East Campus Landscaping and Infrastructure







Landscaping Maintenance







Irrigation Upgrade and Recycled Water Management

- ➤ Management of water starts with infrastructure.
- > Skilled repair specialist.
- > Cutting-edge controller technology.
- > CSU Channel Islands is currently at a milestone of 40% recycled water reduction in usage.
- ➤ The campus is using 2009 usage levels and is irrigating 30 more acres.









University Glen (UGC) Irrigation Status

• Facility Services Grounds has recorded over 400 working hours of irrigation system repair and upgrades since the January 1st 2016 maintenance services change.



• The installation of 30 new smart link technology controllers will help with water reduction by 30% or more. Currently 24 controllers have been installed and are fully operational.

http://www.youtube.com/watch?v=fNJOjbsgwz8

University Glen Irrigation Wire Repair Work





- Multiple direct bury irrigation wiring issues have been identified and repaired.
- Unsafe controller enclosure electrical wiring has also been addressed.



University Glen Irrigation Valve Replacement





Leaking irrigation control valves and PVC water line breaks have been discovered through out University Glen 30 acre property. Efforts will continue to repair past under maintained damaged irrigation infrastructure to allow future water saving. YTD replacements: 15 control valves, 10 Valve boxes, and 3 sections of 3 inch mainline have been repaired.

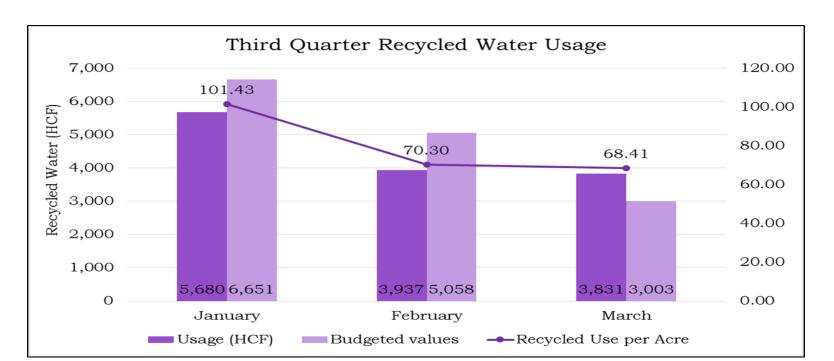
University Glen Sprinkler Repair and Replacement



- Grounds services has spent the last 8 months inspecting irrigation systems and replacing broken popup, rotor and drip line sprinklers.
- We currently have a count of over 250 faulty sprinkler nozzles that have been replaced.
- YTD: 65 broken popup sprinkler body caps have been changed out.
- 20 Community park lawn rotors replaced.
- 35 planter and lawn area popup sprinklers removed and replaced.

Recycled Water Reduction at University Glen

- (UTS) Utility Tracking System recycled water reduction for University Glen
- Since January 2016 the implementation of smart controller technology has reduced recycled water usage by 1000 (HCF) Hundred Cubic Feet or 748,000 gallon of water.
- Dollar and cents shows returns of > \$1000.00 a month, which will put an estimated return on investment for smart controllers around 3 years.



Annual Wildland Fire Clearance





The campus has always been challenged with the amount of acreage that needs to be cleared for fire season — through reviewing alternative resource options, FS has partnered with California Department of Forestry & Fire Prevention (Cal Fire) to handle Annual fire clearance work in and around the buildings and homes of University glen and the main campus; Minimizing costs to the University and University Glen community - normally many hours of OT would be needed for this whereas now we can now bring in a CAL-Fire crew of 6-8 for \$200.00 a day.

24/7 Emergency Response



- Grounds services and our Infrastructure team is always ready to respond to a disaster.
- Our communication network is in place.
- ➤ Employee's live on UGlen or in the surrounding community being a 5-10 minute response time.
- Equipment is onsite and always fueled and ready for use.



FACILITIES SERVICES C H A N N E L I S L A N D S

Environmental Protection



- Monitoring and cleaning storm out falls.
- Curb, gutter, and parking lot street sweeping.





Pest Management







Tree Care

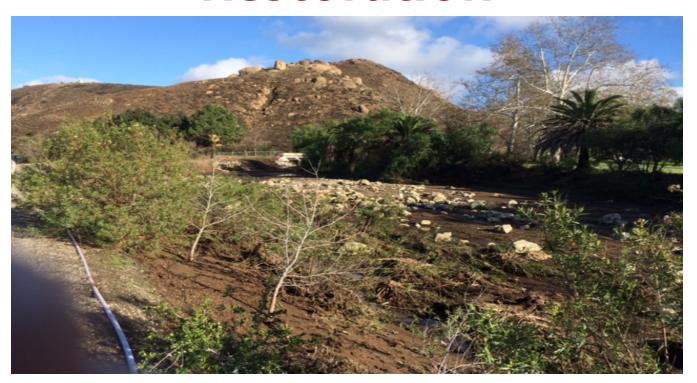


Protecting the life of the tree and trimming to prevent injury or property damage due to heavy limbs.





