

# Appendix E

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Action Plans

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## Acronyms

APN	Assessor Parcel Number
BLM	Bureau of Land Management
CCMC	Carson City Municipal Code
CSWP Plan	Community Source Water Protection Plan
CWSD	Carson Water Subconservancy District
ESRI	Environmental Systems Research Institute
GIS	Geographic Information System
HHW	Household Hazardous Waste
ISWPP	Integrated Source Water Protection Program
LID	Low Impact Design
MHP	Mobile Home Park
PCS	Potential Contaminant Source
QR	Quick Response
STEM	Science, Technology, Engineering, and Math
SWPAs	Source Water Protection Areas
WCP	Watershed Control Plan
WHPP	Wellhead Protection Plan
WTP	Water Treatment Plant

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## Appendix E

### Action Plans

Carson City has been working to implement source water protection measures since the initial adoption of the Carson City Community Source Water Protection (CSWP) Plan in 2014. The community's dedication to safeguarding drinking water supplies is commendable, and Appendix E aims to highlight the outstanding source water protection efforts put forth by the community. Through collaborative efforts, Carson City has improved their household hazardous waste program, coordinated with State Parks and State water systems to maintain surface water quality, increased public education and outreach through numerous community events, including the annual source water assessment day, and prioritized and completed sewer extension connections within source water protection areas (SWPAs). Carson City's commitment to source water protection demonstrates a proactive approach to identifying and addressing potential contaminant sources in the surrounding public drinking water supply. Carson City's efforts serve as an exemplary model for communities striving to implement source water protection measures. The community's source water protection achievements since 2014 are a testament to their dedication centered around environmental stewardship and the health and well-being of the residents.

Appendix E includes the implementation Action Plans for Carson City, the State of Nevada Marlette-Hobart Water System, and the Cottonwood Mobile Home Park (MHP). The Action Plans include an account of action project achievements from 2014 – 2023 for Carson City and the State of Nevada Marlette-Hobart Water System. Each Action Plan contains new action projects created by the local planning team to reflect current water system operations and future source water protection goals within the community. The action projects are organized by management strategy, and implemented projects contain a detailed description of project application since 2014. The action projects listed in the following tables are not in order of priority. Instead, the items are grouped by management strategy, such as public education, coordination, or monitoring, etc.

The Action Plans were developed using the 2014 CSWP Plan, existing Wellhead Protection Plans and the outcomes of the Team meetings throughout 2013, 2014, and 2023. Where applicable, specific action projects include supporting agencies, priorities, and projected completion timeframes. The Action Plans follow the management strategies to continue 2014 CSWP Plan implementation. Implementation is dependent upon resource availability and action projects will be implemented as funding and time allows by the respective public water systems.

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Carson City Source Water Protection Action Plan and Implementation <sup>1</sup>													
Carson City Public Works – Water Division			Applicable Area									Key Implementing Department or Group	
Management Strategy	Action Description & Achievements	Implemented	Ongoing	Priority <sup>1/</sup>	County Wide	2-Yr SWPA	5-yr SWPA	10-yr SWPA	25-yr SWPA	Watershed/ Recharge	Other		
1.1	Coordination and Planning	Consider conducting a source water protection needs assessment in collaboration with landowners.			High						X		Public Works, State Hobart/Marlette System
1.2	Coordination and Planning	Consider designating the land use “public conservation” to protect water quality.			Medium						X		Planning
1.3	Coordination and Planning	Consider direct coordination with State Parks for protection of surface water quality in the Marlette-Hobart water system.  <i>The State of Nevada and Carson City Public Works – Water Division, have developed a multiagency collaborative effort to protect surface water quality in the Marlette-Hobart water system.</i>	✓		Medium						X		Public Works, State Hobart/Marlette System
1.4	Coordination and Planning	Consider an agreement between Carson City and the State of Nevada to clarify roles and responsibilities regarding the Marlette-Hobart water system.  <i>Carson City Public Works – Water Division and the State of Nevada have developed a collaborative effort to clarify roles and responsibilities for the Marlette-Hobart water system. For example, Carson City currently has a stand-alone water quality sampling program for Marlette Lake, in addition to the State and federal regulations by which the State of Nevada is in full compliance.</i>	✓		Medium						X		Public Works & State Hobart/Marlette System

