



9 Environmental Stewardship

Taylorsville is located in a region endowed with abundant natural resources and stunning scenery. We strive to lead by example, to collaborate with neighboring communities, to incorporate innovative strategies, and to conserve resources. Keeping our air clean and our water pure is crucial to ensure the health of future generations. We will work together as neighbors to create a community culture of preparedness for emergencies and natural disasters.



*"I am the Lorax. I speak for the trees. I speak for the trees
for the trees have no tongues."*

Theodor Seuss Geisel aka Dr. Suess (1904-1991)
(from *The Lorax*)

Author, illustrator, publisher

Theodor Seuss Geisel, commonly known by his pen name of Dr. Suess, is most famous as a children's author. His books have sold over 600 million copies and include many of the most popular titles of all-time, including *How the Grinch Stole Christmas!*, *The Cat in the Hat*, *Horton Hears a Who*, *Green Eggs and Ham*, and... *The Lorax*.



Taylorsville General Plan

Chapter 9: Environmental Stewardship

Chapter 9 Contents:

- 9.1 Water Conservation
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Environmental Stewardship Goal: Taylorsville will cultivate and implement innovative strategies to conserve resources, keep our air clean, and our water pure for our health of current residents and future generations.

Utah is well-known for its vast public lands, iconic landscapes and vistas, and abundant natural resources. These have contributed in various ways to the past, present and future economies of the region, and make the area attractive to families and individuals. As the region continues to grow, protecting the natural environment and natural assets will become even more challenging.

Over the past century, urban development has reduced access to natural areas and altered wildlife habitat. Growth patterns have also contributed to increased pollution and a decline in biodiversity, threatening the physical and mental wellbeing of residents.

Taylorsville residents recognize that once abundant resources are becoming more scarce, signaling the need for responsible stewardship. Thoughtful planning and stewardship will ensure an improved quality of life for Taylorsville residents and those in the greater Wasatch region. This General Plan acts as a guide to align Taylorsville's values with standards for future



Jordan River

development and redevelopment and to demonstrate a commitment to promote environmental stewardship through:

- Protecting natural assets, including the Jordan River.
- Reducing water consumption (gallons per person per day).
- Preserving natural resources.
- Increasing access to nature and passive recreation.
- Reducing exposure to heat and pollutants.
- Reducing emissions generated by transportation and buildings.
- Improving air and water quality through low-impact development principles.

9.1 Environmental Stewardship Water Conservation

Water conservation is among the highest priorities in Utah to accommodate the projected growth and preserve irreplaceable natural features of the region. Utah leads the nation in per capita water use, despite being the second driest state based on annual precipitation. In recent years there have been drastic fluctuations in water levels of major water bodies including the Great Salt Lake and Lake Powell, and reports of smaller rural towns running out of water (Chow, Vivian, "Severe drought causes Utah town to run out of drinking water," ABC4 News, August 28, 2021, [link](#)). This demonstrates the urgency of water conservation. In 2022, the Utah State Legislature passed Senate Bill 110 requiring cities to include a water element in their General Plan that evaluates municipal water supply and demand and to identify methods of conservation.

Current Conditions

Water delivered to Taylorsville residents and businesses is provided by Taylorsville-Bennion Improvement District (TBID), whose supply is drawn from wells and supplemented by water sourced from Deer Creek and Jordanelle Reservoirs. Reservoirs rely primarily on snowpack volume and annual precipitation, which are influenced by global weather patterns. Over the last century, weather patterns and snowfall totals have been inconsistent, resulting in regular drought conditions in Utah. These factors coupled with population growth drive the need for efficient water use across the state.

Water levels in the Great Salt Lake have fluctuated drastically and are influenced by the amount of water diverted from tributaries feeding the Great Salt Lake. If water levels remain below optimum levels, there would be significant environmental and economic consequences, placing an extreme burden on the region. Water conservation efforts are a top priority to minimize any short- and long-term impacts associated with declining water levels at the Great Salt Lake.

The 2019 Regional Water Conservation Update established a 2030 consumption target of 187 gallons per capita per day (gpcd) for the Salt Lake Region. Data provided by TBID shows that customers in its service area have consistently exceeded the regional goal, evidenced by the most recent five-year average of 168.11 gpcd (2020-2024). Five-year averages show trends that level out variations in monthly and annual water use. Illustration 9.1.3 illustrates a slight upward trend in consumption rates. The annual rates show a drastic spike while more people stayed home during the height of the COVID-19 pandemic, followed by low consumption rates in 2022 and 2023, likely a result of strong water conservation messaging which resulted in updated landscape standards and irrigation practices. 2024 has brought an increase to annual water consumption close to that seen in 2020. Continued public education and outreach, water meter upgrades, coordination with TBID, and other infrastructure updates will be required to ensure a sufficient water supply and its efficient use as the population continues to increase.

Source	Capacity
Atherton East Well	15,825 Acre-Feet
Atherton West Well	
Barker West Well	
Fairway Well	
Meadowbrook Well	
Pioneer Well	
Rawson Well	
Swenson Well	
Taylorsville East Well	
Taylorsville West Well	
Valley West Well	
Supplemental	4,700 Acre-Feet
TOTAL SUPPLY 20,525 Acre-Feet	

Table 9.1.1
Wells and Current Supply

Annual capacity numbers are based on water rights and contract amounts. This data does not guarantee each well is producing an equal, set quantity of water month to month, especially during summer months. Physical pumping capacity of wells depends on a variety of factors, including time of year, influence of other running wells and mechanical maintenance.

Source: Taylorsville-Bennion Improvement District

One ongoing program is the installation of upgraded residential meters that provide real-time access to water usage data, giving customers the ability to view household trends and make informed decisions and changes to reduce household water consumption. Taylorsville residents also benefit from a continuous flow program that alerts residents of potential water leaks. Customers are also incentivized to reduce water use with a tiered rates pricing system. On a larger scale, TBID has identified infrastructure upgrades to reduce the risk of main line breaks and massive water loss and damage, as identified in the *Taylorsville-Bennion Improvement District Water Conservation Plan Update 2019*. A TBID representative is also involved in the earliest stages of development review, providing developers with information to inform budget, timelines, existing capacity, necessary upgrades, and other design details.

In 2022 the city updated its park strip and boulevard landscaping at City Hall, as well as landscaping in areas at two public parks to model waterwise landscaping. City Hall irrigation is regulated by a high quality smart controller that adjusts water frequency and duration according to factors such as weather, sun exposure, and soil moisture content. Taylorsville is also in the process of gathering and evaluating consumption data that will inform clear reduction targets for city owned and operated facilities and properties.

Outdoor Water Use

An estimated 60% of residential water is used for outdoor purposes (Clark, Becker, Hotaling, Wagner "Policies and Programs for Water-Wise Residential Landscaping in Utah", USU). The majority of land area in Taylorsville is residential single-family detached lots with large yards, resulting in approximately 21% grass coverage for the city. As a result, during summer months Taylorsville's peak water demand has been more than 400 gpcd for five of the past eight years. To help handle peak water demand, TBID is proposing a new well expected to begin operating in 2026.

Taylorsville has already taken steps to increase outdoor irrigation efficiency and to minimize overall water consumption. In 2022, an ordinance was adopted prohibiting grass in park strips, which are difficult to efficiently irrigate. Over spraying of park strips is estimated to waste 7,000-10,000 gallons per season per residential home due to their rectangular shape when irrigated by the conventional overhead spray method. In 2023, another ordinance was adopted updating city-wide landscaping standards, limiting water-intensive lawns for both residential and commercial areas. The ordinance also included a restriction on daytime watering, which can reduce water waste by up to 20%. Adoption of these standards enables Taylorsville residents to participate in the state-

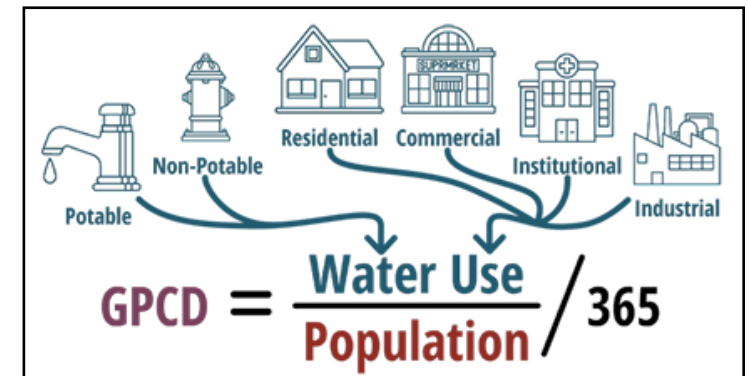


Illustration 9.1.2

GPCD Calculation Method (Utah DNR)

The Utah Division of Water Resources has established the method to calculate gallons per capita per day (gpcd) in Utah. Annual water allocation is measured in acre-feet of water. Individual water use is measured in gallons per household or gallons per capita per day.

Source: Utah Division of Water Resources

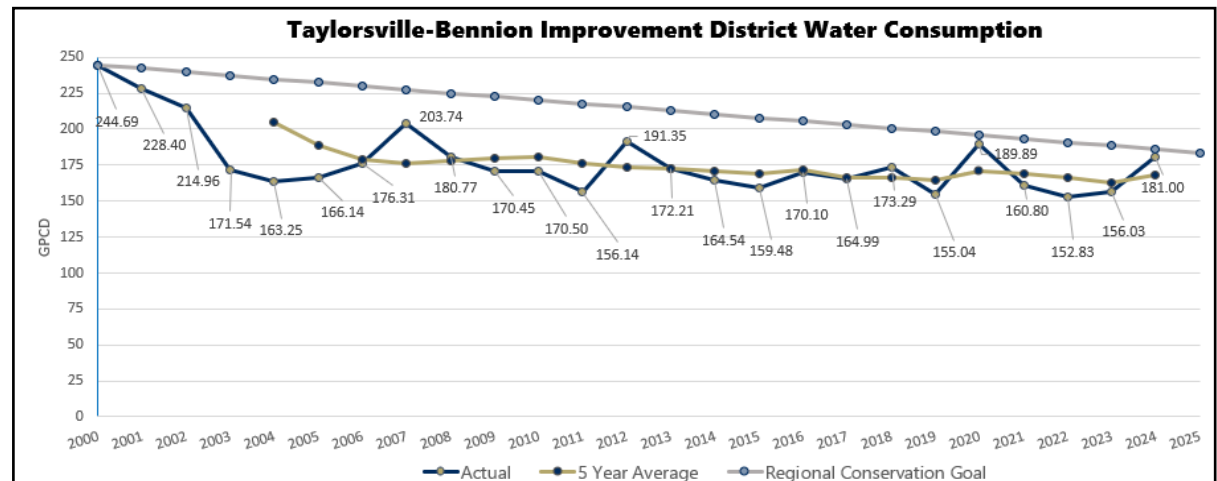


Illustration 9.1.3

Gallons Per Capita Per Day TBID Water Consumption Data, 2000-2024

Source: Taylorsville-Bennion Improvement District

funded Flip-Your-Strip program to receive reimbursements for replacing lawn with drought-tolerant plantings in park strips.

