be deemed to be in violation of this Agreement if it is prevented from performing any of its obligations hereunder due to strikes, failure of public transportation, civil or military authority, act of public enemy, accidents, fires, explosions, or acts of God, including, without limitation, earthquakes, floods, winds, or storms. In such an event the intervening cause must not be through the fault of the party asserting such an excuse, and the excused party is obligated to promptly perform in accordance with the terms of the Agreement after the intervening cause ceases.

16. GOVERNING LAW; JURISDICTION. This Agreement and the rights and obligations of the parties hereto shall be governed by and construed according to the laws of the State of Nevada. If by action of the Nevada State Legislature this Agreement or a portion thereof becomes inconsistent with Nevada law or otherwise becomes unenforceable, the parties agree to renegotiate this Agreement to conform with the law.

17. NOTICE. For notice purposes, the address of each party is as follows:

STATE OF NEVADA
Department of Administration
Division of Buildings and Grounds
406 E. Second Street, Suite #1
Carson City, Nevada 89701
(775) 684-1800

CARSON CITY, CONSOLIDATED MUNICIPALITY
201 North Carson Street, Suite #2
Carson City, Nevada 89701
(775) 887-2100

18. PRIOR CONTRACTS. It is understood by all parties that this agreement does not supersede or change any rights or obligations of any prior contract with respect to the Systems.

19. PROVISION HELD UNENFORCEABLE. If any provision contained in this Agreement is held to be unenforceable by a court of law or equity, this Agreement shall be construed as if such provision did not exist and the non-enforceability of such provision shall not be held to render any other provision or provisions of this Agreement unenforceable.

20. COUNTERPARTS. This Agreement may be executed in one or more counterparts, each of which will be deemed an original and all of which together will constitute one and the same instrument

21. ENTIRE AGREEMENT AND MODIFICATION. This Agreement constitutes the entire agreement of the parties and such is intended as a complete and exclusive statement of the promises, representations, negotiations, discussions, and other agreements that may have been made in connection with the subject matter hereof. Unless an integrated attachment to this Agreement specifically displays a mutual intent to amend a particular part of this Agreement, general conflicts in language between any such

attachment and this Agreement shall be construed consistent with the terms of this Agreement. Unless otherwise expressly authorized by the terms of this Agreement, no modification or amendment to this Agreement shall be binding upon the parties unless the same is in writing and signed by the respective parties hereto, approved by the Office of the Attorney General and Carson City District Attorney.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be signed and intend to be legally bound thereby.

**STATE OF NEVADA
DEPARTMENT OF ADMINISTRATION
BUILDINGS AND GROUNDS DIVISION**

CINDY EDWARDS, Administrator

ATTEST:

Department of Administration

**STATE OF NEVADA
DEPARTMENT OF ADMINISTRATION**

Andrew K. Clinger, Director

**NEVADA STATE
BOARD OF EXAMINERS**

Andrew K. Clinger, Clerk

APPROVED AS TO FORM:

APPROVAL BY ATTORNEY GENERAL:

Deputy Attorney General for
Nevada Attorney General

CARSON CITY

Robert L Crowell
Carson City Mayor

ATTEST:

Alan Glover
Carson City Clerk

APPROVED AS TO FORM:

CARSON CITY



District Attorney

EXHIBIT "A"

TRAINING AND TRANSITION PLAN

Purpose

The Buildings and Grounds Division and Carson City believe there will be cost savings and increased efficiencies to both parties, by entering into an Agreement for Carson City to assume operational control, maintenance and repair of the Marlette Water System; and operation, maintenance and water testing of the Stewart Water Treatment Plant and Distribution Facilities. The State shall remain responsible for the cost of repairs to the Stewart Water System and the pipeline (siphon) from the tanks to the system delivery point to Storey County. Carson City will be responsible for the cost of repairs to the balance of the Marlette Water System. Additionally, the State would maintain ownership, control and oversight of Carson City's operations, maintenance and repair of the "Systems".

