

Silver Springs Mutual Water Company (SSMWC)
Water Conservation Plan
Updated for compliance with NRS 540.121 to 540.151 (2025)

1. Background / System Information

Silver Springs Mutual Water Company (SSMWC), Public Water System ID NV0000223, serves the town of Silver Springs in Lyon County, Nevada. The water system spans approximately 50 square miles and is fully metered. As of 2025, the estimated population served is 3,043 through 1,217 service connections.

SSMWC sources water from three active wells: Lake Street Well, Idaho Street Well, and Deodar Well. Lake and Idaho wells pump directly into an arsenic removal Water Treatment Plant (WTP), which utilizes multimedia filtration and chemicals (Ferric Chloride, Sodium Hypochlorite, and Polymer) to meet the USEPA arsenic MCL of 10 ppb. The Deodar Well, with current arsenic levels below 10 ppb, can pump directly into the distribution system or to the WTP as needed.

Storage includes three one-million-gallon above-ground tanks. Disinfection is continuously practiced, maintaining a free chlorine residual of 0.25 mg/L. The system consists of two pressure zones. Wastewater services are managed separately by Dayton Utilities.

With continued development along USA Parkway, airport expansion, and nearby industrial growth, water conservation remains critical to delaying infrastructure expansion and mitigating the effects of prolonged droughts in Nevada.

This plan will be reviewed and updated every five years, per NRS 540.131.

2. Plan Elements (per NRS 540.141)

This conservation plan includes:

- Public awareness initiatives
- Promotion of arid/semiarid landscaping
- Specific water conservation measures
- Leak detection and reduction
- Effluent reuse (if applicable)
- Drought contingency planning
- Implementation schedule
- Plan effectiveness metrics
- Tiered pricing structure and analysis

3. Public Awareness

SSMWC promotes water conservation by:

- Providing new customers with conservation literature and plan materials
- Including conservation tips and reminders in bills and newsletters
- Participating in community events such as Earth Day
- Publishing water conservation resources on www.silverspringsmwc.com

4. Arid Landscaping Encouragement

Residents are encouraged to reduce turf areas and use drought-tolerant, native, and low-water-use plants. Information on xeriscaping and drip irrigation is available via the SSMWC website and customer materials.

5. Water Conservation Measures

In accordance with NRS 540.141:

- All customers are metered, and meters are read monthly
- Low flow plumbing fixture standards (NRS 461.175) are enforced
- Wasteful water practices are monitored and penalized
- Water usage data is reviewed for anomalies
- Conservation compliance is verified during new construction inspections

6. Leak Detection & Repair

SSMWC maintains a Capital Improvement Plan to replace aging infrastructure. Monthly water production vs. sales audits are conducted to track non-revenue water and investigate losses. Leak repairs follow written policy:

- Major leaks: repaired immediately
- Minor leaks: repaired within 48 hours

7. Effluent Reuse

Although SSMWC does not manage wastewater, coordination with Dayton Utilities supports potential effluent reuse for applications such as airport landscaping and agriculture (e.g., sod farms).

8. Drought Contingency Plan

Water scarcity is monitored through well-level tracking and coordination with regional suppliers. SSMWC has adopted a four-stage drought and emergency response system, with each stage escalating in response to water supply conditions:

Stage 1 – Advisory

- Public education campaign activated
- Voluntary reductions in outdoor watering
- Prohibited irrigation from 1:00 PM to 5:00 PM
- Identification and notification of excessive users
- Repair of known leaks required within 48 hours

Stage 2 – Moderate Restrictions

- Mandatory watering schedule by address (e.g., odd/even days)
- Continued irrigation restrictions between 1:00 PM and 5:00 PM
- Prohibition of washing hard surfaces (driveways, sidewalks) unless for safety
- Vehicle washing only allowed with automatic shutoff nozzles
- No decorative water features or fountains in use

Stage 3 – Severe Restrictions

- Reduction of watering days to two per week
- No use of potable water for construction or dust control
- No new lawn installations or seeding
- Suspension of hydrant water use (unless for fire protection)
- Enhanced enforcement and penalties for violations

Stage 4 – Critical Emergency

- Irrigation prohibited except for essential trees and food-producing gardens
- One-day-per-week watering for essential landscape areas only
- No irrigation from December through February
- All nonessential outdoor water use banned
- Mandatory 15%+ reduction in total system usage
- Emergency water use allocations may be imposed per account

These stages are declared by SSMWC in response to drought indicators and water system capacity. Notifications will be issued through bills, the website, social media, and local media.