Indoor Water Use

Taylorsville residents use approximately 76 gpcd for indoor water use, higher than the national average of 58.6 gpcd. Unlike outdoor water use, indoor use remains consistent throughout the year and is largely influenced by household size, education attainment, and appliance and fixture efficiency. The EPA created the WaterSense fixture designation to encourage consumers to use more efficient fixtures. A home built to WaterSense standards conserves about 28 gallons per household per day (~ 7 gpcd) compared to homes without efficient fixtures. More than half of Taylorsville homes were built before 1992 and are less likely to have water efficient fixtures; however, replacing plumbing fixtures is a relatively inexpensive way to conserve water.

Community Vision

It is important that planning and preparation for conservation and improvements are started today and continued to be implemented while supplies are still sufficient and economic conditions are favorable. A proactive approach will help prevent a crisis period requiring immediate and drastic response. Conscientious development and thoughtful planning coupled with smart technology and best practices will help the city maintain or reduce the city’s average water consumption of 168.11 gpcd (2020-2024 five-year average). Taylorsville will create a culture of water conservation by coordinating with TBID and other local organizations to implement best practices and to take a proactive approach to updating development and landscaping standards. The City and its residents are committed to supporting regional goals and efforts to conserve water.

Water conservation will be accomplished by encouraging a shift in consumption behavior through education, incentives, and informed policies and ordinances. Taylorsville will continue to partner with state and regional organizations to demonstrate efficient use of water and continue the positive momentum of recent years by cultivating a community identity that embraces water conservation principles through collaboration, public awareness and involvement. The following are strategies to help promote a more water conscious, resilient, and prosperous future.

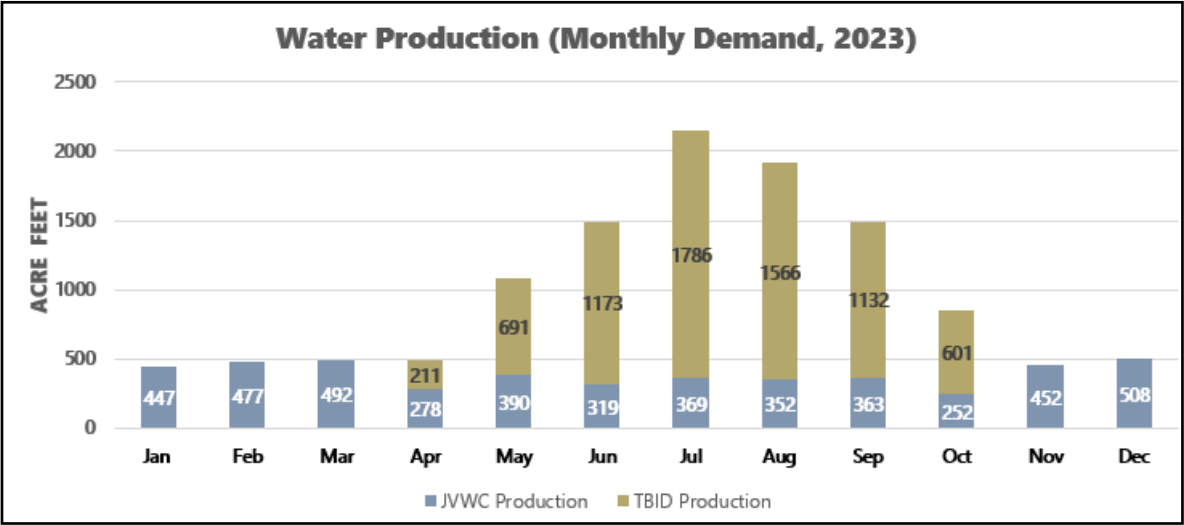


Illustration 9.1.4

Water Production (Monthly Demand, 2023)

Water production aligns with water demand. Existing storage tanks are used to account for daily fluctuations.

Source: Data provided by Taylorsville-Bennion Improvement District

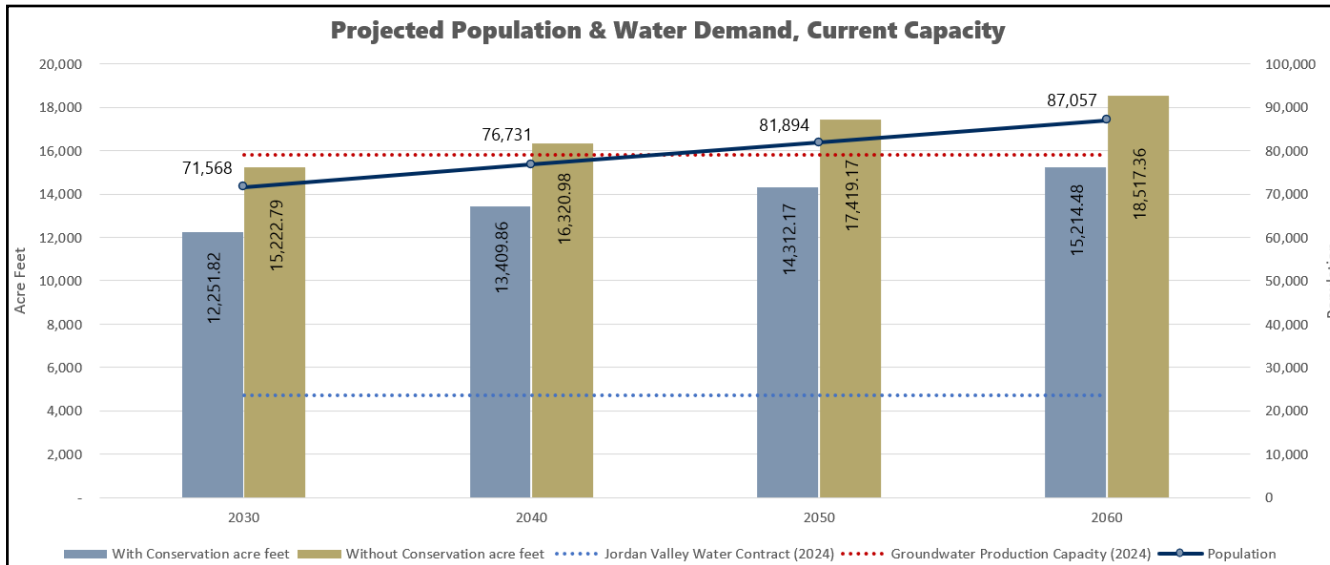


Illustration 9.1.5

Projected Water Demand Compared to Current Water Supply

Population is based on projections made in this plan plus 10,000 residents in TBID service area outside of Taylorsville city limits. With and without conservation calculations are based on 2022 (low) and 2020 (high) gpcd, compared to current water supply. Efficient use of water will be necessary to prevent shortages or the need to secure more water supplies.

Water data provided by Taylorsville-Bennion Improvement District

Education and Outreach

Providing helpful educational resources to the public is arguably the most effective method for promoting water efficiency. Optimized irrigation practices and systems have been a major focus throughout the state and have proven to decrease water usage by 5-25%. As mentioned earlier, approximately 60% of all water used is for outdoor irrigation. Any effort to reduce the amount of water used for irrigation will make the most impact. The installation of more efficient landscape designs throughout the city will be realized through new development, redevelopment, and voluntary changes by property owners. Providing educational resources regarding best practices for drought-tolerant landscape designs and efficient irrigation practices will result in more informed choices. Replacing traditional landscape areas with more drought-tolerant designs has been met with some resistance, particularly because it departs from cultural norms and introduces a new unfamiliar aesthetic. Providing information and examples for how the selection and location of drought-tolerant plant species can be used in conjunction with thoughtful grass areas can demonstrate that alternative landscape approaches still achieve aesthetic and functional goals. Taylorsville does not currently require permits for landscape projects for single-family detached homes, but handouts or other resources could be provided to educate homeowners.

The city can also provide resources and information to advance measures to reduce indoor water consumption. As mentioned previously, replacing plumbing fixtures and taking advantage of appliance rebate opportunities is a simple and non-intrusive means of improving overall indoor water efficiency. A dedicated web page on the city website that contains helpful and easy-to-access information would be a great resource for those interested in water conservation.



Illustration 9.1.6

Park Strip Irrigation

Overhead spray irrigation in park strips can waste up to 10,000 gallons every summer.

Image: Jordan Valley Water Conservancy District

Development Standards

Re-evaluating the City's development standards that govern new development can also promote water conservation. Water usage for a property can be directly impacted by the development standards. For example, large residential lots have a direct correlation with the amount of water needed to irrigate the larger yard space. Building setback requirements, or the distance a building must be situated from the property line, also results in areas of the property that are likely to be landscaped and that require watering. Exploring smaller residential lot sizes and more compact development are strategies to minimize the amount of outdoor watering in the city. These standards should also be balanced with Taylorsville's character and identity, ensuring to maintain high-quality landscaped areas in the City. For smaller lots and compact development, focusing landscape areas in highly visible portions of the site, along with more dense plantings, may prove to be more effective strategy than just relying on the overall size of the landscape area. This same logic could apply to mixed-use and commercial applications to get the "biggest bang for the buck" when it comes to the functionality and aesthetic of landscape treatments.

Additionally, the city can explore and implement best practices to encourage efficient stormwater management. One example is allowing rainwater to flow into landscape areas within or adjacent to impervious surfaces. This waters the vegetation and filters out toxins and other contaminants, diverts water from the city's storm drain infrastructure, and recharges underground aquifers. Other examples include collecting rainwater in barrels for irrigation use.