Pending the outcome of a cost benefit analysis and pertinent approvals by the State and Carson City, the parties desire to enter into a Phase I Training and Transition Agreement that will provide a smooth and orderly change in operations to prevent disruption in service and delivery of the critical water supply to the communities. It is the intent of the parties to develop and complete a final Phase II Operating Agreement during the first and second quarters of 2011 for implementation target date of July 1, 2011.

Note: Until the Phase II Operating Agreement is approved by both parties no modification and/or transfer of control systems (SCADA), equipment, personnel or responsibilities will occur. The exception would be acquisition of additional licenses required during the Transition Period.

Background Summary

The Marlette Water System provides wholesale raw water to the Storey County water system and to the Carson City water system. Storey County has first call on water from the system as it is its only water supply and Carson City utilizes the water to supplement its supply. Both Storey County and Carson City treat the water prior to delivery through their respective water distribution systems.

The State Buildings and Grounds Division and Carson City have worked cooperatively for operation and maintenance of the facilities over the last several decades and have conducted extensive evaluations of the Marlette Water System for replacement, upgrade and future planning of facilities, including investigation of increasing the water yield of the system and generation of power through installation of small hydro-electric facilities.

As a result of the new Marlette Water System pumping facility, the water production capability has been increased and allows for longer seasonal operation for delivery of water. Previously, Marlette pumping was conducted from generally late June to early September, but now can be accommodated April through November or possibly longer allowing Carson City to integrate increased water flows into its water supply. Planned improvements will continue to provide even more potential to integrate the Marlette Water flows into the Carson City water supply system.

While both Carson City and Storey County pay the State's costs of operation and maintenance of the Marlette Water System, Carson City pays the vast majority of the costs, since it utilizes far more water than Storey County. Carson City uses all excess water not supplied to Storey County from the system. Storey utilizes in the summer high-demand period approximately 250 gpm while Carson City receives as much as 2,200 gpm.

The Stewart Water System provides water to the State Stewart facilities (previous Stewart Indian School) and includes a well, water chlorination building, and related facilities.

Transition Time Frame

It is anticipated that Carson City will assume operation, maintenance and repair responsibilities July 1, 2011. The ability to train and transition during the period through June 30, 2011 provides time to allow State and City personnel to acquaint themselves with all issues of operation of the water systems and the integration of the SCADA Systems and setup of the State's monitoring system by City.

Personnel

State Buildings and Grounds currently utilizes two full-time employees for operation of the systems. It is anticipated the two employees will ultimately transfer to Carson City employment within the Carson City Public Works Department upon official take-over of the water systems. During the Phase I Training and Transition period, the State employees will be assigned part time to Carson City in order to provide training and familiarization in the operation and maintenance of the state water systems to Carson City staff. The part time schedule shall be mutually agreed upon between Buildings and Grounds Division and Carson City. While the two state employees are assigned to Carson City part time, Carson City will direct and manage the employees through City's management. The Department has over 125 employees in numerous divisions including water. Carson City Public Works has a water staff of approximately 20 full-time employees and additionally, has electrical, control systems, mechanic, engineering and administrative staff to support the water function.

The State employees would work within the Water Production Division which currently has six production operators who operate the City's wells, water treatment plants, booster stations, and related water facilities. The State employees would work with City production staff to integrate and operate the two water systems as one functional water system.

While the Carson City production staff is generally knowledgeable of the Marlette and Stewart water systems, a detailed process for review of the systems would be conducted over the transition period between State and City staff to insure the transition is smoothly conducted.

Control Systems

The City and State each has a SCADA telemetry control system for operation of their water systems. City staff will evaluate and work with State staff to integrate the State telemetry control system within the City telemetry control system. City and State staff, and Sierra Controls will develop a detailed plan and schedule to provide for the system integration. Initial review of the systems indicates there will be a fairly seamless transition for integration. The State will maintain "view only" telemetry control within their offices that will allow for 24/7/365 review of the systems operation, including the ability to receive/download reports and data. Carson City will assume all costs for the integration, including any additional SCADA licenses.

