



Las Campanas Water Cooperative

SANTA FE, NEW MEXICO

2019 | SUMMER

Las Campanas Summer Newsletter

President's Letter | July 24, 2019 | Ken Kirk, President

The Co-op is becoming a "Utility of the Future."

In April, I reported that the Co-op was reviewing our contract with Jacobs for Water & Sewer services, developing a cost of service analysis to help determine a future rate structure, and focusing on a Capital Improvement Plan to inform our 2020 budget.

The Co-op is becoming a "Utility of the Future," a term that refers to a Utility that takes a proactive approach to Utility Management, guided by a systematic and cost-effective infrastructure asset and renewal program. This approach ensures the long-term viability of our water and sewer systems.

We anticipate that we will modify our rate structure to accommodate rising costs in several areas. Our infrastructure is aging and this, combined with the existing County rate increases which have gone into effect for Estates I and II, and inflation point to a rate adjustment in 2020. The Board assures you that the Co-op will only make infrastructure investments that are consistent with our needs and priorities. The Co-op is also reviewing our reserve policy.

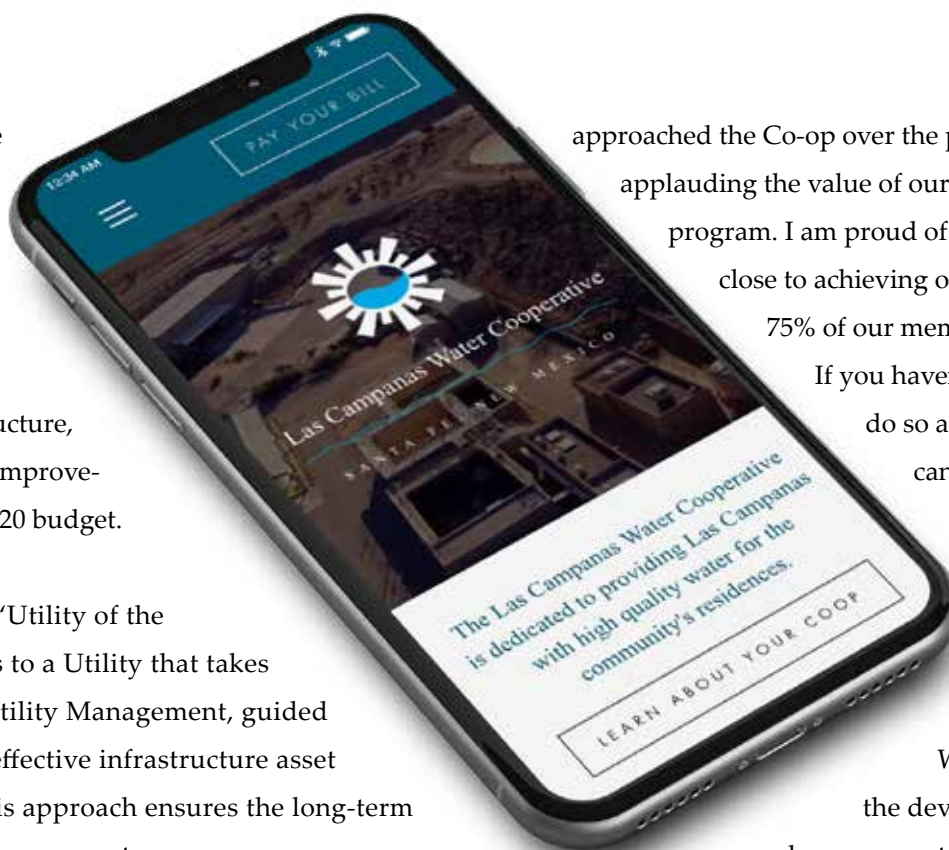
Just a reminder about "Eye on Water"! Several members have

approached the Co-op over the past few months applauding the value of our "Eye On Water" program. I am proud of the fact that we are close to achieving our goal of having 75% of our members using the app.