As the city updates ordinances, methods to reduce consumption in city-owned facilities and properties should be considered. The State of Utah set a goal of 25% water use reduction for all state-owned properties—the city could adopt a similar standard for city-owned facilities to reduce water consumption. Once a reasonable target is set, progress can be shared to create a culture of conservation among employees and the community. Facility fixtures upgrades, changes to irrigation and landscaping practices, and identifying and prioritizing the repair of leaks are some initial steps to minimize waste from nonfunctional water uses. Additionally, the visibility of public property presents the unique opportunity for these areas to act as demonstration gardens with displays about the benefits of the design, plant species, or references to resources.

Measuring Success

Water conservation is an on-going practice and is never "achieved," however, the city will continue to monitor effectiveness of programs and strategies by comparing water consumption data year-to-year provided by water suppliers. While there are several actions and policies identified in this section, overall success will be measured by observing the five-year average water consumption (gpcd) in the City. As new dwelling units are added, the city will provide information and resources to residents and developers with a goal to maintain the recent five-year average. When the desired average consumption of 168 gpcd by 2029 is reached, the city

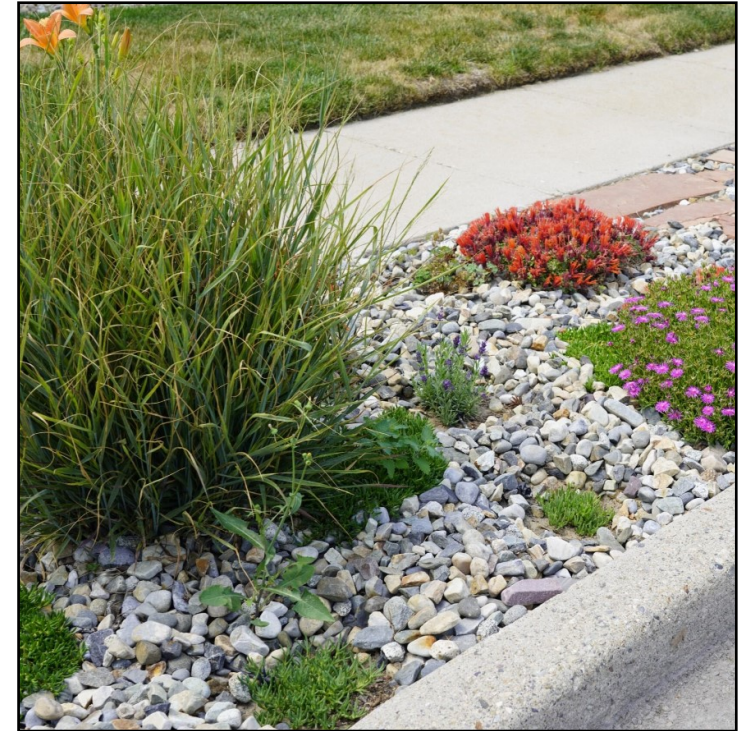


Illustration 9.1.7

Water Efficient Landscaping

Recent adoption of water-efficient landscape standards enable city residents to participate in Flip-Your-Strip program. Residents can apply for reimbursements to cover the cost of converting lawn park strips to designs that feature drought-tolerant vegetation and drip irrigation.

will re-evaluate goals and objects and consider additional measures and strategies to further increase efficiency and conserve water.

Environmental Stewardship Objective 9.1: Achieve a five-year average consumption rate of 168 gallons per capita per day by 2029. [continued from previous page]

Recommendations, Strategies and Actions

- 9.1-A:** Commit to researching, gathering, and distributing relevant information to Taylorsville residents, property owners, and business owners, regarding water conservation best practices and principles.
- 9.1-B:** Create a dedicated city webpage highlighting water conservation goals and best practices. Include general information about current and historic water consumption in the state, region, and city; best practices for drought-tolerant landscaping; resources for improving indoor plumbing efficiency; and grant and reimbursement programs.
- 9.1-C:** Engage with residents and businesses through neighborhood groups, schools, and committees to inform additional outreach and programs.
- 9.1-D:** Create a policy guide/manual for water-wise landscape standards for residential and commercial properties.
- 9.1-E:** Identify areas with housing built before 1990 to prioritize plumbing fixture and appliance upgrades. Use federal grants (CDBG and HOME) or other resources to assist low- and moderate-income and seniors with needed upgrades.
- 9.1-F:** Reduce water consumption for city owned and operated property and facilities by upgrading fixtures, evaluating outdoor water use, and consider replacing nonfunctional turf with water efficient ground cover alternative.
- 9.1-G:** Regularly review city code and update language to align land use policies and regulations to with water conservation goals.
- 9.1-H:** Explore methods to minimize landscape area on a site while maintaining high-quality landscape on highly visible portions of the site.
- 9.1-I:** Research the impact that lot size, minimum building setbacks, minimum parking standards, and other design requirements have on water consumption.
- 9.1-J:** Encourage shared efficient and functional open space.
- 9.1-K:** Research advances in low-impact design best practices to inform regulatory updates for more efficient stormwater management.
- 9.1-L:** Meet regularly with water suppliers to discuss current and future water needs.
- 9.1-M:** Collaborate with suppliers to identify priority areas for meter and infrastructure updates and address water system inefficiencies.
- 9.1-N:** Identify suitable locations for alternatives to large-lot single family housing based on infrastructure.

9.2 Environmental Stewardship Emergency Mitigation and Recovery

Disaster resilience is the ability for a community to survive and adapt when faced with community-level stresses and shocks. This section aims to anticipate vulnerabilities in Taylorsville and identify opportunities for improvements so Taylorsville can withstand and more readily recover from a large-scale or catastrophic event. Taylorsville has already adopted several mitigation measures to decrease the risk of loss and damage, coordinate responses, and support residents and businesses during the recovery process:

- Salt Lake County Multi-Jurisdictional Hazard Mitigation Plan;
- Taylorsville Emergency Operations Plan;
- Sensitive Area Overlay Zone (liquefaction risk and FEMA floodplain data);
- Building and development standards; and
- Compliance with 2021 International Building Code (IBC) and International Residential Code (IRC).

	Severe Risk	Moderate Risk	Limited Risk
High Probability	<ul style="list-style-type: none">• Earthquake	<ul style="list-style-type: none">• Technological System Failure• Drought	<ul style="list-style-type: none">• Small HAZMAT Incident
Moderate Probability	<ul style="list-style-type: none">• Large HAZMAT Incident• Pandemic Event	<ul style="list-style-type: none">• Tornado• Flooding (Storms)• Water Supply Compromise• Radon Exposure	<ul style="list-style-type: none">• Extreme Heat/Cold• Extreme Weather (Storms)• Urban Interface Fire
Low Probability	<ul style="list-style-type: none">• Air Transportation Incident• 	<ul style="list-style-type: none">• Canal Break• Civil Unrest• Sabotage/Terrorist Event	<ul style="list-style-type: none">• Ground Transportation Incident• Mudslide/Landslide• Utility Failure

Existing Conditions

The matrix in Table 9.2.1 details the probability and severity of incidents if they were to occur in Taylorsville. While the severity of an event may be high, its probability may be much lower. Conversely, while an event may be more likely to occur, its impact may be minimal. Accordingly, those events deemed the most probable and most severe, and which may have the highest impact upon the city, dictates much of the planning efforts.

Heat

Extreme heat is an increasingly common threat locally. Data from the National Oceanic and Atmospheric Administration (NOAA) show that very hot days (100+ degrees Fahrenheit) are increasing in number. Adapting the built environment and targeted public outreach and education can help residents (especially the young and elderly) stay comfortable and safe. Urban areas like Taylorsville often experience temperatures 5-10 degrees warmer than rural or less-developed areas. This phenomenon is called the “urban heat island effect,” when structures such as buildings, roads, and other infrastructure absorb and re-emit the sun's heat more than natural landscapes such as forests and water bodies. Taylorsville should explore strategies to minimize the urban heat island effect, such as reducing overall impervious pavement coverage, increasing the urban tree canopy, and developing more efficient building standards. Additional information related to this topic can be found in the Urban Forest and Green Infrastructure sections.

Table 9.2.1

Probability and Risk of a Significant Event

Matrix illustrating the probability and risk of a significant event in Taylorsville. Darkest shade of blue represents a high probability event that would create heavy disruption to affected areas.

Source: “Taylorsville City Emergency Operations Plan” Revised and Adopted, 2023

Earthquake

Another risk to Utah urban areas is a major earthquake event. Seismologists and geologists predict a 6.0- 6.75 magnitude earthquake is due along the Wasatch Fault, which would cause massive disruption. Geological analyses also predicts the West Valley Fault will rupture at the same time or shortly after, a “big one” on the main Wasatch Fault, placing Taylorsville at higher risk.