Pumping Facility

Carson City staff will acquire from State copies of all operations and maintenance manuals, product and equipment specifications, etc., for the pumping and generation facilities. State and Carson staff will review and develop mutually agreed upon protocols for operation and maintenance of the facilities. City will provide maintenance with its own staff for the natural gas engines for operation of the generator.

Utilities

Carson City and State will contact Southwest Gas to provide for assumption of natural gas and propane costs related to pumping, upon transfer of the Marlette Water System to the City for operations on July 1, 2011 or date provided for in the Phase II Operating Agreement.

Storey County

State and City staff will meet with Storey County to discuss the transition and to reiterate that Storey County has first call on any water from the Marlette Water System and Carson City only has the ability to receive water after Storey County needs are met. Any operating agreements between the State and Storey County will be provided to the City and any agreements that may occur between Carson City and Storey County shall be provided to the State.

State NDOW/State Parks

State and City staff will meet with NDOW, State Parks, and other governmental agencies as appropriate to discuss the transition and operating changes to insure that their respective concerns are met. Quarterly coordination meetings will be held with all agencies to insure open lines of communication.

Roadway Access

Carson City will assume maintenance and repair responsibility for the access roadways for the Marlette Water System upon approval and commencement of the Phase II Operating Agreement. Carson City staff will review with State staff, including other agencies as may be interested, the roadway maintenance requirements and any other facilities in the area. A mutually agreed upon written protocol will be developed which outlines this responsibility.

Pipelines/Valves/Tanks/Permits and Appurtenances

State and City staff will review the pipelines and attendant problems for access and maintenance, coordination with landowners over which pipelines pass, and any other related issues. Review will include acquiring copies of any as-builts, plans or related documents necessary for operation of the Marlette and Stewart systems. A mutually agreed upon operating protocol will be developed for system operation of valves, tanks, discharge permits from NDEP, maintenance of proper lake levels at Hobart Reservoir, etc and chlorination systems.

State Yard/Building/Equipment

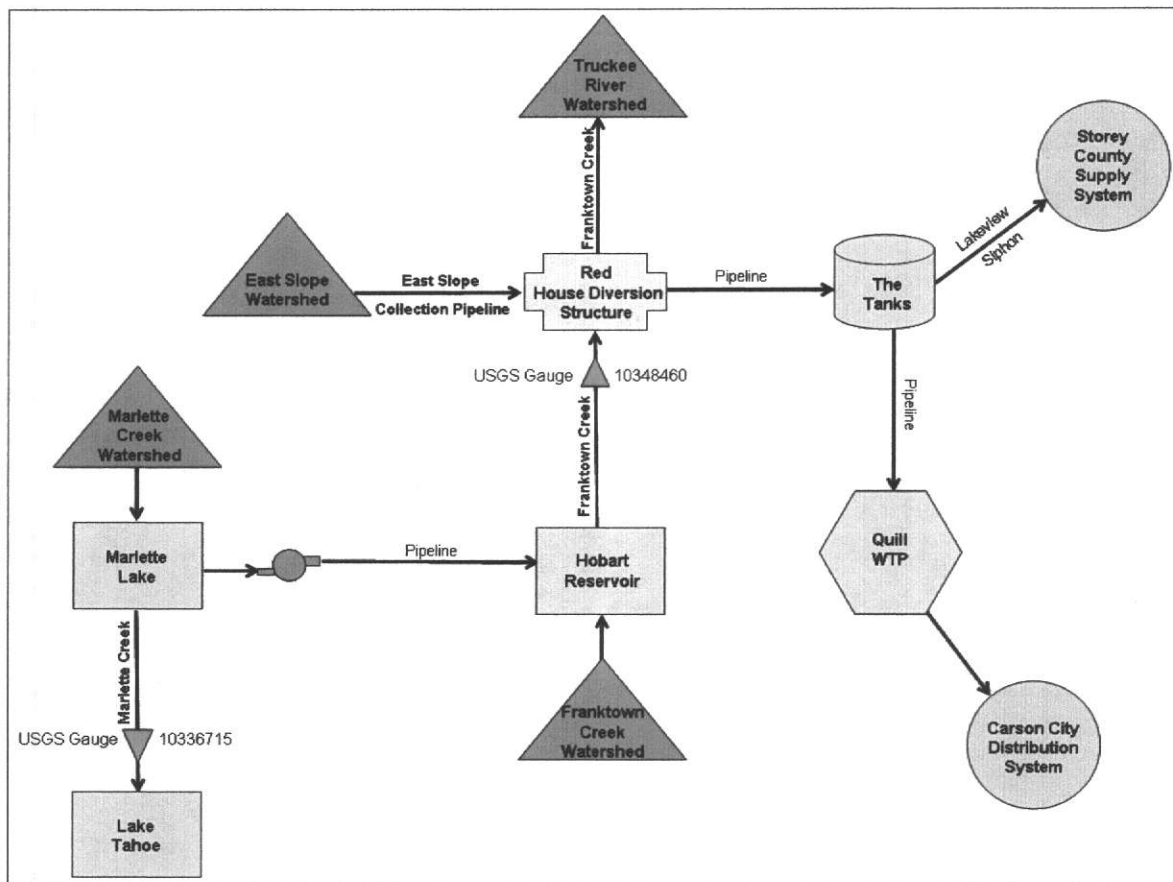
Carson City does not anticipate the need for assuming the State operations building and yard located in Lakeview or the need for any of the rolling stock equipment or trucks upon official takeover of the systems on July 1, 2011. State will provide current equipment during the transition period. An inventory of replacement parts currently on-hand for the systems will be conducted so they can be transferred to the City upon approval and commencement of the Phase II Operating Agreement.