Water Shed Abatement & Restoration



To prepare for Winter storms





Community Service



Providing sand and sand bags to residents who wish to add additional property protection from rain storms.





FS Grounds services is a one stop shop, fully equipped and staffed with professional, skilled, and friendly employees. They are ready to take on challenges and serve as a vital partner in the community.





Landscaping Work Schedule

Monday & Tuesday

- Mowing and edging of common lawn areas starting at 1A/1B
- Ending on Tuesday at Phase 1C

Wednesday, Thursday, Friday

 Hedging, weeding, tree trimming, planter clean up, and chemical application

Added Value

➤ Street sweeping of University Glen once per month.



Infrastructure Maintenance











Sewer and Street Valves



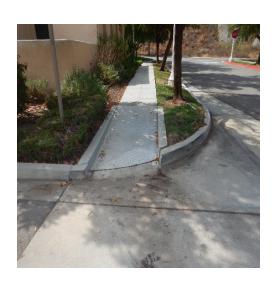


All Sanitary Sewer
Lines and Storm Water
Lines have been
cleaned in order to be
compliant with
regulations and to
ensure proper
operation — this service
is required on an
annual basis.





Repairing Trip Hazards







Repairing safety trip hazards in concrete walkways by grinding down uneven concrete, filling in cracks in front of stairs and replacing sections of broken sidewalks.



Regularly Scheduled Road Repairs and Preventative Maintenance (PMs)

Routine Repairs

- Repair Cracks and Pot Holes in Roadways
- Repair Sunken Areas of Pavers
- Curb and Gutter Repairs
- Restripe Stop Markings and Limit Bars

Preventative Maintenance for Roads

- ➤ Street Slurry Seal (Every 4-5 years)
- Annual Curb Painting
- ➤ Annual Striping
- Annual Man Hole Inspections





Water, Sewer and Storm Drain Systems

- Monthly Water Valve Exercising
- Quarterly Hydrant Flush
- Annual Sanitary Sewer Cleaning and Inspection
- Emergency Sewer Blockage Repairs on Mains and Laterals
- Annual Storm Drain Cleaning and Inspection
- **➤** Emergency Storm Water Blockage Repairs
- Biannual Catch Basin Inspection and Cleaning





Infrastructure Preventative Maintenance

All PMs are scheduled in our CMMS with ongoing repairs as needed.

- Monthly Sidewalk Inspection and Repairs
- Annual Backflow Testing and Certification as required by Code.
- Jogging Path Repairs (Decomposed Granite)
- Monthly Street Light Inspections and Repairs
- Basketball Court Reseal and Strip (5 Year Need)
- Monthly Landscape Lighting Inspections and Repairs
- Annual Red Curb Painting
- Annual Signage Inspections and Repairs





Road Repairs Since 1-1-16



- FS has restriped all stop markings, limit bars and faded red curbs repainted.
- FS has replaced all faded road signs and has repaired damaged signage.
- FS has trained our infra team on repairing roadway cracks using a hot rubber application — cracks through out the development will be repaired prior Winter 2016 to prevent pot holes from developing.



Infrastructure Repairs since 1-1-16



Trip Hazard Repairs:

- FS has repaired the jogging trail ruts and trip hazards at transitions
- FS has ground down sidewalk trip hazard throughout the development
- FS has surveyed and identified over 50 sections of sidewalk for R&R that will begin this Fall.

Bridge Railings:

• FS has prepped the wood beam railings for a stain refresh that will occur soon.

Misc. Repairs:

- Broken concrete bases, loose pavers, falling hazards (Heavy Limbs) are all being addressed.
- V Ditches are being cleaned out, extended and diversion walls added to create better storm water flow and to prevent erosion into the streets.





Communication

- FS has met with UGlen Property Management and is providing them with training and direct access into our CMMS which will be a single point of communication and provide direct work order access.
- FS is posting this presentation along with Weekly UGlen Project updates and Activities onto our Webpage for all to access and will also provide quarterly updates.



Our Facilities Services Maintenance team take great pride in working to maintain the University Glen infrastructure and keeping ahead of any potential problems that may arise. They have a wealth of knowledge in concrete, plumbing and in general construction trades that will serve the residents of University Glen well into the future. They are ready and willing to help in any way they can.



Casey Waltrip and Jesse Gonzales