9. Implementation Schedule

All elements are currently in practice. Review and updates occur every five years or as system needs evolve.

10. Plan Effectiveness Metrics

Effectiveness is measured using gallons per capita per day (gpcpd). Annual well production, minus commercial/industrial sales, is divided by estimated population. Seasonal usage comparisons help assess the impact of specific conservation efforts.

As of 2025, SSMWC's gpcpd is approximately 81, demonstrating an improvement from 91.86 gpcpd in 2019. This represents a reduction of approximately 11.8% over six years. The national average residential gpcpd is estimated at 101.5, positioning SSMWC well below the national benchmark and indicating successful conservation progress.

Metering, public education, and leak response remain the primary conservation drivers. The effectiveness of any drought stage implementation or outreach campaign is evaluated against historical usage to guide future planning.

11. Tiered Pricing Structure (per NRS 540.141)

As of 2025, SSMWC has adopted a tiered rate structure to encourage conservation:

- Tier 1: 0–15,999 gallons — \$55.00 flat monthly rate
- Tier 2: 16,000–30,999 gallons — \$5.00 per 1,000 gallons
- Tier 3: 31,000 gallons and above — \$6.00 per 1,000 gallons

Rates are reviewed annually and adjusted if necessary to maintain operational and capital budgets. Changes in water usage in response to rate adjustments are analyzed annually to assess price sensitivity and conservation impact.

12. Requirements to Calculate Water Loss (per NRS 540.145)

- 2020 – 183,651,000 gallons delivered to the distribution system.
 - 159,665,640 gallons billed to SSMWC Membership.
- 2021 – 160,418,700 gallons delivered to the distribution system.
 - 164,305,931 gallons billed to SSMWC Membership.
- 2022 – 167,082,000 gallons delivered to the distribution system.
 - 159,201,530 gallons billed to SSMWC Membership.
- 2023 – 160,424,000 gallons delivered to the distribution system.
 - 141,045,550 gallons billed to SSMWC Membership.

- 2024 – 171,235,000 gallons delivered to the distribution system.
 - o 155,840,310 gallons billed to SSMWC Membership.
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13. Appendices

Appendix A – Efficient Landscaping

Guidelines (zone watering, drip system use, plant selection)