HISTORICAL BACKGROUND

Marlette Water System

The Marlette Water System was developed in the 1870's to support water demands associated with the Comstock Lode mining boom in and around Virginia City. The system included Marlette Lake, the Incline Tunnel, Hobart Reservoir, the Red House Diversion Structure, the Lakeview Siphon and a system of flumes and pipelines. As the Comstock mining operations declined, the water system, including its associated water rights and approximately 5,400 acres of land, were purchased by the State of Nevada in 1963.

Although some components of the Marlette Water System are not in operation today, the key component of the pipeline system, the Lakeview Inverted Siphon, is still in operation. This high pressure pipeline continues to deliver water to a reservoir near Virginia City and is the sole water supply to the Storey County Water System, which serves Virginia City, Gold Hill and Silver City. However, the bulk of the Marlette water supplies are provided to Carson City. Over the past 20 years, supplies to Carson City from the Marlette System have ranged from 510 acre-feet (AF) (1988) to 1,390 AF (2003).



A schematic of the facilities of the Marlette Water System is presented in the previous figure. The system consists of the Marlette Lake, Hobart Lake, and associated network of piping that conveys water from these lakes to Carson City and Storey County. Water from Marlette Lake (approximate EL 7838) is pumped to the Hobart Creek/Hobart Lake drainage area via a 12-inch pipeline. Water from Hobart Lake (EI 7650) discharges into Franktown creek and is conveyed to the Red House Diversion Structure. The Red House Diversion structure also diverts water from the East Slope watershed (conveyed by the East Slope pipeline) and Franktown Creek into an 18-24 inch pipeline which conveys

this water to a 22,000 gallon capacity steel storage tank at the Tanks (approximate EL 7000)¹. The Tanks provide water to Storey County via a 10-inch pipeline and to Carson City via a 10-inch steel pipeline

Marlette Water System Existing Facilities

MHWS Component	Capacity	Diameter	Length
Marlette Lake	11,700 AF	NA	NA
Hobart Reservoir	110 AF	NA	NA
The Tanks	22,000 gallons	~ 15 ft diameter and 15' sidewall height	NA
Quill WTP	2,800 gpm (4 mgd)	NA	NA
Pipeline – Marlette Lake Discharge	1,500 gpm	12 inch diameter	~9,600 ft
Pipeline - East Slope	~700 gpm	8 inch diameter	~15,000 ft
Pipeline - Red House to Tanks	~2,000 gpm	18 and 24 inch diameter	24" ~ 2,000 ft 18" ~ 20,000 ft
Pipeline - Tanks to Quill	~2,000 gpm	10 inch diameter	~16,500 ft
Pipeline – Tanks to Virginia City	~500 gpm	10 inch diameter	~65,000 ft

A brief description of each component is presented below.