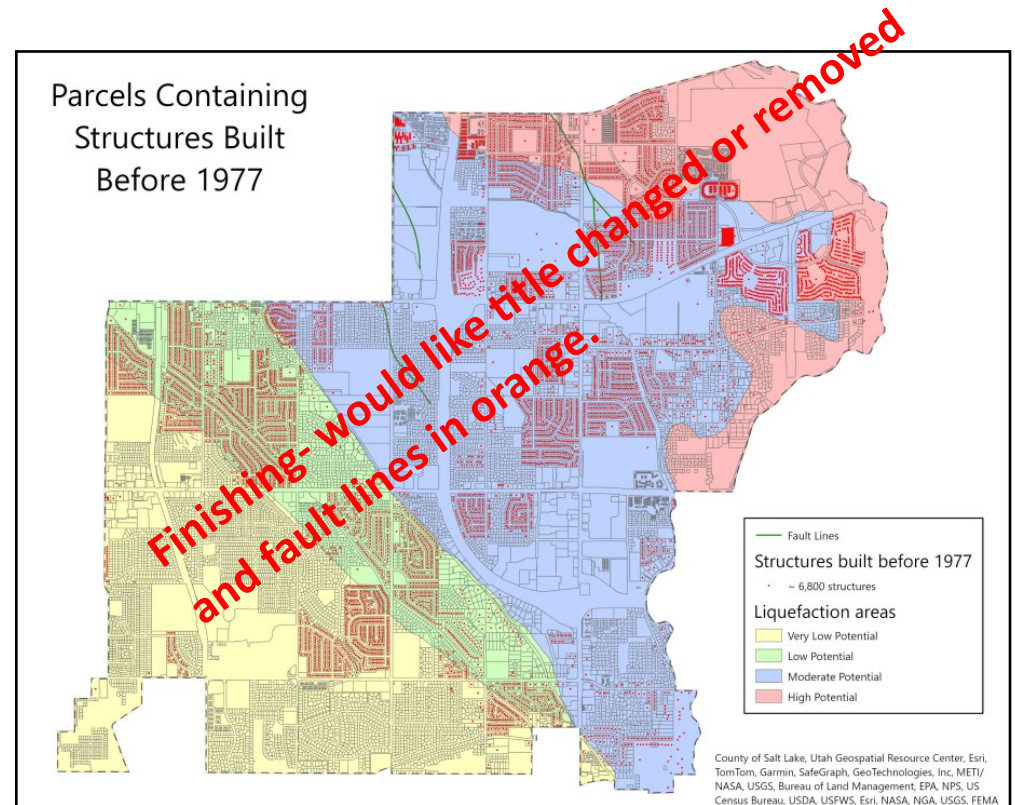
On March 18, 2020, a 5.7 magnitude earthquake struck the Salt Lake Valley. The overall damage and disruption was relatively minor; however, the Salt Lake County Emergency Response Team reported disproportionate impact to mobile homes, several of which experienced a “fairly significant amount of damage,” due to structures slipping off foundations. The most severe and publicized structural damage occurred to unreinforced masonry buildings (URMs). Map 9.2.2 illustrates the location of approximately 6,800 buildings in Taylorsville that pre-date more strict building code standards adopted in 1977. Such structures have an increased risk of sustaining severe damage during an earthquake. According to FEMA and the Salt Lake County Response Team, URM buildings are most often occupied by disproportionate number of disadvantaged and marginalized populations.

Liquefaction potential also poses major threats in the event of an earthquake. Liquefaction is when water-saturated soil loses strength and behaves like a liquid, similar to quicksand. This can happen when the ground shakes during an earthquake. The Majestic Meadows, Monte Vista, and Majestic Oaks manufactured home parks, Dutch Draw Lane, and Morningside Cove subdivision also have high-risk factors due to the structural integrity of buildings, liquefaction risk, and limited ingress/egress for residents and emergency responders.

Taylorsville should focus earthquake mitigation efforts in areas with high concentrations of unreinforced masonry structures, high liquefaction potential, and neighborhoods with limited access. Exploring new vehicle and pedestrian connections in these areas would prove valuable during evacuation and rescue operations. Securing funding for a fix-the-bricks program for high-risk homes and in Taylorsville’s historic district would help protect residents and preserve unique structures. Expedited building permitting processes and adopting emergency ordinances to relax temporary housing restrictions are other examples for how Taylorsville can help minimize the impacts and displacement caused by a significant earthquake.

Drought

Drought results from a deficiency of precipitation over an extended period of time, resulting in a water shortage. The severity of a drought depends upon the degree of moisture deficiency, its duration, and the size of the affected area. The U.S. Drought Monitor is a broad-scale national

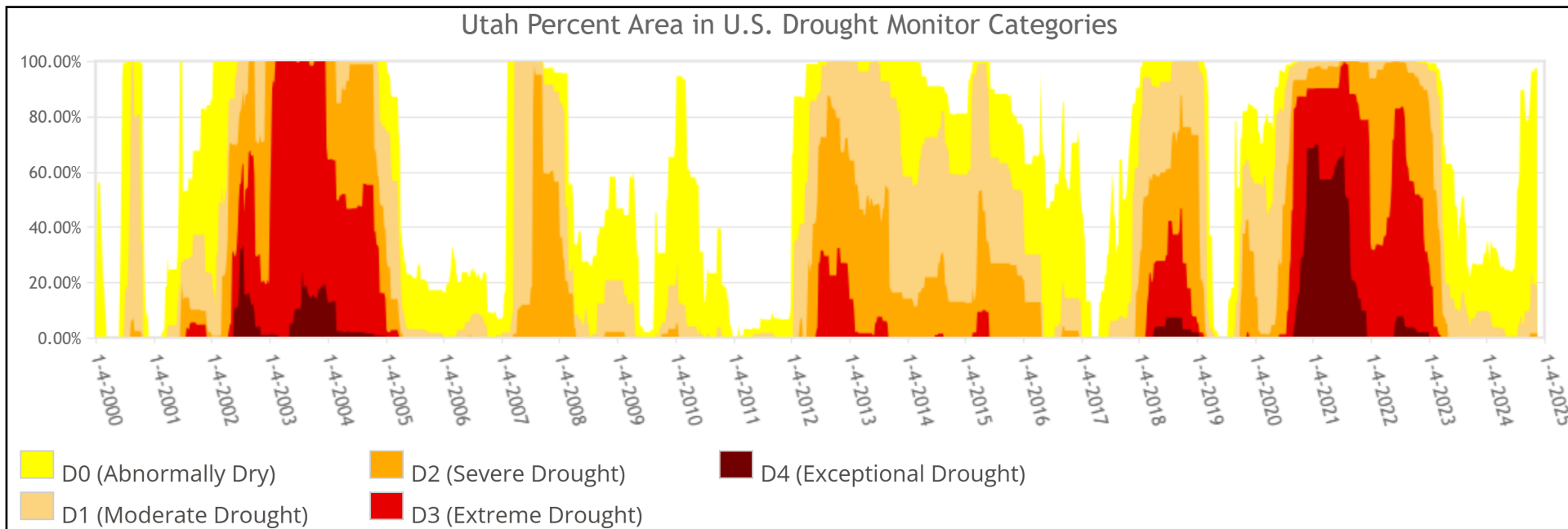


Map 9.2.2

Likely URM Structures, Liquefaction Zones

Approximately 30% of the structures in Taylorsville were constructed prior to 1977, when building codes were updated to include seismic safety considerations. Taylorsville exceeds the state-wide average of 20% for URM structures.

Source: Data from 2019 Multijurisdictional Hazard Mitigation Plan and Salt Lake County Records.



drought map updated weekly to communicate unusually dry conditions using four categories (moderate, severe, extreme, and exceptional drought). Illustration 9.2.3 illustrates the percentage of Utah land affected by drought over time. Since the year 2000, Utah has experienced several cycles of exceptional drought conditions. Utah largely relies on snowmelt runoff stored in reservoirs to get through the hot summer irrigation season. If enough snow falls in the mountains during the winter months, dry summer weather conditions can be somewhat overcome in many areas of the state. The most effective strategy for drought resilience is reducing water consumption; additional information related to this topic can be found in Section 9.1: *Water Conservation*. The city can also coordinate with water suppliers to create mitigation and response strategies to provide short-term relief from temporary drought-related water supply shortages.

Flooding

The types of floods that pose the highest risk to Taylorsville are flash flooding and snowmelt flooding. Flash flooding is a rapid and extreme flow of high water into a normally dry area, or a rapid water level rise in a stream or creek above a predetermined flood level due to a causative event (i.e., intense rainfall, dam failure, ice jam). Flooding due to snowmelt most often occurs in the spring when rapidly warming temperatures quickly melt the snow. The water runs off the already saturated ground into nearby streams and rivers, causing them to rapidly rise and, in some cases, overflow their banks. Land near the Jordan River corridor has the highest risk of flood. To minimize risk, these areas are already subject to additional development standards if they are within a FEMA-designated food zone. Subdivision plats adjacent to the Jordan River

Illustration 9.2.3

Utah Percent Area in Drought, 2000-2025

Source: U.S. Drought Monitor website, <https://droughtmonitor.unl.edu/DmData/TimeSeries.aspx>

also include a buffer area (typically 50 to 100 feet from the edge of the bank) to provide additional land area to store and absorb flood water. This also preserves healthy vegetation to stabilize soils and prevent erosion. Additionally, depending on the flood plain elevation and water table, basements may not be permitted in some areas. Additional information related to recommended river buffer zones and low-impact development can be found in the Blueprint Jordan River, a guiding document intended to establish river-sensitive best practices. Taylorsville City is a member of the Jordan River Commission and is committed to supporting and implementing policies and standards to preserve and protect life and property.

Community Vision

Taylorsville will continue taking steps to implement best practices and policies to better prepare for emergencies and natural disasters. Strong social capital is an indicator for how well a community recovers in the aftermath of a disaster or emergency. Supporting and/or partnering with faith-based, educational, and other organizations that provide emergency preparation, outreach, and educational efforts would prove valuable. The following strategies will help Taylorsville become more prepared and resilient in the event of an emergency or natural disaster.

Measuring Success

Without a significant event taking place, it’s difficult to know how well the city and its residents are prepared; however, committing to a proactive approach of preparedness and education is key. The city’s on-going efforts to implement the policies and actions listed in this Section will help Taylorsville be more prepared and resilient in the event of an emergency or natural disaster.

Environmental Stewardship Objective 9.2: Reduce the risk of preventable loss and injury and prepare to act and recover from emergencies and natural disasters.

Recommendations, Strategies and Actions

9.2-A: Partner with universities and other organizations to identify high-risk areas for urban heat island and incorporate best practices to mitigate. Evaluate development standards that contribute to the heat island effect. Research and incorporate best practices as necessary (reduce minimum parking standards, improve building efficiency with site planning and building orientation, reduce heat absorption with “cool roofs,” increase landscape and tree canopy coverage, evaluate street design standards).

9.2-B: Coordinate with Emergency Management and distribute information regarding emergency preparedness, mitigation, and recovery. Create a dedicated city webpage that can function to provide real-time updates in case of emergency.