If you haven't signed up, please do so as soon as possible. It can help you monitor/ conserve water and identify potentially expensive leaks.

We will jump start the development of a long-range strategic plan this Fall with a meeting of current and past Co-op Board members. We encourage you to participate as well by responding to a Member survey that will be sent to you in August. We value your ideas and will take your recommendations seriously.

Our talented staff and Board never lose site of the fact that we all work for you to provide you with clean & safe water. With your support, we can continue our impressive record in this regard and while achieving our lofty goal of becoming a "Utility of the Future."





OPERATIONS UPDATE | Q3 WATER COOP NEWSLETTER

The Operations Committee of the Water Coop is focused on three key areas of activity:
(1) completing our 2019 goals & objectives; (2) taking the Eye-on-Water program to completion;
and (3) supporting the 2020 budget and goals & objective process which includes
the need to renew the Jacobs Engineering contract for support services.

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We are pleased to report that we are on schedule to complete all of our major goals & objectives on or before the established completion dates. The goals & objectives include a wide range of activities ranging from the installation of a new pond liner to the development of a three-year, risk-based capital improvement program. Performance versus 2019 goals & objectives are tracked on at least a monthly basis and reported to the Board of Directors.

The installation for the Eye-on-Water program is now 92% complete with approximately 122 households remaining. To date, 61% of our households have signed up for Eye-on-Water versus 49% at the end of Q2. We have a 2019 goal for participation (households that have signed up for the program) of 75% and are working towards meeting or exceeding this goal through continued communications with the Las Campanas community. We are hoping that the community helps us to achieve our goal by sharing the value of the technology with their friends and neighbors. If you have any questions about the program or need guidance on how to sign up, please contact Heather in the water Co-op office.

Internal staff supported by Black & Veatch has positioned us to better negotiate our contract with Jacobs Engineering. Competitive bidding is alive and well and we are on schedule to complete all 2019 Operations goals & objectives.

The Operations Committee is supporting internal staff and the Finance Committee on the development of the 2020 budget. This year's budget preparing process is benefiting from several process enhancements which will allow us to not only complete the budget well in advance of the deadline but to improve the decision-making process as it relates to capital expenditures and the all-important renewal and replacement program.

The current Jacobs Engineering contract expires in November 2020. We are on schedule to have a new contract negotiated by December 2019. Internal staff was supported by Black & Veatch as part of the review of the existing contract with three goals: (1) negotiate a contract that is favorable for the Las Community community in terms of level and quality of service and cost;

(2) put in place contractual provisions to enhance the overall program; and, (3) structure contract so that it is easier to manage and track by internal staff.

Jacobs will be required to divide its service/support area into six standalone areas of support: (1) O&M; (2) Renewal & Replacement (R&R); (3) Capital Improvement Program (CIP); (4) Asset Management Plan (AMP); (5) Engineering Support; and, (6) Technology (efficiencies gained through data collection & analysis).

If you have any questions or concerns with the operations activities, please do not hesitate to contact Stephen Raab, the chair of the Operations Committee.





COMMUNICATIONS AND SUSTAINABILITY COMMITTEE

Communications Initiatives

- During the next quarter we will conduct a Member Survey as one of the steps to put together a comprehensive long-term plan. The survey will allow for Member comment on a wide range of topics. Please complete the survey to help guide the Board in its planning. An email will be sent letting you know to be on the lookout for the survey in your inbox.
- If you haven't visited our updated Co-op website, please do so. We have more updates planned to further enhance functionality, including adding a member comment link, the website archives newsletters, governance documents, and an ever-expanding resource section about effective plantings, water conservation, and other topics of interest.
- A new Welcome Booklet is in the final stages of development to provide to Co-op members with important information about water conservation, our billing system, and the resources provided by the Co-op.
- We are presenting information to local realtors about Eye on Water and sharing our Welcome Booklet so that potential new residents have access to information about our Co-op.