Marlette Reservoir

Marlette Lake, located on the western slope of the Carson Range of the Sierra Nevada Mountains south of Incline Village at Lake Tahoe, and at an approximate elevation of 7,838 feet mean sea level (MSL) is the key component to the overall system. Marlette Lake was formed by an earth-fill dam across the outlet of a small natural lake (Goodwin Lake) on Marlette Creek (USGS, 2008d). The dam was originally built in 1873. In 1876, Marlette Lake was integrated into the Virginia and Gold Hill Water Company and shortly thereafter began providing water to the Virginia City area. The dam was raised several times until it reached its present height of 45 feet in 1959. The lake now has an estimated capacity of 11,700 AF at the spillway elevation of 7838.0 feet MSL, but normal storage volumes fluctuate around 11,600 AF \pm 400 AF with water surface elevations of 7837.5 ft \pm 1.5 feet MSL (USGS, 2008a).

To supply the State's Marlette Water System, water in Marlette Lake is pumped during the summer season over the Carson Range and is discharged into a tributary to Hobart Creek, which feeds into Hobart Reservoir. In addition to the important water resource Marlette Lake provides, Marlette Lake is also used by Nevada Department of Wildlife (NDOW) as a brood lake for Rainbow and Lahontan Cutthroat trout and is a popular recreational area.

The State of Nevada Department of Buildings and Grounds (B&G) recently installed an upgraded water pumping and pipeline system for pumping from Marlette Lake to Hobart Reservoir. These upgrades include: laying over 9,600 linear feet of 12 inch diameter ductile iron and PVC pipe following primarily the existing pipe alignment; installation of a natural gas service line to power a new continuous duty generator; construction of a 1,500 GPM pump station on Marlette Lake's shoreline; replacement of the existing pump intake line and construction of a new generator building located east of the Sierra crest. These improvements have increased pumping capacity, enable year-round pumping and reduced

¹ The 24 inch pipeline reduces to an 18 inch steel pipeline approximately 2000 ft below the Red House diversion structure.

environmental risks to the area previously associated with the hauling of diesel fuel. The costs for these improvements are being paid by Carson City through bonds issued by the state.

Hobart Reservoir

Hobart Reservoir was created by the construction of an earth-fill dam on Franktown Creek. The reservoir is owned by the State of Nevada and is located within the Truckee River Basin on the eastern slope of the Carson Range at an approximate elevation of 7,650 feet. It has an estimated capacity of 110 AF, covers approximately 10 acres, and has a maximum depth of 15 feet. Hobart Reservoir Dam is approximately 26 feet high and 300 feet wide.

In addition to water pumped from Marlette Lake, Hobart Reservoir also receives flows from Franktown Creek and its contributing watershed. Water in the reservoir is discharged into Franktown Creek which conveys flows to the Red House Diversion Structure. Any flows that are not diverted via the Red House Diversion Structure continue downstream via Franktown Creek.

A CMU building located on top of the dam provides protection and access to the dam outlet isolation gates actuators and it houses a solar panel and a battery backup used for powering ultrasonic level instrumentation that monitors the lake level.

Red House Diversion Structure

The Red House Diversion Structure receives flows from both the East Slope Collection System and Franktown Creek, downstream of Hobart Reservoir. The Red House Diversion Structure is a concrete diversion structure with a manual sluice gate that combines the Franktown Creek flows with the East Slope System flows. Flows are diverted from the creek into a corrugated metal standpipe, which discharges directly into a 24 inch transmission line for conveyance to the State's tanks and on to the Storey County and Carson City water systems. The 24-inch pipeline reduces to an 18-inch pipeline approximately 2,000 feet from the Red House Diversion Structure.