[Continued]

Environmental Stewardship Objective 9.2: Reduce the risk of preventable loss and injury and prepare to act and recover from emergencies and natural disasters.
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Recommendations, Strategies and Actions

- 9.2-C:** Identify and partner with community organizations and groups as contacts and partners for response plans and recovery efforts. Support programs and efforts to increase neighborhood connections to build social capital and improve community resilience.
- 9.2-D:** Coordinate with water suppliers to create mitigation and response strategies to provide short-term relief from temporary drought-related water supply shortages.
- 9.2-E:** Collect data and create a series of maps depicting low-, moderate-, and high-risk areas for events or incidents that may impact Taylorsville.
- 9.2-F:** Identify areas with high concentrations of unreinforced masonry structures, high-liquefaction potential, and neighborhoods with limited access. Create effective mitigation and response strategies based on area-specific resident/ business needs and capabilities.
- 9.2-G:** Explore opportunities to provide additional vehicle and pedestrian access to neighborhoods with limited means of ingress/egress.
- 9.2-H:** Explore funding opportunities to create a fix-the-bricks program.
- 9.2-I:** Update development standards to reflect applicable goals, policies, and standards identified in the Blueprint Jordan River Plan.
- 9.2-J:** Use the Hazard Mitigation Plan to inform land use decisions and city policy, seek input from emergency response teams.
- 9.2-K:** Prepare a building permit inspection process or pre-approved building plans to enable expedited permitting and construction in the event of a disaster.
- 9.2-L:** Create an emergency response ordinance that would remove barriers to emergency response and recovery efforts (e.g., lifting restrictions for RV parking, overnight camping, waiving/reduced fees for permits, etc.).

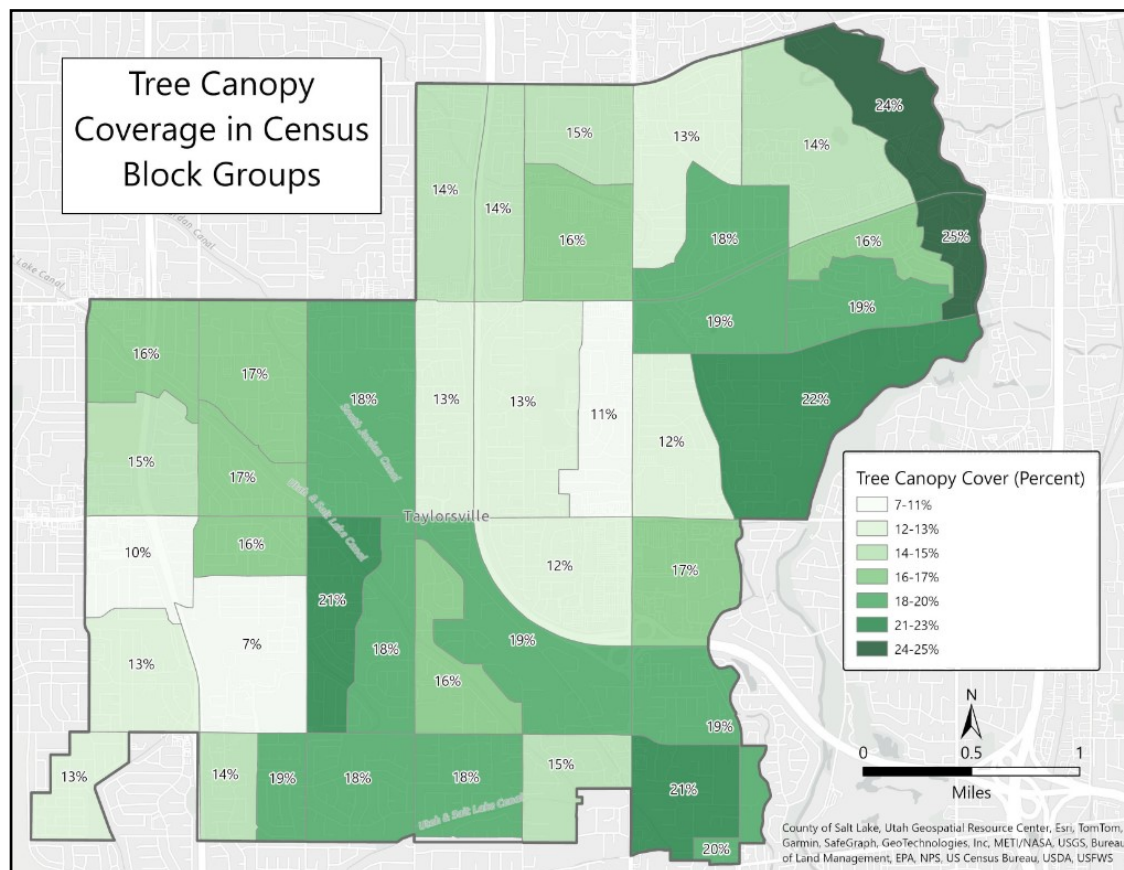
9.3 Environmental Stewardship Urban Forest

As urban areas have developed, land is cleared and the natural area is altered, which usually includes a decrease in the number of trees. Utah is no exception to this pattern as tree canopy has continued to decline. Global Forest Watch reports that Utah has experienced a 10% decrease in tree cover since 2000. Taylorsville residents recognize that trees play a vital role in maintaining and improving environmental health and community wellbeing. Trees sequester carbon, regulate temperatures, influence critical weather cycles, support biodiversity, and improve the quality of water, soil and air. Their presence also increases property values and can improve the quality of our lives; studies continue to show a positive correlation between increased exposure to trees and human health and well-being, while others have revealed the economic benefits that trees bring to commercial spaces as more green space and tree cover create an inviting sense of place, increasing lingering time and spending by visitors attracted to the area. With the direct and indirect benefits that trees provide, the urban forest will be both an amenity and a necessity as population increases, and development continues in Taylorsville. For the purposes of this section, urban forest will be broadly defined as all trees within the city limits.

Existing Conditions

Tree canopy cover is the standard metric taken from an aerial view and represented as a percentage of land area covered by tree canopy. According to American Forests, the recommended minimum tree canopy coverage for urban areas has traditionally been 20%, but in recent years has been recalculated to a minimum of 15% for arid climate. Tree Equity Score, a tool created by American Forests, maps tree canopy coverage and can assign a priority level based on demographic indicators drawn from census data. Taylorsville generally scores higher compared to neighboring cities. This could be due to the fact that some municipalities in the valley have replaced large areas of land with industrial or office space, while Taylorsville's transition from agricultural land use to single-family bedroom community has resulted in land that is preserved as yards with mature trees and potential to provide space for new ones.

The Tree Equity Score tool estimates tree canopy coverage for Taylorsville at about 18% city-wide, with variation between individual census blocks. A closer look reveals areas of the city



Map 9.3.1

Percent Tree Canopy Cover by Census Block

City-wide tree canopy coverage is reported to be 18%, with wide variations among census block groups.

Source: Data obtained from American Forests Tree Equity Score tool

where significant opportunity for canopy increases exists (Map 9.3.1). Unsurprisingly, commercial areas with large expanses of parking, such as properties along Redwood Road, stand out as lacking in cover as well as areas in the southwest corner of the city. The neighborhoods below the recommended minimum are the same areas that range from 0.5 to 2.6 degrees Fahrenheit warmer than surrounding neighborhoods on high-heat days, according to the tools' heat disparity layer. Areas of the city that show a high tree canopy coverage are those same areas of the city with high property values, large mature trees, and a lower-than-average temperature on hot days.

The value Taylorsville has placed on trees is reflected in its policies. The city maintains a street tree list and has codified language that requires maintenance and care of public trees in the Tree Stewardship Ordinance, adopted in 2012. Commercial land development standards require one tree per 500 square feet of landscape area, an unspecified quantity of trees in park strips and a restriction on removing healthy mature trees for commercial visibility. However, as sites are redeveloped, existing landscaping is often redesigned for the purposes of improving traffic ingress and egress, which sometimes leads to the removal of mature trees. A recent volunteer survey of Taylorsville trees in public parks identifies a lack of diversity which threatens canopy coverage due to loss from disease and pests, and a need to improve landscaping practices to nurture growing trees to achieve the full benefits of a mature canopy. Tree planting best practices, and an updated tree stewardship ordinance are mechanisms other peer cities have used to incentivize and prioritize preservation and nurturing of a healthy tree canopy to benefit businesses and residents now and into the future.

Community Vision

Cities worldwide recognize the benefits of increased tree cover in urban areas as evidenced by tree planting initiatives, including those in the capital city and others. Higher tree canopy cover in urban areas is correlated with increased psychological and physical health, higher property values, lower traffic speeds along tree-lined streets, and lower temperatures than surrounding areas. The value trees add to a community through aesthetic and ecological services make their presence one of many important factors to consider when reviewing development and community initiatives. Taylorsville has multiple areas that can act as destination points to bring in shoppers and business owners. As stated in other areas of this General Plan, improvements to these spaces, including ambitious landscaping standards, will create compounding benefits by increasing the number of trees that will improve air quality while improving the real and perceived safety and comfort of an area, encouraging pedestrian use and further reducing the need for emission-producing transportation.

A city-wide tree canopy coverage goal could be adopted for a tree planting initiative, but a city-wide average may hide neighborhoods that lack funding, assistance, and awareness to plant much needed trees that will improve neighborhood character, provide cooling benefits, and



Illustration 9.3.2

Trees in Taylorsville

Mature trees provide such benefits as heat mitigation, storm water management, and air purification. Standards for planting new trees and protection of mature trees will be essential to maintain a healthy tree canopy that can improve property values and wellbeing for residents and visitors.

improve residents' well-being. A tailored goal based on land use and current coverage for an area would be useful in evaluating and setting goals by district, census tract, or by neighborhood to implement an effective tree planting initiative. Incorporation of greenery has been shown to improve the feel of a destination resulting in increased use of public transportation and visiting time to community spaces and retail areas, improving the perceived safety of pedestrians, character of a place and influencing shoppers' destination choice, leading to an increase in property values. Incorporating tree coverage goals for key areas and uses will help identify the desired benefit and ultimately the right type of trees for an area. The City can explore working with outside programs and partners to receive designations that will showcase commitments to conscientious and progressive development and can also bring eligibility to certain funds and technical assistance from national programs.

The importance of trees and vegetation to habitats has been studied extensively and fragmentation is one result of development that has led to changes in wildlife populations over the centuries. The Jordan River Corridor is one important path that allows wildlife to move throughout the valley and help support biodiversity for the regional ecosystem. Canals are another opportunity for increased tree canopy coverage and could be viewed as veins that run through the city, where specific areas could become focus areas of greening efforts to increase passive recreation and green corridors similar to those identified in Wasatch Regional Council's Green Infrastructure Plan.

