

Front Range Urban Forestry Council
May 12, 2011
Parker Water & Sanitation District

Introductions – David Flaig, City of Littleton

Attendees introduced themselves.

Tour of North Water Reclamation Facility

Eric Pierce – Water Resource Superintendent

James Roche – Operations Manager (presentation)

Slideshow: 2 million gallons a day. Four lift stations that move sewage from one side of Cherry Creek to another. Complete ground water system. 45 ground water wells 60' to 2700' deep. Maximum production is 16 million gallons a day. Headworks – first (smelliest) room in the plant. From there the waste moves on to the aeration basin (bacteria does the work to clean it up). Nitrogen and phosphorus is removed. Cherry Creek is phosphorus sensitive. Through biology and chemistry it is possible to remove waste. Next step: clarifiers. The Advanced Water Treatment Facility removes 350 dry tons of bio solids from plant and hauls it off to farmers' fields for land application. After the water goes through the Advanced Water Treatment Facility it goes into Cherry Creek--discharge point is at the Confluence. NWRP and SWRF go to regional reservoir. RPS (pump station) moves it to Cherry Creek, where it exchanges to Rueter-Hess Reservoir. Next couple of years building treatment plant using ceramic membranes. Right now finishing up reservoir itself, laying erosion control, and testing to get water up to Rueter-Hess. Pump station can pump 78 cfs to Rueter-Hess Reservoir. Three wetlands were created along Cherry Creek as mitigation. Rueter-Hess Reservoir capable of storing 72,217 acre feet. It is a 2,700 acre site. One 48" pipe will feed WTP in the future. It travels up 300' incline, and then three miles to site. Shave peak of spikes in summer with water from treatment plant.

Break

Parker Forestry Update – Erik Stadsvoid, Forestry and Open Space Supervisor

Absent

Water Conservation, Trees and Xeriscape

Craig Miller, Parker Water and Sanitation District Water Efficiency Specialist

Water Management for Your Home and Community

Colorado is growing bluegrass in the desert. We received close to two and a half to three inches in moisture in the last 36 hours. Where does our water come from? Douglas County is reliant on ground water. An acre-foot is approximately 326,000 gallons of water. Denver Basin aquifers contain 467 million acre-feet of water and only 269 million are recoverable. In the Denver Basin, once water is taken out of the top layer it is gone forever. Ground water is very expensive to pull as some wells are 3,000' deep. Water out of the ground is pristine, so it takes very little to treat before sending it off. Levels are dropping 30' year. Wells that used to process 1800 gallons per minute have gone down to 2-300 gpm. There isn't a drop of water that has not been polluted in some way. Between 1950 and 2000 the US population nearly doubled, but in the same period the water use tripled. Americans use 100 gallons of water each day (1600 glasses). At least 36 states are anticipating local, regional, or statewide shortages by 2013--Colorado is on the list. Parker uses 163 gallons of water per person per day and Castle Rock's use is 137 gallons per person per day. More than half of the water usage between May and October is for landscapes. Bluegrass does NOT require heavy irrigation--good performance is seen in spring and fall and when weather is cool and rainy. Expect brown spots and discoloration during the heat of summer, or if irrigation efficiency is poor, or soil preparation is inadequate. Match irrigation application to soil type and root depth. Trees should be watered well, but less often to encourage deep root growth. Trees should not be in turf. For turf make sure there is head to head coverage. No need to program, just use the footprint test. If you step on grass and it springs back it is good. If it lies flat and does not recover quickly then water. Use the "cycle and soak" premise, which is especially good for our compacted soils, which can only accept ¼" per hour. Water at night or in the early morning (9 pm to 6 am). There is less wind and evaporation, and avoid hours of peak water demand as there can be less pressure. Doing these things will reduce water usage by 30%. Wait to activate system until late in season (late May). Again, this will encourage deeper root systems. In the spring or fall, water only half the amount that it would typically need in July, decreasing the number of days in half and not the time per zone. For example, if you are watering every third day in summer, then water every sixth day in spring and fall. What to do...Xeriscape! Colorado Senate Bill 100 (SB 100) passed in 2005. "Any section of a restrictive covenant that prohibits or limits xeriscape, prohibits or limits the installation or use of drought-tolerant vegetative landscapes, or requires cultivated vegetation to consist exclusively or primarily of turf grass is hereby declared contrary to public policy and, on that basis, that section of the covenant shall be unenforceable." If you don't walk on it, you do not need bluegrass! Replace turf with xeric groundcovers or use native blue grama or buffalograss. Average tree failure age in Parker is 7-10 years due to over watering, poor soils, etc. Castle Rock certifies landscape contractors before they can work there, which is good as many times landscaping is "slammed in" then forgotten about.

Committee Reports/Community Reports

Insect and Disease – Ralph Zentz

TCI has an article talking about the Goldspotted Oak Borer Beetle (another *Agrilus*) that is wiping out Coastal Live Oak, Canyon Live Oak and Black Oak in California. It is native to Arizona, Mexico and Guatemala and probably got into California through movement of firewood. Not sure of the threat to Colorado, but the pest is of concern.

MPB continues to spread in our urban areas. It appears to be on the upswing this year. Mortality estimates of 10-15% are still good, but with multiple year hits it is just hard to quantify and predict what the outcome will be. It is interesting to note that many of our arborists have reported that the beetles were flying in late April and so far in May. Also saw an Austrian pine that had fresh pitch tubes about two weeks ago. It is right next to a killed Scots pine so it is easy to assume the beetles came out of one tree and went right back into another. What is different about this is that usually we see only a few aborted hits on only a few Austrian pine, but this tree was heavily attacked. Will watch it through summer and see what happens. Also seen substantial MPB attacks on Norway Spruce.