A CMU building located on top of the concrete structure provides protection and access to the isolation gate actuator and houses an ultrasonic level sensor. A natural gas fired thermo-electric generator unit is used to power the instrumentation and for communications. The level sensor equipment also has a battery backup.

Tanks

Flows from the Red House Diversion Structure are conveyed to the Marlette tank facility (the Tanks). Two 10 inch diameter pipes discharge from the Tanks facility, each with a flow control valve and a flow meter for monitoring flows. One of the two pipes conveys flows to the Storey County water system through the Lakeview Siphon. The other pipeline conveys flows to Quill Water Treatment Plant in Carson City.

There is one storage tank at this location with a capacity of approximately 22,000 gallons. As improvements to the overall system are completed, the State has also requested that the overflow issue with the current operations be corrected so that overflow conditions are eliminated. The flow control valves, flow meters and a thermo electric generator (powered by a propane tank and used to power the flowmeter and other instrumentation) are housed inside a CMU building next to the Tanks.

Pipelines

East Slope Collection System

The East Slope Collection System begins at the east portal of the Incline Tunnel. This tunnel was part of the original Virginia City water delivery system and was an integral part of the flume system that delivered water from Marlette Lake to the Lakeview Siphon. The Incline Tunnel has deteriorated over the years and is no longer usable. The East Slope Pipeline now follows the original flume alignment between the Incline Tunnel and the Red House Diversion Structure.

The East Slope Collection System consists of an 8-inch diameter pipeline and several drop inlets which collect natural drainage along its route from the Incline Tunnel to the Red House Diversion Structure on Franktown Creek. Approximately 1,291 acres drain into the East Slope Collection pipeline. The State has indicated that flows from the East Slope are fairly consistent at approximately 1.5 cfs.

Red House to Tanks Transmission Main

The transmission line leaving the Red House Diversion Structure is 24 inches in diameter for approximately the first 2,000 feet then transitions into an 18-inch diameter pipeline. The 18-inch diameter transmission line follows the original flume alignment to the Tanks. At the Tanks, flows are split via two separate effluent pipes for conveyance to Storey County Water System and Carson City. Overall capacity through the existing pipeline between the Red House Diversion Structure and the Tanks is approximately 2,000 gpm but its capacity could be potentially improved to up to 4,000 gpm by doing repairs on the existing pipeline.

The last 3,800 feet of this pipeline from Red House Diversion Structure to the Tanks is located in the Hobart Basin access road. This segment of the pipeline has a very shallow cover and has been damaged by large trucks and equipment that have used the road. Sections of the pipe have been crushed resulting in reduced conveyance capacity. Some of the damage might also be due to a vacuum created inside the pipe during operation. The State Buildings and Grounds has requested that the replacement of these 3,800 feet of pipeline be given the highest priority in the next series of improvements to the overall system. Without these repairs, the system cannot accommodate all of the pumped flows from Marlette Lake. Pumping from the new improvement at Marlette Lake began in late summer, 2010.

Tanks to Quill Water Treatment Plant

The pipeline from the Tanks to the Quill WTP is a 10-inch diameter gravity pipeline, approximately 16,500 feet long, with a capacity of 2,000 gpm (2.9 mgd) that was originally constructed in the 1960s to serve a State water treatment plant near Ash Canyon. The State water treatment plant (Ash Canyon WTP) served the State facilities and a portion of the Carson City system. Carson City completed the construction of the Quill WTP in 1992 and the pipeline was extended from the Ash Canyon WTP to the new Quill WTP. The Ash Canyon WTP has been decommissioned, but the Ash Canyon storage tanks are now part of the existing Carson City water system.

Stewart Water System. The Stewart Water System provides water to the State Stewart facilities (previous Stewart Indian School) and includes a well, water chlorination building, and related facilities.