A tree planting initiative will be an effective mechanism to increase tree cover, while preserving mature trees that provide cooling and purification benefits so important to air quality. Data collection will be required and may reveal that small area targets may be the most effective way to set targets for Taylorsville. Cities officially implement such initiatives on different scales, but successful aspects of such efforts have been documented. Each aspect below can be considered and tailored to Taylorsville's needs, capacity, and resource availability. According to "Planting the Living City" (Young), a comprehensive study of municipal tree planting initiatives, an effective tree planting plan must contain the following:

- Data collection: Create an inventory. The level of detail can be determined based on the City's capacity, method of collection, ability to maintain data.
- Clear goal: Needs and capacity of areas will differ throughout city.
- Identify financing: Not only for initial costs, but establishment period for saplings.
- Implementation method: Consider financial, time, and who will be involved in executing (volunteer, city employees, etc.)
- Successful partnerships between city and nonprofit groups: Technical assistance, event coordination, and long-term maintenance contracts.
- Reduced responsibility for property owners: Use public property, provide information, subsidize materials or labor.



Illustration 9.3.3

Arbor Day Event (2011)

Community tree planting project with Taylorsville officials and volunteers near Little Confluence Trailhead, on Murray Taylorsville Road.

Measuring Success

According to American Forest's Tree Equity Survey, to bring every census block in Taylorsville to a tree canopy cover percentage of 20%, approximately 5,937 trees need to be planted.

Environmental Stewardship Objective 9.3.1: Recognize, celebrate, and expand Taylorsville's urban forest.

Recommendations, Strategies and Actions

- 9.3.1-A:** Create a work plan and monitoring framework to inventory and grow city's urban forest to 20% city-wide canopy coverage. Consider designating a person or persons to champion this effort.
- 9.3.1-B:** Adopt a resolution recognizing the impact trees have on air, water, and soil quality and overall community wellbeing with goal to enhance urban tree canopy.
- 9.3.1-C:** Redesignate as a Tree City to reignite interest and gain access to tools and assistance from organizations.
- 9.3.1-D:** Officially recognize and celebrate Arbor Day, involve community stakeholders and regional organizations.
- 9.3.1-E:** Enlist assistance of Historic, Green, and Parks Committees to reach out to residents and identify Big Trees and Heritage Trees to be added to Utah Community Forest Council registry. Preserve Big Trees and Heritage Trees.
- 9.3.1-G:** Consider contracting with professional arborist to bring element of expertise to city reviews and public outreach efforts.
- 9.3.1-H:** Build public-private partnerships to inform and involve community. Explore creation of a citizen's urban forester program.

Environmental Stewardship Objective 9.3.2: Harness the benefits from trees and set place-specific goals.

Recommendations, Strategies and Actions

- 9.3.2-A:** Reduce private tree removal by exploring ways to help citizens mitigate problems caused by trees.
- 9.3.2-B:** Gauge community interest for participation in opt-in program (Storm to Shade) for tree planting efforts.
- 9.3.2-C:** Explore methods to assign value to mature trees and amend fee schedule accordingly. Consider creation of a tree replacement fund.
- 9.3.2-D:** Increase tree canopy coverage in commercial centers to create places and increase property values.

[continued]

Environmental Stewardship Objective 9.3.2: Harness the benefits from trees and set place-specific goals. [continued from previous page]

Recommendations, Strategies and Actions

- 9.3.2-E:** Strengthen tree preservation language in city code, codify flexibility measures to standards like parking or setbacks to preserve existing trees.
- 9.3.2-F:** Codify spacing, landscaping, and species variation requirements for trees in park strips.
- 9.3.2-G:** Use trees to increase pedestrian comfort to enhance safety, shade paths, and reduce vehicle speeds.
- 9.3.2-H:** Link green spaces by enhancing trails and sidewalks with increased tree and vegetation cover.
- 9.3.2-J:** Consider heat disparity information to prioritize tree cover increases.
- 9.3.2-K:** Explore Urban Forest Grants to fund improvement projects related to tree planting.



Illustration 9.3.4

Little Confluence Trail

Public and private trees can enhance spaces based on place-specific goals.

9.4 Environmental Stewardship Preservation of Natural Amenities

Existing Conditions

Great Salt Lake

The Great Salt Lake is invaluable to Utah culture and economy. Water levels have always fluctuated due to climate and geological events, but in recent years, drought and impacts of consumption and development have resulted in downward trends and dramatic lows. The lake is a regional asset through its historical and local significance and influence on precipitation levels; it is a national asset, producing 100% of the United States' magnesium; and global asset by supplying 14% of the global supply of brine shrimp. The lake is also an integral piece of the Pacific Flyway and has been recognized as site of "Hemispheric Importance" by the Western Hemisphere Shorebird Reserve Network. In 2022, its water level dropped to the lowest water level recorded. Continuing diminishment will affect the health of various animal species in the area- including Utah residents. Up to 40% of the dust in Salt Lake and Ogden has been found to be composed of dust swept up from exposed lakebeds that can contain toxic elements and reduce air quality. It has been estimated that a seriously diminished lake would cost Utah \$2 Billion annually in economic losses due to decreasing property values from declining air quality and its associated health issues, as well as the impact on tourism and reliable water supply, caused by premature melting from dust settling on snowpack. The preservation and rehabilitation of the lake will be central to the continued prosperity of the state.

Jordan River

The Jordan River is a major local and regional asset that flows through the center of the Salt Lake Valley and flows along the northeast border of Taylorsville. At over 50 miles long, the river spans three counties as it wanders northward from Utah Lake and merges with the Great Salt Lake wetlands. The meandering river creates a lowland riparian environment that once covered over 12,500 acres and is identified by the Division of Wildlife Resources as important for fish, vegetation, and mammals, and the most critical habitat type for birds. Adoption of a joint interlocal resolution in 2012 and membership on the Jordan River commission demonstrates Taylorsville's commitment to preservation of this unique natural feature. The commission has created Blueprint Jordan River with stakeholder and expert input to guide development along the corridor while protecting habitat, water quality, soil health, and nurture the overall health of the ecosystem. The plan designates the Taylorsville portion of the corridor as "silver" which requires a minimum 100-foot buffer from development and stormwater runoff management. Best practices in the plan are intended to support the rehabilitation of the Jordan River corridor to allow it to function as a central blue-green path that draws in visitors to appreciate its features, increase passive recreation opportunities, and support critical ecosystems from Utah Lake to the Great Salt Lake wetlands. Most of the land adjacent to the river in Taylorsville is

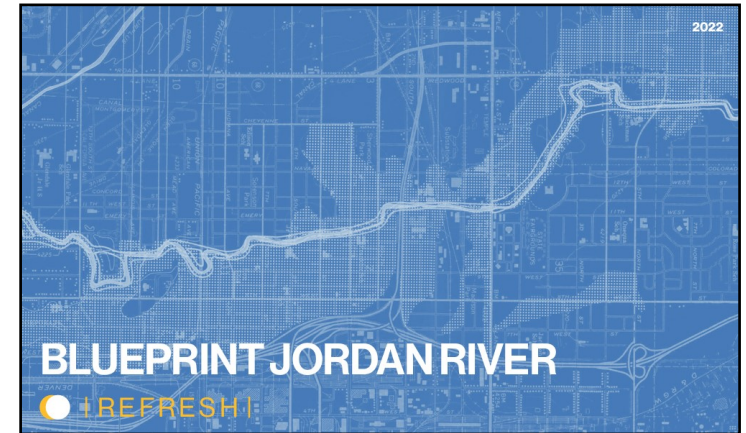


Illustration 9.4.1

Blueprint Jordan River

A regional plan for best practices and goals for the Jordan River corridor.

Source: <https://jordanrivercommission.gov/vision/>

residential subdivisions containing 50-foot no-build buffers. Parcels of various size and ownership (county, TBID, or state-owned) make up the northeast border of the city and include undeveloped parcels along the corridor unintentionally buffering the river from development. Meadowbrook golf course and multifamily developments (built in 1978 to 1997) are the closest developed parcels that will likely redevelop sometime in the future. Enhanced protection standards should be adopted to preserve the river corridor as a community asset and to support the regional vision for the Jordan River.

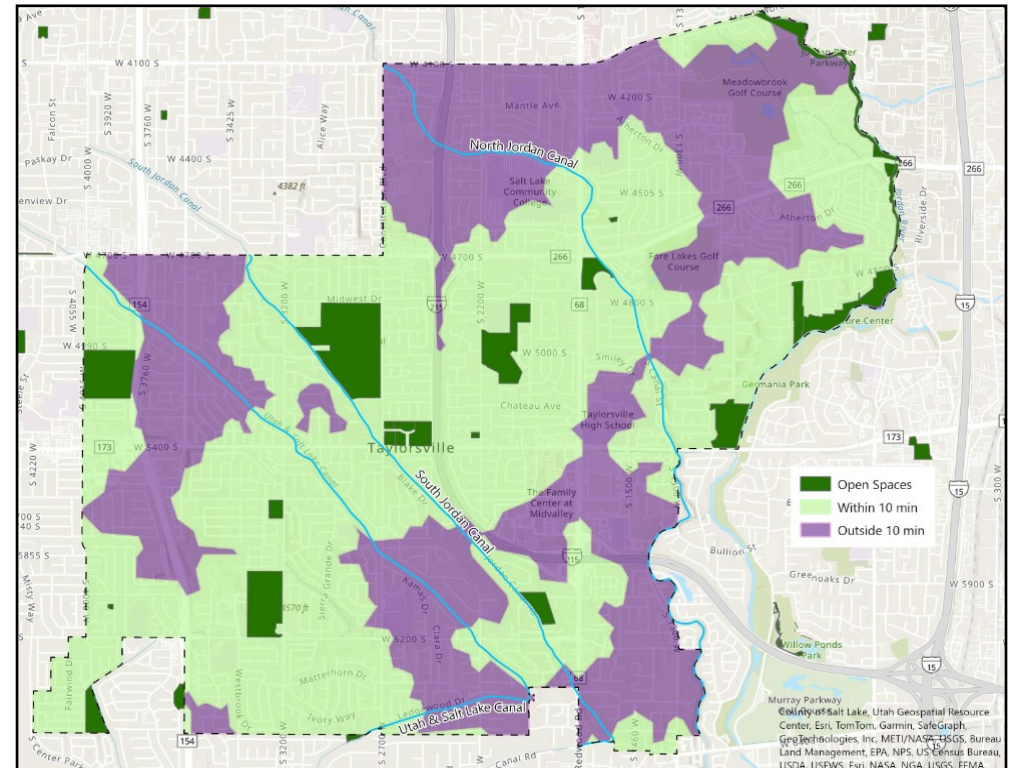
Natural Space Opportunities

The presence of existing parks, canals and the Jordan River create the opportunity for the creation of a network of trails that function as green connective corridors, which are identified by Wasatch Front Regional Council as a vital piece to its Green Infrastructure Plan. These green connective corridors should include trees and vegetation that can support wildlife and pollinators, and create spaces where residents can visit to feel a reprieve from the city. The purple areas on map 9.4.X illustrate neighborhoods where residents must walk more than ten minutes to access a natural or open space. Many of these neighborhoods are bisected by canals that could be improved to function as these green corridors.