• The July meeting and barbeque generated attendance of over 100 people, helping achieve our goal of Community engagement. Ginny Selvin presented a history of the Las Campanas Water Co-op.

Sustainability Initiatives

- Eye On Water continues to be a valuable new resource allowing members to track water usage and identify leaks through the "leak alert " system. Over 61% of our members have enrolled. We will continue to promote enrollment and remain committed to our goal of 75% enrollment by year-end.

If you need assistance setting up your account, please do not hesitate to call the Co-op.

- Quarterly Conservation Bulletins will continue to be sent out by email to all members in an on-going effort to provide timely information to our members. These bulletins are all archived on the Co-op Website.
- Time-Sensitive Communications will continue to be sent out periodically as friendly reminders of best practices on subjects such as:
 - Guidance for Turning on Irrigation in the Spring
 - Using Eye-on-Water to Monitor for Leaks
 - Guidance for When and How to Effectively Revegetate Post-Construction



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www.lcwatersewer.coop



Las Campanas Water Cooperative

SANTA FE, NEW MEXICO

2019 SUMMER | CONSERVATION BULLETIN

Considerations for Selecting Trees in Las Campanas

Trees are typically the largest, longest-lived and most expensive plants in the landscape, so making sure they get off to a good start is very important.

Matching the tree to the site is a critical factor. This means choosing a tree that won't grow too large for the space it has above ground and making sure there is enough space, soil and water available to support the tree you've chosen as it matures.

It also means choosing a tree that is adapted to the soil on the site. A tree that doesn't grow well in alkaline soil will probably develop a lack of iron in many sites around Las Campanas. Most trees need more water than we get from natural precipitation to grow well here, and this will be even more critical as it gets hotter and possibly drier in the future. It's hard to properly irrigate big trees, so shaping the land and planting trees where rainwater can collect around them will be useful to make sure they get enough water.

People used to believe that the root system of a mature tree echoed the shape of the top of the tree, that the roots were as deep and as wide as the canopy of the tree. We now know that this is not accurate. The root system of a mature tree (growing in a space that allows it to develop naturally) is typically much shallower and much wider than the top of the tree. The majority of most tree root systems is in the top 3' of soil and most of the roots that absorb nutrients and water are in the top 18" of the soil, with the highest biological activity occurring in the top 8-10". Mature root systems of most trees are typically two to three times as wide as the tree is tall; hence a 20' tall pinon can have a root system 50-60' wide and a 30' tall shade tree can have a root system 60-90' wide. Matching the tree to the site and giving it plenty of room to develop its root system is critical for its long-term health. It's equally import-

ant to understand a tree's natural form and mature size above ground so it won't be placed in a space that is too small, requiring regular pruning over time. Following are some important things to think through before buying a tree.

Critical Factors

1. Adaptability to our environment
2. Adaptability to the conditions of the site
3. Ability to meet the needs of the owner and the community

Human Needs

Shade in summer, solar gain in winter
Screening unwanted views, framing/accenting desirable views
Protection from wind and dust
Season(s) of function/interest
Food for humans
Wildlife support--food, cover, nesting sites
Beauty, connection to Nature

Tree Characteristics

Adaptation/tolerance to--alkaline soil, cold (to -15 F), drought, heat, intense sunlight, wind
Adaptation to conditions/limitations of site
Type--deciduous, evergreen (consider year-round appearance)
Resistance to pests/diseases

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- Size at maturity, growth rate, ultimate form (including shading potential at maturity)
- Aesthetic appeal (flowers, foliage, fruit, bark)
- Aggressive spreading/suckering tendency
- Potential root problems: heaving walls/foundations, cracking pipes, competition with other plants
- Maintenance required to achieve desired functions (including water needs), “messiness” potential
- Site Conditions
- Space for growth (above and below ground), underground utilities
- Water availability, patterns of water movement on site
- Wind patterns
- Sun/shade patterns
- Other microclimate factors (reflective surfaces, etc)
- Proximity to other properties (consider potential to grow into adjoining properties)
- Soil characteristics--pH, nutrient profile, texture, drainage, volume, contaminants