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1.5	Coordination and Planning	Consider an annual interdepartmental CSWP Plan status update including assigning roles and responsibilities in coordination with other meetings or trainings (Planning, Health and Human Services, Public Works, environmental control, water/stormwater, Fire Department, Open Space).			High	X							Public Works Director or Designee
1.6	Coordination and Planning	Consider annual updates and maintenance of the CSWP Plan digital geodatabase. (2023)			High	X							Public Works
1.7	Coordination and Planning	Consider source water protection in updates to the Effluent Management Plan. (2023)			High	X					X		Public Works
1.8	Coordination and Planning	Consider SWPAs for the Washoe Tribe of Nevada and California in the Carson City CSWP Plan. (2023)			High	X					X		Public Works & Planning
1.9	Coordination and Planning	Consider water resource protection through land use planning in the Carson City Master Plan update. (2023)			High	X							Public Works & Planning
2.0	Coordination and Planning	Consider source water protection in updates to the Carson City Emergency Operations Plan. (2023)			High	X							Fire Department & Public Works
2.1	Coordination and Planning	Coordinate with NDEP on availability of, and eligibility for, funding to address emerging contaminants. (2023)			High	X							Fire Department & Public Works



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2.1	Domestic Septic Tank Program	<p>Maintain the existing program and continue to work toward completing mandatory connections in the New Empire and Southeast Carson City areas.</p> <p><i>Carson City has completed mandatory sewer connections in the New Empire Area. The Southeast Sewer Conversion Project is 75% complete, and Carson City is currently pursuing the remaining 25%. Additional information can be found on the Carson City Public Works sewer extension project <a href="#">website</a>.</i></p>	✓	✓	High		X	X	X	X			Public Works
2.2	Domestic Septic Tank Program	<p>Consider prioritizing municipal sewage facility extension projects based on the location of septic systems in the 2-, 5-, 10-, or 25-year SWPAs.</p> <p><i>Carson City has prioritized and completed sewer connections within 2- to 25-year SWPAs in the New Empire and Southeast Carson City Areas. Additional information can be found on the Carson City Public Works sewer extension project <a href="#">website</a>.</i></p>	✓										Public Works
2.3	Domestic Septic Tank Program	<p>Consider revising code language to allow more control over new septic systems on single parcels.</p>			Low		X			X	X		Planning

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3.1	Fuel Storage Tank Program	<p>Develop and maintain management strategies directed at the Aboveground Storage Tanks.</p> <p><i>The Carson City Fire Prevention Division performs various tasks designed and intended to reduce the incidence of fires and other non-specific emergencies which occur within the community. Management strategies directed at aboveground storage tanks fall within the jurisdiction of the Carson City Fire Prevention Program.</i></p>	✓		Medium	X							Public Works & Fire Department
4.1	Household Hazardous Waste (HHW) Program	<p>Request technical assistance to update the HHW outreach and education process (handouts, mailings, website information, etc.).</p> <p><i>HHW educational handouts have been developed and will be posted on the website.</i></p>	✓		High	X							Public Works

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4.2	Household Hazardous Waste Program	Request technical assistance to formalize operating procedures for the existing HHW Program.  <i>Carson City has developed standard operating procedures as formal procedures for the HHW Program. For example, the Health and Safety document for HHW Collections is in Policy Tech, Carson City’s internal policy procedure tracking software. Many of Carson City’s policies are housed in Policy Tech, and policies are forwarded out to affected staff as needed for review and acceptance.</i>	✓		High	X							Public Works
4.3	Household Hazardous Waste Program	Consider HHW Waste Program collaboration with other communities or counties.  <i>Carson City currently collaborates with Douglas County on Household Hazardous Waste. For example, Carson City will put residents in touch with Douglas County Hazardous Waste when applicable.</i>	✓		High	X							Public Works