Northern Colorado Pest Group's first pest meeting is this next Wednesday (May 18th) at 12:00 in the classroom at the Gardens on Spring Creek.

May 25th - Pest meetings Harvard Gulch 550 East Iliff Avenue at 9 a.m. (hear about "tree-age" and its registered uses for EAB and MPB). Someone from the Metro Area will also be at the N. Colorado meeting to update Denver Metro attendees on that meeting.

Select Tree – Tim Buchanan

No Report.

Hazard Tree – Bill Cassel

CTC is down to a handful of defective tree CDs. The committee has reorganized with new members developing a new form and CD, which will include presentations.). There has not been a consensus on which form to use nationally. Julian Dunster – lead author NW Pacific certification program-Is there enough interest to get Julian out here? About \$600 per person. Pacific NW has a program to get a certificate. Certification different from certificate...several day program then take a test. ISA will have to have approved teachers and exams would have to be given—on hold for now.

Program/Membership – Keith Wood

Next meeting July 12 and 13 in Cheyenne. Great Plains Forest Pest Committee is meeting there then, and there are several folks attending, so others interested in tree selection will track alongside of that group with a Tree Selection Workshop on the 12th. The morning of the 13th we will plan to visit the research station arboretum and check out the remaining "survivor" trees on the site.

CTC /TAC

Membership envelopes on the table...please join (www.coloradotrees.org). Bike ride will be on June 26 at New Belgium Brewery in Fort Collins. Tasting room open – ride from Fort Collins to Greeley and back or alternate depending on water levels. Mike McGill is looking for volunteers for various committees, Grant program, newsletter, notable tree tours (template), Trees Across Colorado (Gertie Grant – 1692 trees at four drops in 2011, 20 more than last year – bare root and B & B 1-1.5” xeric species). Trees are planted along the Front Range through Colorado Springs. TAC took in 70k from 19 groups and net profit of \$11,751 to CTC. Gertie is not in a paid position. Eastern/Western forestry conferences (looking for speakers or attendees), calendar committee, board development, Champion Tree Program (enter trees for consideration).

Kelli O'Brien, a visiting Douglas County Master Gardener interested in starting some tree non-profit work. She is trying to build a project for Douglas County MGs to help/educate local communities. Tree knowledge is needed (water, pruning). MGs could give CTC the man power it needs to help education on proper tree care. Need to put mechanisms in place to track how they are getting education (i.e. Castle Rock – Waterwises program, etc.). Bill Cassel and Kim (the Park People) could train people. If the program is successful in Douglas County it could expand to other extension offices.

MHM - 200,000 trees at this point...have until 2025 to finish planting.

ISA – Bill Cassel for Rob Davis

Chapter meeting Sept 29 and 30 will be at Marriott at 470 and I-25. John Ball will speak on safety and injuries, tree rigging, climber safety, TBD safety. Critical root zones and root plates, how close can we get to trees. Whitney, Shiloh internal tree systems. Dave Leatherman on the state of the forest. Altec will provide an inside/outside bucket truck safety training. Tree climbing championship October 1 in a TBD location (south Metro area) – Chad Delzell is running this. September 28 is the ISA written exam at Littleton's Bemis Library. Tree worker exam June 23 posted on Internet. Aerial lift exam (Friday or Saturday). Certified arborists had an ethics form to sign about a year ago asking for them to list any time they'd ever broke the law, etc. It now has been changed to ask if they'd ever committed offenses related to arboriculture. Trying to keep itself policing...everyone playing by the rules.

Save the date:

ISA-RMC Annual Conference

September 29-30, 2011

Marriott Denver South at Park Meadows

303-756-1815; www.isarmc.org

MISC

Keep track of where water is going and note the changes.

The Cooperative Agricultural Pest Survey Program (CAPS) survey information is kept on: (<http://www.aphis.usda.gov/hungrypests/pestTracker.shtml>). If there is a particular pest that you are looking for you can look on the website. CAPS is keeping track of state-wide problems (there are interactive maps). Missouri and Minnesota are under federal quarantine for Emerald Ash Borer. Pennsylvania is totally quarantined for Emerald Ash Borer and Gypsy Moth. Biological controls have been somewhat successful. Traps...it is ultimate time to put them up!

Attendance

Chuck Gehringer	City of Broomfield
Tom Wells	City of Broomfield
Keith Wood	CSFS-Broomfield
Scot Sanders	Davey Tree
M. Rours	City of Englewood
Charlie Auner	City of Englewood
Robert Bond	Independent
Lisa Peraino	USDA APHIS PPQ
Becky Lamphear	City of Colorado Springs
Ben Walker	Super Trees
Josh Theobald	Highlands Ranch
Caleb Palmer	Highlands Ranch
Jason Kruegel	Highlands Ranch
Brad Hoy	Fort Collins Forestry
Tim Abbott	Fort Collins Forestry
Patrick Plummer	City of Golden
Kyle Sylvester	City of Brighton
Bill Cassel	City and County of Denver
Michael Till	CSFS-Woodland Park
Andy Schlosberg	CSFS-Woodland Park
Mike McCann	Highlands Ranch
Scott Grimes	South Suburban
Susan Hardin	South Suburban
David Flaig	City of Littleton
Kelli O'Brien	Douglas County Master Gardener

See you in July! Next meeting July 12 and 13--July 12 will be the Tree Selection Workshop in Cheyenne, and July 13 is the tour of the Cheyenne Research Station Arboretum.