Other considerations

- Architectural considerations—orientation of house and potential for solar heating, views from inside and outside, relationship to nearby properties
- Movement patterns—how close is this tree to traffic patterns? (thorns, fragrant bloom, form)
- Timeline/cost considerations—size at planting and expectations, time required for establishment, availability and quality of plants available, availability of knowledgeable planters, cost—for both the tree and the installation

Recommendations for rootball size

Large field grown and collected native trees suffer tre-

mendous root loss at transplanting, and some are dug with rootballs that may not provide enough root mass for the tree to easily get established after being transplanted. Here are recommendations for sizes of rootballs to help ensure transplant success.

(1) For deciduous trees, it’s recommended to have rootballs that are at least 12” wide for each inch of trunk diameter for trees that are 1.75 to 2.5” caliper. For larger trees, a rootball at least 10” wide per inch of trunk diameter is standard; bigger is better if the rootball is firm and well-secured.

(2) For conifers, look for rootballs at least 3.5” to 4” wide for every foot of height, with a minimum of 12” for trees 3’ tall collected from the wild.

How to Plant a New Tree

Santa Fe Municipal Tree Advisory Board

A new tree is a lifetime investment. How well your tree, and investment, will grow depends on the type of tree and location you select for planting, the care you provide when the tree is planted, and follow-up care the tree receives after planting. Nine Steps for Planting a New Tree. If the tree you are planting is balled in burlap (b&b), it is important to understand that its root system has been reduced by up to 95% of its original size. As a result of



the trauma caused by the digging process, these trees commonly exhibit what is known as transplant shock. Containerized trees may also experience transplant shock, particularly if they have circling roots that must be cut. Proper site preparation before and during planting coupled with good follow-up care reduces the amount of transplant shock and allows the tree to more quickly establish in its new location. Follow these steps carefully to get your tree off to a good start and help it recover from transplant stress.

1. Dig a shallow, broad planting hole. Make the hole wide, so that there is at least 12-18 inches of space around all sides of the ball. With soil that is not too compacted, using a spade or spading fork to loosen the soil beyond the planting hole can also help roots spread into the surrounding soil more quickly. Check the rate at which water drains from the planting hole before you plant the tree. A drainage rate of 1 -3 inches per hour is good for most trees. In heavily compacted soils or those containing caliche, you may need to dig four to six radial trenches

4-6 inches wide and 12-15 inches deep, extending 6 feet beyond the planting hole to give new roots a better start. Fill these trenches with a blend of half native soil and half compost.

2. Identify the trunk flare. The trunk flare is where the roots spread at the base of the tree. This point should be partially visible after the tree has been planted (see diagram). If the trunk flare is not partially visible in the container or on top of the b&b root ball, you may have to remove some soil from the top of the root ball. Find the trunk flare so you can determine how deep the hole needs to be for proper planting.

3. Prepare containerized trees for planting. Inspect the root ball for circling roots and cut them off with a clean, sharp knife or pruning shears. Expose the trunk flare by cutting roots covering it, if necessary.

4. Dig the hole only as deep as the rootball, making sure the trunk flare is partially visible above ground once the tree is planted. Before placing the tree in the hole, check to see that the hole has been dug to the proper depth. If the hole is too deep, add some soil and tamp it down to form a solid base for the root ball. To avoid damage when setting the tree in the hole, always lift the tree by the root ball.