Appendix B – Water-Saving Tips for Residents

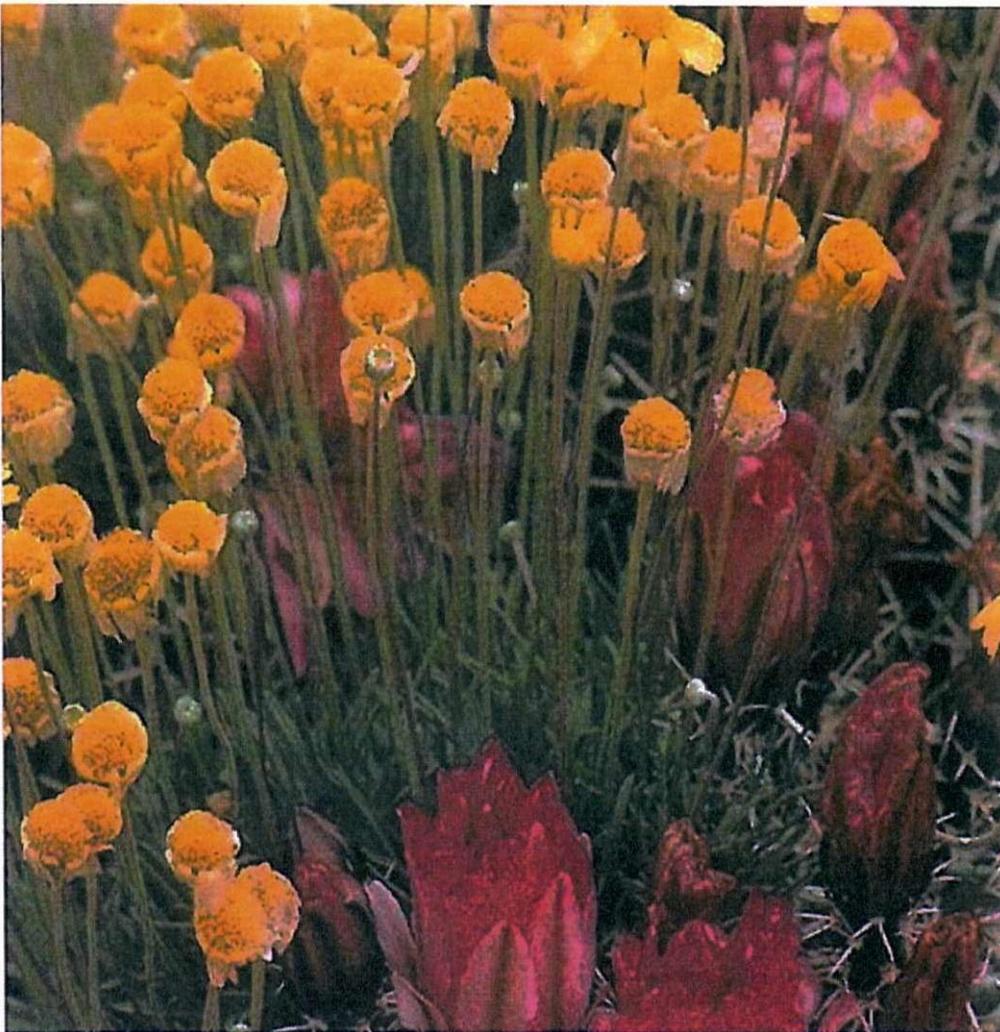
Appendix C – Recommended Low-Water Plants

Efficient Landscaping

Appendix A

Zone Your Landscape

A key to using water efficiently is to group plants of similar water requirements in the same irrigation "zone." For example, trees and shrubs need far less water than bluegrass. Therefore, trees and shrubs should comprise one or more watering zones and your lawn should be a separate zone. Each zone's irrigation should be controlled by a different water valve. By dividing your landscape into zones, you can apply the right amount of water to each type of plant. Plus, zoning your landscape will help to prevent one of the most common irrigation mistakes - overwatering!



Design Your Landscape for Water Conservation

By utilizing smart design principles. You can start saving water even before you install your landscape.

Avoid narrow strips of lawn or water-thirsty plants that must be watered by overhead sprinklers. A narrow strip of lawn (such as the median between a sidewalk and curb) is virtually impossible to irrigate without sprinkler overspray. In addition, narrow planting

strips dry out more quickly than wider areas and require more frequent watering. By using plants and drip irrigation in these narrow areas, you'll ensure long-term water conservation.

What Kind of Irrigation Is Best?