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4.4	Household Hazardous Waste Program	Evaluate the need and feasibility for accepting waste paint.  <i>Carson City HHW Program currently accepts waste paint if 'drying out' is unavailable for residents. Carson City also handles waste paint from illegal and/or 'other' dumping. More information can be found on the <a href="#">HHW website</a>.</i>	✓		High	X							Public Works
4.5	Household Hazardous Waste Program	Consider expanding the HHW Program to address disposal of pharmaceuticals from residential sources.  <i>Carson City currently handles residential pharmaceutical disposal at the 'dead animal pit'.</i>	✓		Low	X							Public Works
4.6	Household Hazardous Waste Program	Consider expanding the HHW Program to address disposal of biohazardous materials such as needles, sharps and lancets.  <i>Carson City currently accepts needles and sharps from the Partnership Carson City and from private citizens. Disposal occurs in the 'dead animal pit'.</i>	✓		Medium	X							Public Works
5.1	Maintenance	Continue best management practices that reduce stormwater contamination and the potential for contaminant infiltration in areas near wellheads.			Medium					X			Public Works & Planning

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6.1	Open Space Management	Consider conducting an open space needs assessment for source water protection coordinated among Public Works and Open Space Departments for surface waters.			High					X	X		Open Space & Public Works
6.2	Open Space Management	Identify facilities or best management practices to protect runoff and recharge water quality.  <i>Facility identification is an informal practice that is incorporated into regular Open Space management activities. Each property is evaluated by maintenance and natural resource staff to identify runoff issues and mitigation options. Through experience of the conditions of the properties that Open Space manages, Open Space is aware of potential areas of concern for erosion and runoff.</i>	✓		Medium					X	X		Open Space, Public Works & State Hobart/Marlette System
7.1	Pretreatment Program	Consider adding the Assessor Parcel Number (APN) to forms and applications for ease of program tracking using Geographic Information System (GIS) databases.  <i>Carson City has added the APN to forms and applications for the Pretreatment Program. Additional information can be found the <a href="#">Carson City Environmental Control Authority website</a>.</i>	✓		High	X							Public Works

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7.2	Pretreatment Program	<p>Consider adding to the permit checklist whether or not the facility is located within an SWPA.</p> <p><i>Carson City is currently updating inspection procedures in their new system. As inspections are completed, Carson City will pursue adding a SWPA checklist to each permit. This process will not need to be a normal part of inspection unless the SWPA boundaries change, or the industry moves.</i></p>			High		X	X	X	X	X		Public Works
7.3	Pretreatment Program	<p>Develop educational tools for Public Works to use when inspecting and educating businesses.</p> <p><i>Carson City currently has a 'Facts, Oil, and Grease Control' and food service educational tools for businesses. Outside storage is discussed upon inspection. Industry specific handouts include the Business Environmental Program, lists of waste haulers, and city requirements for storage.</i></p>	✓		High	X							Public Works
8.1	Public Outreach and Education	<p>Initiate classroom presentations to middle school science classes.</p> <p><i>RCI (ISWPP Contractor), in coordination with Carson City School District, completed source water protection presentations to middle schools including Silver State Charter in 2014, Eagle Valley in 2015, and Carson Middle School in 2014, 2015, and 2017.</i></p>	✓		High	X							School District

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8.2	Public Outreach and Education	<p>Consider presenting at appropriate school events, for example: annual Science, Technology, Math, and Engineering (STEM) night as described in the Carson City CSWP Education Plan.</p> <p><i>RCI (ISWPP Contractor), in coordination with Carson City School District, completed a source water protection presentation for STEM night and Carson City School District Science Fair at Eagle Valley Middle School in 2014, Eagle Valley STEM night in 2017, and Eagle Valley STEAM Night in 2018.</i></p>	✓		High	X							School District
8.3	Public Outreach and Education	<p>Consider coordination with schools to participate in “water week” or “public works week” activities.</p>			High	X							School District & Public Works
8.4	Public Outreach and Education	<p>Update communication materials: website, consumer confidence report, utility bills, etc. to be current with the CSWP Plan.</p> <p><i>The Carson City Water Quality Report is updated annually. The <a href="#">2022 Water Quality Report</a> outlines source water protection on Page 2, and the 2023 Water Quality Report will be updated to reflect the 2023 Carson City CSWP Plan update.</i></p>	✓		High	X							Public Works