Community Vision

Responsible stewardship of the Jordan River and implementation of water conservation measures is the most effective way for Taylorsville to impact the Great Salt Lake. Blueprint Jordan River identifies methods such as reducing impermeable surfaces near the corridor and onsite stormwater management using ponds and bioswales as key low impact methods to preserving or improving the health of the corridor. To protect our natural assets, as members of the Jordan River Commission, the city should require best practices presented in the blueprint and acknowledge the importance of the corridor by creating design standards for the sensitive lands overlay that require low impact design standards and strongly incentivize innovative and progressive development practices that preserve or enhance the health of the ecosystem for wildlife and people to enjoy.

The city can identify and coordinate with regional resources and property owners of land adjacent to canals to restore or enhance these areas and provide access to underused land around canals to create multi-beneficial trail systems that function as connective green corridors. Such improvements can reduce habitat fragmentation and provide heat mitigation, while also bringing more natural green space to areas in need of its benefits. The city can explore partnering with property owners to create small nature pockets, demonstration sites and pilot collaboration projects to explore and establish best practices for improvement efforts.



Map 9.4.2

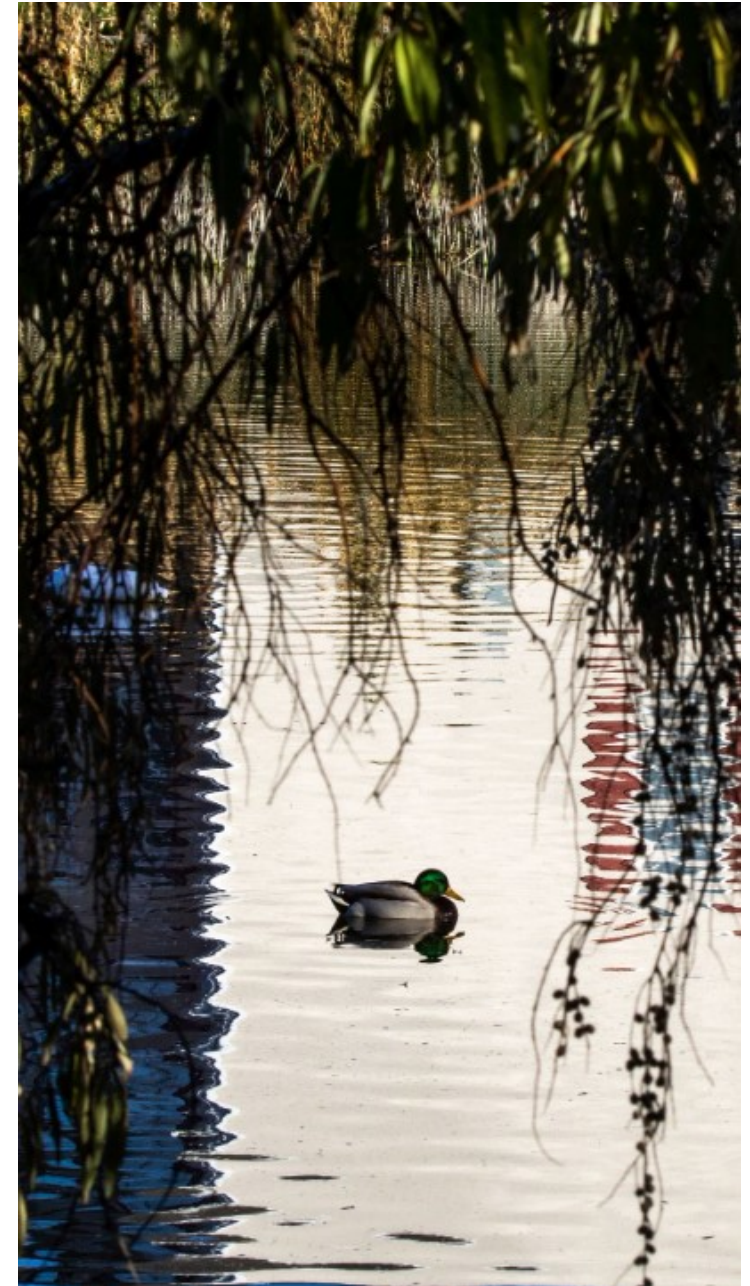
Proximity to Public Open or Natural Space

Canals and their maintenance roads bisect several areas in the city where residents must walk more than ten minutes to access a public natural or open space. These may provide space for green corridors that provide environmental benefits and increase access to nature for residents.

Environmental Stewardship Objective 9.4: Preserve and enhance local and regional natural amenities.

Recommendations, Strategies and Actions

- 9.4-A:** Monitor and implement Great Salt Lake Council advisory actions to increase water flow to Great Salt Lake through water conservation measures in other sections of this chapter.
- 9.4-B:** Codify best practices from Blueprint Jordan River for new development.
- 9.4-C:** Continue to support of the Jordan River Commission and implementing best practices from Blueprint to enhance the Taylorsville portion of the Jordan River.
- 9.4-D:** Reduce habitat fragmentation and encourage passive recreation and access to nature for all residents and workers in Taylorsville. Review tools identified in this General Plan to determine potential areas for green improvements. Engage with property owners and gauge interest and willingness to enhance the areas surrounding canals.



Jordan River

9.5 Environmental Stewardship Green Infrastructure

Green infrastructure can be implemented on a range of scales by harnessing natural processes using vegetation and soil to create healthier urban environments. It can be accomplished through intentional conservation or creation of green space, “creating a patchwork of natural areas that provides habitat, flood protection, cleaner air, and cleaner water” (WFRC). The purpose of this section is to identify new or age-old practices that use natural processes and have a multi-beneficial outcome, addressing common concerns for residents of Taylorsville. As cities continue to investigate and implement green infrastructure systems, more is revealed about the benefits of replacing gray infrastructure with green. As Taylorsville harnesses these vital services, it will benefit from associated increases in social, physical, mental, and economic wellbeing as the city more intentionally addresses the natural environment within the urban fabric.

Existing Conditions

Air Quality

The geography of the Salt Lake Valley produces unique air quality challenges. Winter inversions trap industrial, building and vehicle emissions beneath a smoggy layer of cold air. The air in the peak of summer brings different air quality challenges as ozone mixes with nitrogen oxides (NO_x) and volatile organic compounds (VOC) to form harmful air pollutants. Due to these geographic constraints and realities, public health related to air quality must be managed by reducing the pollutants released and employing methods to mitigate the impacts of those that are. As mentioned in previous sections, vegetation sequesters, or stores carbon and cities that have implemented greening initiatives have seen improvements to their air quality. Significant improvements to air quality can also be improved by reducing the number of vehicle miles driven using methods to increase transit use and active transportation, discussed throughout this General Plan.

Water Quality

Stormwater is one of the greatest challenges to water quality. After snow or rainfall, water flows off impervious surface areas such as paved streets, parking lots, and building rooftops and is conveyed to the river and its tributaries. This runoff often contains pollutants that adversely affect water quality. Bioswales have been shown to reduce runoff pollutants in the range of 80%-90%. Water-sensitive urban design offers an alternative to the traditional conveyance approach of stormwater management. Incorporating river-friendly designs into the built environment minimizes the detrimental effects of impervious surfaces, and mitigates impacts to the natural water ecosystems. In addition to water conservation efforts noted in Section 9.1, effectively managing and reusing storm and rain water can also help conservation efforts. Low-impact development and green infrastructure can use soil, gravel, and plants to filter out nutrients and surface pollution from runoff while also irrigating landscaping. Aside from the already mentioned benefits,

porous surfaces also reduce the rate of runoff and the need for deicing salts by melting snow and ice faster.

Heat

As mentioned in previous sections, heat island effect is a growing concern for urban areas. Pervious concretes have been shown to store less energy and therefore are more effective at dissipating the high temperatures than traditional impervious concretes store. Vegetation, particularly broadleaf foliage like trees provide reflectivity, cooling shade and evapotranspiration that lead to lower temperatures as well. Random sampling estimates indicate that approximately 40 percent of Taylorsville is impervious surfaces, and 7 percent bare soil/dirt. Nearly 50 percent of the surface area in Taylorsville is either not absorbing water or contributing to runoff, with the high percentage of impervious surfaces also contributing to the urban heat island effect. Implementing low-impact requirements such as buffers around water bodies, bios-wales along parking lots, and incentivizing innovative parking, landscaping, or water reuse designs should be highly encouraged as Taylorsville continues to grow.