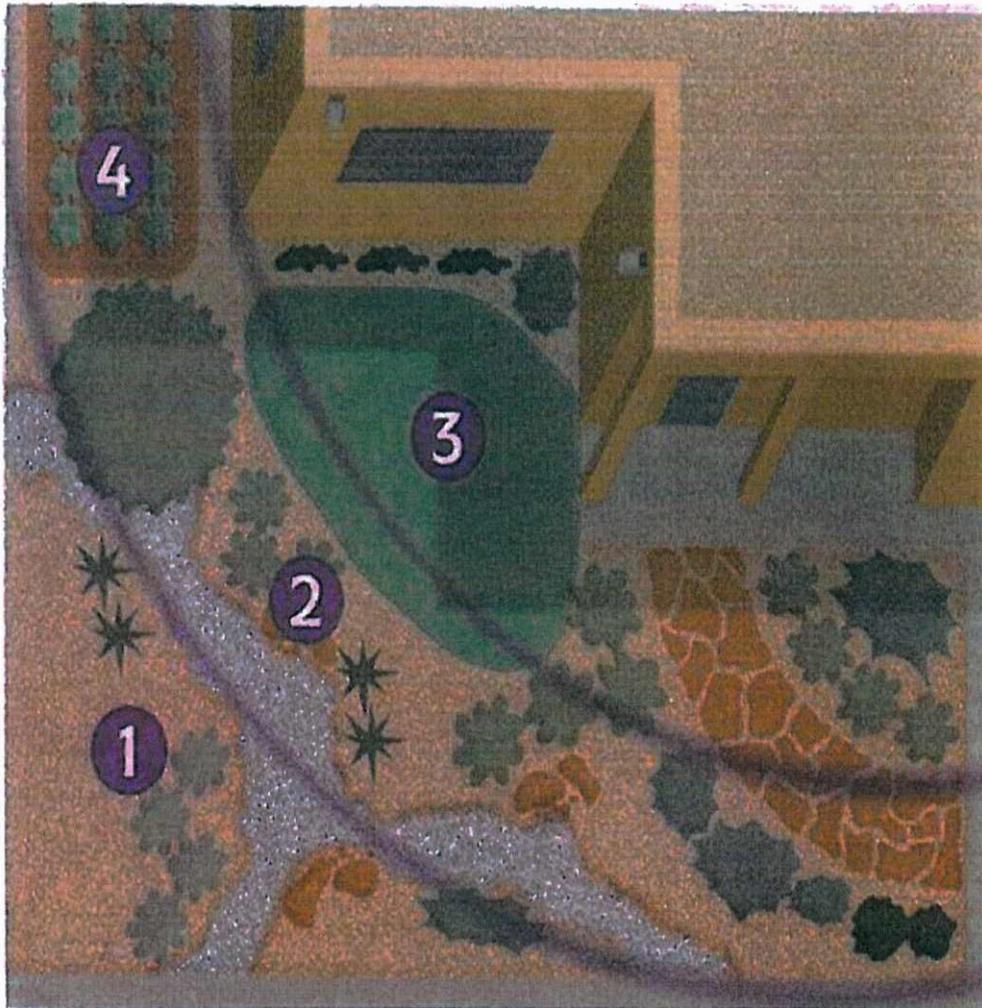
It's Important to use irrigation water wisely and efficiently. Different landscapes-and specific "micro-climates" within a landscape-can best be watered using very different types of irrigation. Here are the most common irrigation methods for the various watering zones in your landscape:

1. Arid Zones Drip irrigation is perfect for the driest zones of a landscape. A drip system saves water because very little is lost to evaporation or runoff. By delivering water slowly and directly to a plant's root zone, drip irrigation promotes healthy plant growth. Water savings can easily be 50% or more versus traditional sprinkling. Drip emitters are well-suited for most trees, shrubs and perennials.

2. Transition Zones Micro-sprayers are an efficient choice for moderate-water-use flowers, perennials and some shrubs. Small areas of groundcover can also be efficiently watered with micro-sprayers.

3. Oasis Zones Traditional sprinklers are designed for water-thirsty turf. Sprinklers can also be an efficient way to irrigate some densely planted flowers and groundcovers. Use the new low-spray-angle heads on lawns and low groundcovers to reduce water loss due to wind. Subsurface irrigation is a new option for some turf areas and other dense plantings . By delivering water underground directly to a plant's roots, subsurface irrigation loses virtually no water to evaporation

4. Vegetable Gardens Instead of watering your backyard garden with a hose, consider converting to a water-conserving drip system. Do-it-yourself kits, available at nurseries and home centers, enable you to run an efficient drip system off an existing hose faucet.