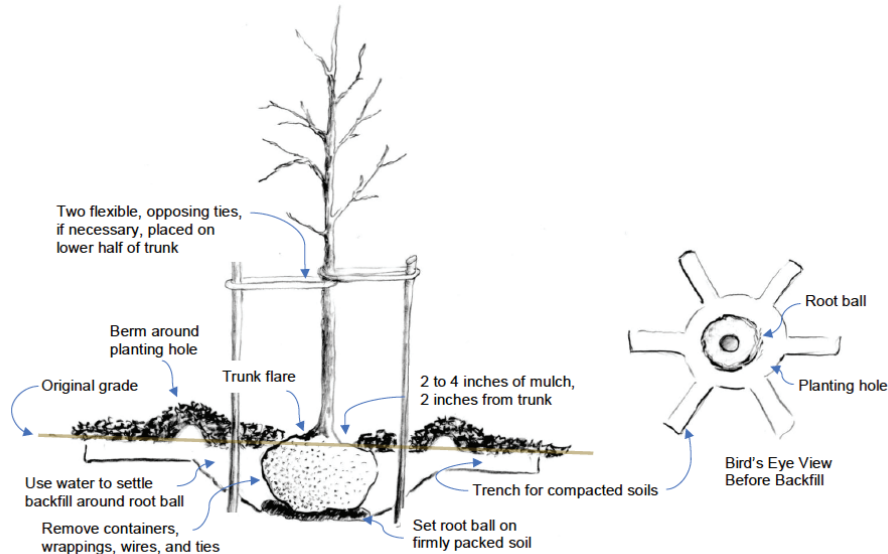
5. Straighten the tree in the hole. Before you begin backfilling, have someone view the tree from several directions to confirm that the tree is straight.

6. Backfill the hole. Break up the backfill soil so that there are no large clods. If you wish to amend the soil, mix good

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compost at a rate of no more than 25% to the backfill soil. Do NOT mix any fast-release chemical fertilizers in the backfill. Fill the hole about one-third full and gently but firmly pack the soil around the base of the root ball. Remove all twine from around the tree and the root ball. If the root ball is wrapped with wire or in a wire basket, cut the wire away from as much of the root ball as possible, being careful not to let the soil fall apart. Remove the burlap from around the root ball if you can do so without the root ball becoming too loose. Finish adding backfill up to the top of the root ball, then water thoroughly to settle the soil and remove air pockets. If necessary, add more backfill to just cover the root ball after the soil is settled. Add a shallow berm the same diameter as the planting hole. Do not compact the backfill soil by stomping on it; use the water to settle it.

7. Stake the tree only if necessary. New trees usually root out better if they are not staked at planting. If staking is necessary on windy sites to keep the tree from leaning in the hole or blowing over, use two stakes in conjunction with a wide, flexible tie material on the lower half of the tree to hold the tree upright, provide flexibility, and minimize injury to the trunk (see diagram). Remove support staking and ties after the first year of growth.



8. Mulch the base of the tree. Mulch with organic matter applied from the base of the tree to several feet beyond the drip line. Mulch acts as a blanket to hold moisture, to moderate soil temperature extremes, and to reduce competition from grass and weeds. Good choices are leaf litter, shredded bark, tree trimmings, or composted wood chips. A 2- to 4-inch layer is ideal. More than 4 inches may cause a problem by reducing oxygen availability and retaining too much moisture. When

placing mulch, be sure that the trunk of the tree is not covered. A mulch-free area 1 to 2 inches wide at the base of the tree is sufficient to avoid moist bark conditions and prevent decay.

9. Provide follow-up care. Keep the soil moist but not constantly saturated. Water trees

at least once a week in cooler weather and at least every 3 to 4 days during hot weather, barring soil-saturating rains. When the soil is dry 2 to 3 inches below the surface of the mulch next to the root ball, it's time to water. After trees go dormant in the first season, water every two to three weeks through November and December. Through the first winter, water at least once a month unless the soil is frozen or heavy snows keep the soil moist. Increase watering frequency in the spring as trees come out of dormancy. At planting prune off only diseased, damaged or dead branches; leave all of the healthy canopy the first year. Pruning to shape the tree can begin the second year.