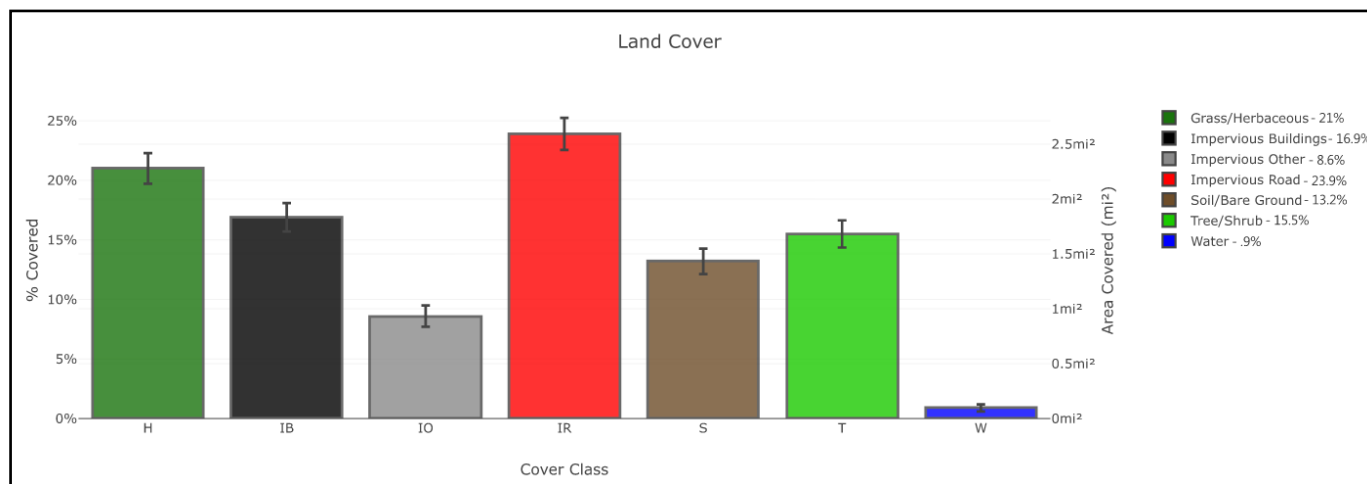


Illustration 9.5.1

Percent of Land Cover by Type

Source: , i-Tree Canopy , Cover Assessment and Tree Benefits Report. Estimated using random sampling statistics on 12/3/2024.

Community Vision

Supporting compact and mixed-use development patterns, as noted in the Chapter 3: Land Use, should be considered to help minimize negative impacts often times associated with urban development. As development and redevelopment continues in Taylorsville, the city should incentivize innovation and encourage elements that lower vehicle use, mitigate heat island effect, and consider water quality and conservation.

Environmental Stewardship Objective 9.5: Preserve and enhance local and regional natural amenities.

Recommendations, Strategies and Actions

9.5-A: Explore alternative porous materials for bike lanes and sidewalks to decrease need for ice melt chemicals and visible delineation between bike and vehicle lanes.

[continued]

Environmental Stewardship Objective 9.5: Preserve and enhance local and regional natural amenities. [continued from previous page]

Recommendations, Strategies and Actions

- 9.5-B:** Codify best practices for green infrastructure to maintain functionality of systems (i.e. silt or trash removal to maintain drainage capacity).
- 9.5-C:** Encourage and provide flexibility for projects that incorporate sustainability principles in design such as rain water harvesting and cool roofs on new structures. Explore methods to incentivize LID in parking lot landscaping such as bioswales, rain gutters, and increased tree coverage.
- 9.5-D:** Update city code to allow alternative materials for impervious parking explore allowing pavers, gravel, or other porous materials for parking.
- 9.5-E:** Adopt a policy to maintain the current impervious land cover percentages by encouraging clustered development, porous materials where appropriate, and increasing vegetation cover.

9.6 Environmental Stewardship Waste Management and Recycling

Waste management directly and indirectly impacts environmental health, land use, and air quality. With such far reaching effects, waste management policies and practices warrant examination and identification of opportunities for improvement. Responsible policies that support conscientious practices will lessen negative impacts as consumption rates and state population continue to rise.

Existing Conditions

The City contracts with Wasatch Front Waste & Recycling District (WFWRD) for residential solid waste disposal and recycling. Residential waste collected in Taylorsville is primarily sent to the Salt Lake Valley Landfill. Once there, waste undergoes the decomposition process, a byproduct of which is carbon dioxide and methane gases. Both gases are linked to the greenhouse effect, with methane being 28 times more potent over a 100-year period than carbon dioxide. It has been reported that reducing methane emissions will have a “rapid and significant effect on atmospheric warming potential” (EPA, Importance of Methane, [link](#)). With over 147 million tons of waste decomposing in United States landfills each year, municipal solid waste landfills are the third greatest contributor of national methane emissions (14.3% during 2021).

The Salt Lake Valley Landfill is approximately 400 acres, is located 11 miles from Taylorsville, and is projected to reach capacity by 2088. At that time, the Intermountain Regional Landfill, 30 miles from Taylorsville, will become the primary destination for residential waste, quadrupling the travel time for residential solid waste. This shift may increase service prices and emissions relative to what they are today. Reducing the amount of waste through consumption and disposal behaviors will extend the lifespan of the landfill, mitigate price increases, lessen negative impacts on air quality, and conserve valuable land.

Residential

WFWRD provides waste management services to nearly 13,800 Taylorsville households, each generating about 2,463 pounds of waste annually, on par with the national average of 2,000 to 7,000 pounds annually (dependent on household size). One effective means of diverting waste is through curbside recycling. As of 2025, Taylorsville’s annual household recycling rate is approximately 13 percent (370 pounds) per household per year; below the national average reported by the EPA of 32 percent. WFWRD conducts regular route audits to collect data on the volume a recycling can is filled compared to the percentage that is contaminated with unrecyclable materials such as plastic bags. Combining the information with customer education has resulted in a declining contamination rate (illustration 9.6.1). These figures do not include rates from residential green and glass recycling services; approximately 11 percent and under 1 percent of Taylorsville customers subscribe to these optional services, respectively.

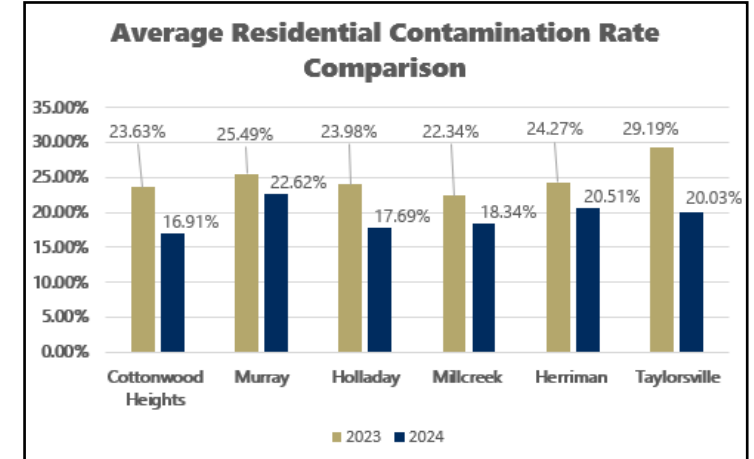


Illustration 9.6.1

Service Area Contamination Rates

Taylorsville residents have historically had high presence of plastic bags in residential recycling containers. New audit and education methods have lead to a decrease in contamination rates throughout the service area.

Data provided by WFWRD



Illustration 9.6.2

Annual Cleanup Day (2025)

Taylorsville Green Committee holds annual cleanup day for hard to recycle items, saving critical landfill space and resources.

Commercial

Commercial and multifamily residential properties contract individually for private sector trash hauling services. Most providers service multiple cities daily, making it difficult to estimate commercial and multifamily waste generated in Taylorsville. One provider reported a 4.4 percent recycling rate among the 173 Taylorsville accounts served, with a recycling contamination rate of 30-40 percent. Another provider identified a 3 percent recycling rate among the 25 commercial accounts serviced.

Food Waste

It is estimated that each person in the United States produces about one pound of food waste per day. For Taylorsville, this translates to approximately 20 million pounds per year, most of which is landfilled, where it decomposes and releases greenhouse gases. Food waste presents an opportunity to save valuable space in landfills, capture methane gas from the atmosphere and convert it to energy using a process known as anaerobic digestion. Utah currently has one facility that receives and processes food waste. In 2024, the facility captured enough natural gas to heat 1,200 houses for one year and diverted 400 tons of food waste from the landfills per week. Two Taylorsville entities use this system, but the city has hundreds of food waste generating uses that could use this service, including schools, restaurants, and grocery stores. One obstacle may be finding space for the needed additional waste receptacle.

Community Vision

Nationally, municipalities are beginning to implement plans and programs to achieve zero-waste goals. Taylorsville can begin by setting waste diversion goals and supporting strategies that incorporate new findings and technologies to capture and redirect certain waste types to alternative destinations. Waste diversion can have a range of indirect and direct benefits including conserving finite landfill space, reducing harmful emissions, and slowing the need for natural resource extraction by extending the life cycle of valuable materials.

The City can conduct a divertability analysis, and coordinate with waste management services and businesses to look for opportunities to lower the volume of trash sent to landfills. Educating businesses about recycling would help divert food waste or other waste materials. Construction of new developments or redevelopment presents opportunities to divert large quantities of waste as well, with several facilities in the Salt Lake Valley that provide construction recycling services. Taylorsville can require a recycling plan for demolished materials or explore methods to incentivize the use of recycled materials in new development.

The city should model responsible consumption and be a leader to residents and workers. Taylorsville should use resources and partnerships with WFWRD, the Green Committee, and other groups to raise recycling awareness to improve waste diversion. Specialists have shown that clearly designating the use of bins yields significant results: 100% increases in recycling in some national parks, 0% contamination rates in schools, and 91% diversion rates with close to zero contamination at large sporting events. Using public events to highlight methods and opportunities can educate and demonstrate Taylorsville's commitment to more responsible consumption and waste practices.

Environmental Stewardship Objective 9.6: Divert waste from landfill.

Recommendations, Strategies and Actions

- 9.6-A:** Establish goal to increase residential recycling rates from 13 percent to 30 percent by 2030. Collaborate with WFWR Sustainability Coordinator to engage in education and public outreach.
- 9.6-B:** Decrease residential contamination rate to 10 percent by 2030 through education and public outreach. Collaborate with WFWR and organizations (Recycle Across America, EPA grants) to implement best practices such as creating standardized labels for receptacles.
- 9.6-C:** Add recycling receptacle to trash enclosure standards for new multifamily and commercial development.
- 9.6-D:** Explore methods to increase commercial recycling in Taylorsville.
- 9.6-E:** Create and distribute a construction demolition debris handout to educate contractors about resources to recycle and divert waste.
- 9.6-F:** Explore ways to incentivize building conversions or building material reuse to reduce resource consumption and save embodied energy.
- 9.6-G:** Consider partnering with regional providers for food waste recycling at city-sponsored events such as Taylorsville Dayzz and Starry Nights.
- 9.6-H:** Inform and encourage food-related commercial uses to consider food waste diversion programs. Consider codifying standards that allow flexibility in development standards if needed for additional receptacles.