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8.5	Public Outreach and Education	Update the HHW Program information available to the public on the city’s web site. Carson City currently has a draft information sheet which is being updated and will be posted on the website as staff time allows.			High	X							Public Works
8.6	Public Outreach and Education	Update information for permit holders in Carson City’s pretreatment program, which are located in SWPAs. Carson City is currently updating inspection procedures in their new system. As inspections are completed, Carson City will pursue adding a SWPA checklist for each permit. Information can be updated to reflect whether a permit holder is located within a SWPA.			High		X		X				Public Works
8.7	Public Outreach and Education	Develop and distribute information regarding what to do in the event of a contaminant spill or leak. Target audience is pretreatment permit holders and other businesses storing hazardous materials.  <i>Carson City complies with the United States Environmental protection Agency’s requirement of slug discharge response plan evaluations. Where needed, Carson City requires spill response plans for each industry or area within the industry.</i>	✓		High	X							Public Works
8.8	Public Outreach and Education	Consider expanding CSWP educational materials available at the Children’s Museum.			Low	X							Other



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8.9	Public Outreach and Education	<p>Consider coordination with Parks and Open Space for educational signage regarding source water protection for watershed/recharge SWPAs.</p> <p><i>Parks and Open Space installed educational signage regarding source water protection for watershed/recharge SWPAs. For example, an educational kiosk explaining how the watershed is a source for drinking water is displayed at the Kings Canyon Waterfall Trail. Additional educational signage plans are detailed in Project 8.11 of Carson City Source Water Protection Action Plan.</i></p>	✓		High	X							Public Works
8.10	Public Outreach and Education	<p>As available, develop and distribute information on proper disposal of pharmaceuticals.</p> <p><i>Carson City has year-round prescription drug drop off boxes at the Carson City Sheriff's office. Details are advertised on the <a href="#">Carson City Website</a>.</i></p>	✓		Medium	X							Public Works & Health

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8.11	Public Outreach and Education	<p>The first Annual Carson City Source Water Assessment Day was held at the Kings Canyon Trailhead on September 10<sup>th</sup>, 2022. Participating organizations included River Wranglers, Muscle Powered, Carson Valley Trails Association, and the ISWPP.</p> <p><i>Carson City Public Works has plans to continue and expand the Annual Source Water Assessment Day. For example, Carson City Public Works will coordinate with the previous participating organizations and expand education about source water protection to the Westside Creeks water sources and the Marlette Lake-Hobart Water System. (2023)</i></p>	✓	✓	High	X							Public Works, Open Space, & Carson Water Subconservancy District
8.12	Public Outreach and Education	<p>Consider continued source water protection education on the Westside Creek Sources. For example, expand the Carson City Annual Source Water Assessment Day to include Westside Creek Sources. (2023)</p>			High	X					X		Public Works, Open Space, & Carson Water Subconservancy District

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8.13	Public Outreach and Education	Open Space staff, working in coordination with a Recreational Trails Program grant, will consider producing interpretive signs to be located throughout the Carson River corridor along the River Trail. Staff will consider coordinating with CWSD to produce water quality and source water protection messaging. For example, working with Carson City Public Works staff, a high-water mark sign is being considered at the Morgan Mill Trailhead. (2023)			High	X							Public Works, Open Space & Carson Water Subconservancy District
8.14	Public Outreach and Education	Consider conducting source water protection education and outreach in conjunction with Master Plan policies. (2023)			Medium	X							Public Works, Community Development, & Community Relations
8.15	Public Outreach and Education	Consider promoting source water protection on the Carson City website. For example, create a public online viewer which includes source water protection areas (SWPAs). Carson City has license to create and house a public Community Source Water Protection Viewer. (2023)			Medium	X							Public Works Geographic Information System Services
8.16	Public Outreach and Education	Continue to work with CWSD to expand non-point source pollution education in the Carson River Watershed. For example, include a link to the CWSD website on the Community Source Water Protection Viewer. (2023)			Medium	X							Public Works, Carson Water Subconservancy District, Community Development, & Community Relations