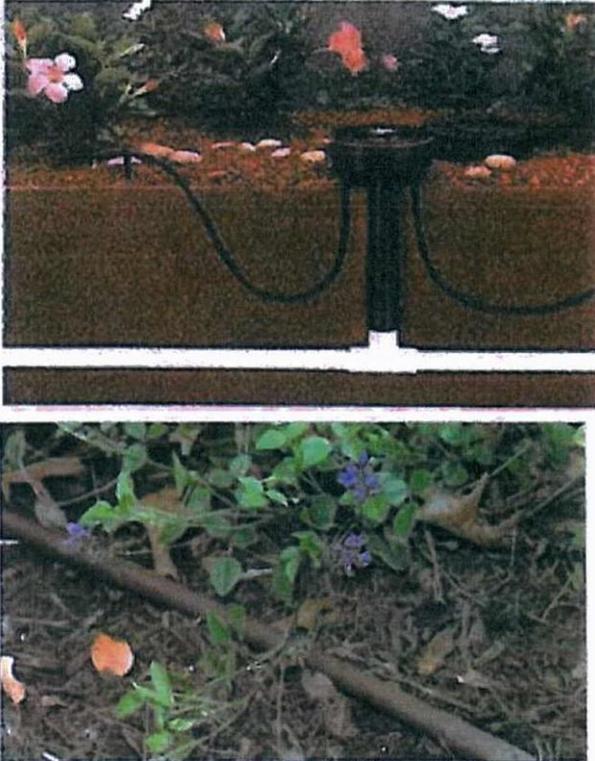
Can Sprinklers be Converted to Drip?

In many cases, existing sprinkler heads can be retrofitted to accommodate multi-line drip emitters.

Analyze your landscape to determine the most efficient way to deliver water. If some of your landscape can be efficiently watered by drip emitters (or if you're converting water - thirsty plantings to water-thrifty plants), drip could be a water-wise option.

Keep in mind that sprinklers and drip emitters apply water at different rates (measured in gallons per minute and gallons per hour, respectively). It's best to put sprinklers and drip emitters on different irrigation valves. Remember, too, that a drip system requires a pressure regulator and filter. Some drip hydrants have built-in pressure regulators and filters, which makes the conversion process easier.

Drip irrigation kits (which can be used to convert vegetable gardens to drip irrigation, for example) are available at hardware stores, home centers and nurseries. In most cases, major irrigation system conversions can best be installed by professional landscape contractors and irrigation specialists.



Irrigation System Testing and Maintenance Checklist

For maximum efficiency, your irrigation system needs regular inspections and adjustments. Use the following checklist as a guide to routine maintenance.

Spring

- Set controller for watering times and durations.
- Replace back-up battery in controller.
- Test manual shut-off/isolation valve.
- Check and clean filters.
- Check and clean screens in sprinkler heads. Adjust spray pattern to eliminate water waste due to overspray.
- Inspect all drip emitters. Clean if clogged. Make sure emitters are applying water to the entire root zone of each plant.

Summer

- Adjust controller for watering times and durations during the hottest months.

- Check and clean filters.
- Inspect all drip emitters. Clean if clogged.

Fall

- Adjust controller to further shorten watering times and durations as the weather cools.
- Test manual shutoff/ isolation valve.
- Check and clean filters.
- Inspect all drip emitters. Clean if clogged. Make sure emitters are applying water to the entire root zone of each plant.
- When daytime temperatures are below 40 degrees, discontinue watering and turn *off* the irrigation system.

Smart Irrigation Saves Water

Water is precious in the arid West. The plants that have adapted to living in our harsh, dry conditions require little water. Plants native to wetter climates, on the other hand, require significant amounts of supplemental water when grown in Nevada.

But no matter what kind of landscape you have, using the right type of irrigation can substantially reduce your water use. The key to smart irrigation is to give plants the amount of water they need to grow and thrive (no more, no less) - and to deliver that water in the most efficient way possible.

By examining your existing irrigation system, fixing leaks, and converting to efficient drip emitters and spray heads where appropriate, you'll conserve water and help preserve Nevada's enchanting quality of life.

Water Saving Tips

Appendix B

Question: Why conserve water?

Answer: Over the last several years, interest in water conservation has increased, particularly in the western U.S. where drought conditions persist. Many communities have policies about water usage and some charge more based on increasing consumption. There are many reasons for conserving water. Here are three of the most compelling:

1. It's the right thing to do. Everyone needs water to survive. Simply put, we have an obligation to share this vital resource and not waste it.
2. We have more people, but not more water. The amount of water on Earth remains the same while the population soars. We can take steps now or we can be forced into them down the road.
3. It will save money. The less water you use, the less you have to pay, and the more money you will have for other things.