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8.17	Public Outreach and Education	Coordinate with Community Development to target Businesses in Carson City with educational and promotional materials. For example, develop an initiative to encourage businesses to help promote and protect clean drinking water. New businesses can receive an educational flyer highlighting the CSWP Plan and possible partnership to be ambassadors of the CSWP Plan. (2023)			Medium	X							Community Development & Community Relations
8.19	Public Outreach and Education	Consider a community source water protection presentation at appropriate events or classes at Western Nevada College, which has a flexible process for presentations. For example, present for specific classes that can host a guest speaker to discuss source water protection in Carson City, as described in the Carson City CSWP Education Plan. (2023).			Medium	X							Community Development & Community Relations

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9.1	Quill Water Treatment Plant Watershed Control Plan	Reduce feces from livestock in the Area of Influence.  <i>In May 2022, sheep were grazed for fuels reduction per the 2020 Carson City Grazing Management for Fuels Reduction Plan Update. Based on the Areas of Influence established in the Quill WTP WCP, Carson City Open Space installed barrier fencing to prevent sheep from grazing above the Quill WTP. Additional measures include pressure washing the road following sheep crossing to reduce the potential for droppings to move on site.</i>	✓		High						X		Public Works & Open Space
9.2	Quill Water Treatment Plant Watershed Control Plan	Continue to control access within the Areas of Influence.  <i>North kings Canyon Road is closed to motorized access, and Ash Canyon Road was seasonally closed for the 2021/2022 winter. Trails are in good condition and maintenance is ongoing.</i>	✓		High						X		Public Works & Open Space
9.3	Quill Water Treatment Plant Watershed Control Plan	Maintain Ash Canyon Road.  <i>Carson City Open Space conducted road maintenance on Ash Canyon Road prior to opening the road to vehicles in Summer 2022. Annual maintenance will continue into the foreseeable future.</i>	✓	✓	High						X		Public Works & Open Space

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9.4	Quill Water Treatment Plant Watershed Control Plan	<p>Prioritize stabilization in the Area of Influence.</p> <p><i>Collaboration between Muscle Powered and Carson City Open Space resulted in trail and road stabilization within the Areas of Influence. Stabilization practices are ongoing as erosion and sedimentation issues arise.</i></p>	✓	✓	High						X		Open Space & Muscle Powered
9.5	Quill Water Treatment Plant Watershed Control Plan	<p>Reduce pet waste in Key Areas in the Area of Influence.</p> <p><i>Carson City Parks and Open Space have prohibited dogs on the Waterfall Trail. The newly expanded trailhead and parking lot include latrine toilets for the public to utilize, further reducing the risk of droppings in Key Areas within the Area of Influence.</i></p>	✓		High						X		Carson City Parks & Open Space
9.6	Quill Water Treatment Plant Watershed Control Plan	<p>Reduce impacts from users of the Waterfall Trail.</p> <p><i>Waterfall Trail improvements are complete, including parking lot improvements, expanded trailhead and increased stabilization, public latrine toilets, and educational signage about the watershed. Carson City Open Space anticipates that stabilization practices are ongoing as erosion and sedimentation issues arise.</i></p>	✓	✓	High						X		Carson City Parks & Open Space

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10.1	Regulatory Measures	Consider including weather protection and covered bins in addition to secondary containment in Carson City Municipal Code (CCMC) Section 12.06.248- Sewerage Use- Secondary Containment.  <i>Carson City currently requires outside covered secondary containment if outside, per State and federal regulations. Carson City will consider adding secondary containment to the Carson City Municipal Code (CCMC) Section 12.06.248- Sewerage Use- Secondary Containment.</i>	✓	✓	High	X							Public Works & Planning
10.2	Regulatory Measures	Request technical assistance to review code and to develop a strategy for revisions.			Low	X							Planning
10.3	Regulatory Measures	Consider code updates for septic system construction appropriate for watershed/recharge areas.			Low		X	X	X	X	X		Planning

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10.4	Regulatory Measures	<p>Collaborate with other local municipalities in developing appropriate Low Impact Design Standards for stormwater (consider for example appropriateness of infiltration measures near public supply wells).</p> <p><i>As directed by the Carson City Board of Supervisors under Resolution 2018-R-9, Carson City's Stormwater Management Plan Update included a provision to include Low Impact Development (LID) measures to comply with the MS4 requirements. The City's Drainage Manual that became effective in July 2021, requires LID for all new development and redevelopment and includes information on various best management practices to control runoff and filter pollutants most suited for the area.</i></p>	✓		Medium		X						Public Works
11.1	Shallow Groundwater Monitoring	Consider conducting an assessment of future groundwater monitoring needs and the triggers for developing and implementing new groundwater monitoring plans. For example, consider conducting an assessment in coordination with the Carson City Master Plan update. (2023)			Low	X							Public Works & Planning



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12.1	Solid Waste Management Program	Consider expanding the Solid Waste Management program to address the evolving concerns and regulations for proper disposal of wastes such as pharmaceuticals.  <i>Carson City has a ‘proper disposal of wastes’ handout that was used for the Public Works Open House on May 20, 2022. Carson City will consider adding to the website once updated.</i>	✓	✓	Low		X						Public Works
13.1	Spills and Complaints	Maintain best management practices that reduce spills and potential contaminant infiltration near wellheads.			High	X				X			Public Works
13.2	Spills and Complaints	Enhance communications between local government departments to promote awareness about potential effects on water sources during emergency response and spill clean-up operations. For example, form a working group to establish spill response notifications from dispatch in real-time. (2023)			High	X							Public Works & Fire Department
13.3	Spills and Complaints	Facilitate the exchange and maintenance of internal source water protection mapping updates with the Carson City Fire Department. For example, a shared Environmental Systems Research Institute (ESRI) viewer could include the most up to date SWPAs, well locations, and hazardous spill response locations. (2023)			Medium	X							Public Works & Fire Department

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	Management Strategy	Action Description & Achievements	Implemented	Ongoing	Priority <sup>1/</sup>	County Wide	2-Yr SWPA	5-yr SWPA	10-yr SWPA	25-yr SWPA	Watershed/ Recharge	Other	Key Implementing Department or Group
13.4	Spills and Complaints	Expand communication with the Washoe Tribe of Nevada and California related to emergency response and spill clean-up operations to protect water quality. (2023)			High	X					X		Fire Department
13.5	Spills and Complaints	Expand communications between the Carson City Fire Chief and the Washoe Tribe of Nevada and California regarding emergency and stormwater management which potentially affect water sources. (2023)			High	X					X		Fire Department

<sup>1</sup>Schedule: High Priority to be initiated within 5 years, Medium Priority to be initiated within 8 years, Low Priority to be initiated within 12 years

### Marlette-Hobart Water System Action Plan and Implementation<sup>1</sup>

Marlette-Hobart Water System			Applicable Area										Key Implementing Department or Group <sup>12</sup>
Management Strategy	Action Description	Implemented	Ongoing	Priority <sup>1/</sup>	County Wide	2-Yr SWPA	5-yr SWPA	10-yr SWPA	25-yr SWPA	Watershed/Recharge	Other		
1.1	Private Well Condition	Consider abandoning inactive wells located within SWPAs.  <i>The State of Nevada has abandoned one well located within a SWPA since 2014.</i>	✓		High		X	X	X		X		State Buildings and Grounds
2.1	Public Outreach and Education	Coordinate with Carson City Public Works to incorporate the Marlette-Hobart Water System into the Carson City Annual Source Water Assessment Day. (2023)			High						X		State Buildings and Grounds & Public Works
2.2	Public Outreach and Education	Consider adding source water protection signage at access points to Hobart Reservoir and Marlette Lake. For example, post SWPA signage along the pipeline road to Hobart Reservoir and add SWPA signage at mountain bike and hiking trail access points leading to Marlette Lake. (2023)			High						X		State Buildings and Grounds
2.3	Public Outreach and Education	Consider developing interactive signage at access points to Hobart Reservoir and Marlette Lake. For example, use Quick Response (QR) codes to explain source water and source water protection to the public who use Marlette Lake and Hobart Reservoir for recreation. (2023)			Medium						X		State Buildings and Grounds

<sup>1</sup>**Schedule:** High Priority to be initiated within 5 years, Medium Priority to be initiated within 8 years, Low Priority to be initiated within 12 years

<sup>2</sup>**Implementation:** The lead responsibility for implementation of the action items for the Marlette-Hobart Water System is State Buildings and Grounds.