Not only will you save money, but you will also help your community save money too. If conservation is practiced widely by homeowners within a community, you have sustained reductions in pumping demands at the water wells.

Question: What are the biggest water users in a home?



Answer: In most homes, toilets, washing machines, and dishwashers use the most water. Newer models such as low-flow toilets and efficient washers and dishwashers save water and money. A 1.6 gallon-per-flush toilet can save thousands of gallons each year and energy saving washing machines use 35 to 50 percent less water and half as much energy.

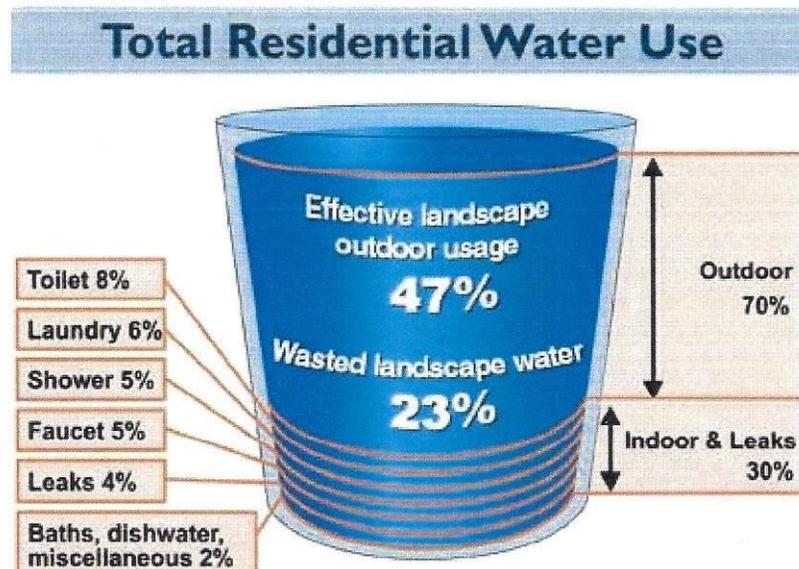
Question: How can homeowners save water?

Answer: There are many ways to save water in the home including:

1. Keep a pitcher of water in the refrigerator rather than running the tap until the water gets cold.
2. Fixing that leaky toilet can save as much as 500 gallons of water a day.
3. Replace five-gallon-per-flush toilets with standard 1.9 gallon-per-flush models. This can save an average of 18,600 gallons per year.
4. Repair dripping faucets by replacing washers. One drop per second can add up to 2,700 gallons per year.
5. Don't let water run while brushing teeth or shaving. On average you will save more than five gallons of water.
6. Garbage disposals use approximately 11.5 gallons of water per day. Try composting organic kitchen waste instead.
7. Use the dishwasher and washer only when you have full loads. Never pour water down the drain when there may be another use for it such as watering a plant or cleaning around your home.
8. Watch your sprinklers in action and adjust your sprinklers if necessary.
9. Water less on overcast or cool days and never water while it's

raining.

10. Water your lawn during less windy, cooler times of the day.
11. Make sure nothing is blocking irrigation sprinkler heads.
12. Set your lawn mower blades one notch higher. Longer grass means less evaporation.
13. Adjust your sprinklers so that water only lands on the grass and areas that need it and not in the street or on the sidewalk.
14. Direct the water drain line to a flowerbed, tree base, or lawn if you have an evaporative air conditioner.
15. Put a layer of mulch around trees and plants to slow evaporation and protect roots from temperature extremes.
16. Look for wet spots to help you find leaky or broken pipes, valves, and fittings in irrigation systems.
17. Careful weeding, pruning, fertilizing and pest control will ensure a healthy landscape and increase water savings.



Low Water Landscaping

Appendix C



Cherry Meidiland Rose



Cranberry Cotoneaster



Echinacea



Crabapple Tree



Feather Reed Grass



Moonglow Juniper



Ice Plant



Kentucky Bluegrass



Moonlight Broom



Red Flowering Yucca



Red Hot Poker



Russian Sage