## Cottonwood Mobile Home Park Wellhead Protection Plan Action Summary<sup>1</sup>

Cottonwood Mobile Home Park Wellhead Protection Plan Action Summary			Source of Actions <sup>1 2</sup>			Key Implementing Department or Group <sup>2</sup>
Management Strategy	Action Description	Cotton wood MHP Comments	WHP Plan -- Existing PCSs	WHP Plan - Future PCSs		
1.1	Coordination and Planning	Coordinate with Carson City to notify new businesses or activities (possible PCSs) when they plan to locate in a SWPA.			X	Cottonwood MHP
1.2	Coordination and Planning	Continue to review groundwater quality and compliance at Silver Oak Golf Club. Coordinate with NDEP and Carson City.		X		Cottonwood MHP
2.1	Domestic Septic Tank Program	Encourage Carson City to extend the sanitary sewer system and connect the neighborhood near to Cottonwood MHP that is currently served by septic systems.		X		Cottonwood MHP
3.1	Public Outreach and Education	Provide information about proper maintenance and abandonment of private wells to local homeowners.	X			Cottonwood MHP
3.2	Public Outreach and Education	Install “Wellhead Protection Area” signs along Arrowhead Drive.		X		Cottonwood MHP
3.3	Public Outreach and Education	Periodically host educational seminars for Cottonwood MHP residents and other interested persons on source water protection.		X		Cottonwood MHP
3.4	Public Outreach and Education	Distribute information to Cottonwood MHP residents on Carson City’s Household Hazardous Waste collection program.		X		Cottonwood MHP
3.5	Public Outreach and Education	Periodically review, contact, assess and advise local PCSs that they are located in a SWPA.			X	Cottonwood MHP
3.6	Public Outreach and Education	Encourage public education about nitrate in groundwater and its detrimental health effects.			X	Cottonwood MHP
4.1	Regulatory Measures	Encourage Carson City and the State of Nevada to prohibit the use of solvent septic cleaners (i.e. solvents such as 1, 1, 1 trichloroethane.)		X		Cottonwood MHP
4.2	Regulatory Measures	Work with Carson City Supervisors to prohibit the expanded use of septic systems within the Cottonwood MHP Wellhead protection areas (Aquifer Science Inc., 2001)			X	Cottonwood MHP

## Cottonwood Mobile Home Park Wellhead Protection Plan Action Summary<sup>1</sup>

Cottonwood Mobile Home Park Wellhead Protection Plan Action Summary			Source of Actions <sup>1 2</sup>			Key Implementing Department or Group <sup>2</sup>
Management Strategy	Action Description	Cotton wood MHP Comments	WHP Plan -- Existing PCSs	WHP Plan - Future PCSs		
5.1	Shallow Groundwater Monitoring	Encourage expansion of shallow groundwater monitoring programs in Carson City to include sampling for pharmaceuticals/endocrine disruptors.	X			Cottonwood MHP
5.2	Shallow Groundwater Monitoring	Encourage a study be initiated to assess potential impacts of deicing chemicals on groundwater in Eagle Valley.	X			Cottonwood MHP
6.1	Spills and Complaints	Request immediate notification of spills from PCSs, State and local agencies to Cottonwood MHP.		X		Cottonwood MHP
7.1	Private Well Condition	Consider a study of domestic wells in the vicinity of Cottonwood MHP to assess any health hazards and to assure that wells are properly sealed or abandoned.		X		Cottonwood MHP
7.2	Private Well Condition	Consider collaboration with State and local officials to establish a Private Domestic Well Program to fund repairs or abandonment of residential wells.	X			Cottonwood MHP

<sup>1</sup>**Sources:** This summary was developed from Section 5.0 of the “Wellhead Protection Program (WHPP) For Cottonwood Mobile Home Park Water System, Carson City, Nevada” (Aquifer Science Inc., April 2001) and comments provided by the Cottonwood MHP.

<sup>2</sup>**Implementation:** Actions suggested by the water system owner during development of this document (Column 3) have not been formally adopted by the Cottonwood MHP. WHP Plan actions for existing and future PCSs (Columns 4 and 5) have been previously adopted by the Cottonwood MHP for implementation. The lead responsibility for implementation of these action items is the Cottonwood MHP.