Landscaping for Water Quality
Thoughtful Design Helps Protect Water Resources

Watershed Planning & Restoration Program Staff

A well planned landscape can enhance the environment in a multitude of ways, particularly with respect to protecting water quality. Landscapes that are sustainably designed and maintained will slow down runoff and increase infiltration of water into the ground, which reduces the amount of pollutants flowing into waterways and storm drains. Other benefits include water conservation, flood and erosion control, and streambank stabilization.

So how would one go about achieving these goals? Reducing the total area of lawn and replacing it with planting beds and/or naturalized areas are two of the best landscape improvements you can make. When compared to traditional lawns, areas planted with perennials, ornamental grasses, shrubs and trees do a much better job of decreasing runoff and increasing infiltration. Strategically placing the planting beds along waterways will create buffer zones that catch pollutants and minimize erosion, as well as providing streamside habitat and beauty!

Using plants that are well suited to your microclimate is another great way to protect water resources by lowering... continued on page 2
Does Waterless Make Sense?
Water and Money Savings Potential of Waterless Urinals

Watershed Planning & Restoration Program Staff

Waterless urinals have become a popular water saving feature in public buildings around the country, and numerous universities, state, federal, municipal and LEED-certified (Leadership in Energy and Environmental Design) buildings now incorporate them.

As the name implies, waterless urinals don’t use water to flush after each use. Most waterless units use a liquid sealant that has a lower relative density than water or urine, which pass right through the sealant. This odor absorbent, environmentally sensitive fluid creates a liquid barrier that traps odors. Liquid-seal urinals come in two basic designs. One uses an integrated trap where the sealant floats on top of the urine (picture oil and water in a glass). This design must be “flushed” with a bucket of water every two weeks; the sealant is then replaced. The other design uses removable, disposable canisters that contain the sealant; these can last up to 6 months depending on use. There are also mechanical-seal urinals that have airtight one-way valves; another design uses a low voltage fan to dissipate odors from the trap.

So the question is, are waterless urinals worth installing? Models range from $230 to $850, with an average of $380. In contrast, traditional urinals cost from $150 to $700, with an average of $275. Depending on regularity of use, waterless urinals can save anywhere from 15,000-45,000 gallons of water per year, per urinal (EPA estimate). This number is based on the 0.5-3 gallon flush of a traditional urinal. Thus if water costs 1 cent per gallon, the average waterless unit could pay back the cost difference in less than a year! As for maintainence, it is different in some respects from that of traditional urinals, but overall it should be relatively straighforward and simple. There have been several news stories in recent months about waterless urinals failing in public settings. Reasons for failure range from old plumbing not working with new technology, user misuse (putting garbage or other liquids into the urinal), and the unique maintenance needs not being upheld or addressed properly.

All in all, when waterless urinal systems are designed and maintained properly, the water and money savings potentials make them well worth considering.

LANDSCAPE FOR WATER QUALITY
continued from page 1

the amount of water and chemicals needed in your landscape. Traditional lawns are planted with bluegrasses that thrive in cool wet weather, a.k.a. early spring. For the rest of the growing season, especially in our climate, these lawns are extremely high maintenance, requiring lots of water and fertilizers to keep them green and healthy. There are a wide variety of drought-tolerant plants available for Utah landscapes, many of which are native to this area. Native plants are a great choice as they are uniquely adapted to their natural environment, having evolved to thrive without the need for drip irrigation and packaged fertilizers! In fact, many natives will suffer from the addition of unneeded water and fertilizer.

If you want to keep lawn as part of your landscape, consider replacing thirsty bluegrasses with low water native grasses such as Blue grama or Buffalo grass. These turf-type grasses can be mowed for a manicured lawn, or, if left unmowed, they will create a meadow that complements naturalized plantings.

All in all, replacing traditional lawn with water-wise, hardy landscape plantings can go a long way toward protecting water resources. Check out these websites for more info:

• Water-wise plant information from Utah Division of Water Resources www.waterwiseplants.utah.gov
• “Utah’s Choice” native plant lists www.utahschoice.org
• EPA’s home landscape tips www.epa.gov/nps/dosdont.html
As an old proverb states, “It takes a whole village to raise a child.” Having been deeply involved in the Jordan River Total Maximum Daily Load (TMDL) process for the past year and a half, I believe that a version of this proverb also applies to cleaning up the Jordan—“It takes a whole watershed to restore a river.” But, how does a whole basin get involved? I see the solution as having three levels of participation: awareness, education, and behavior change.

DWQ uses all possible avenues to let the community know that the Jordan River is not meeting its water quality standards for a number of pollutants. We spread the message through our website, presentations to the public, and in publications like this newsletter. We promote boating trips to build respect and love for the river. We have a Technical Advisory Council that reviews drafts of the TMDL before it goes to public comment.

Second, we educate the community on actions that will positively affect water quality in the Jordan, such as how to keep pollutants out of the storm drain and thereby out of the river. We also publish water quality information about the Jordan, what we know and what we have left to learn.

Ultimately, it’s up to each of us to change our behavior. For example, a change might be not over-watering your garden to prevent fertilizer-rich runoff from ending up in the river. Another change in habits could be washing cars at the car wash, where the water is treated before entering the storm drain. DWQ staff hopes that our educational efforts and campaign to spread awareness have been, and continue to be, effective. We want the Jordan River TMDL to be a successful and implemented plan and we welcome suggestions on how to reach the widest audience.

Cleaning up the Jordan River will be a complex and long-term process, so please get involved! Neither the DWQ, nor the river, can do it without you—“It takes a whole watershed.”

Kayaking the Jordan River to evaluate completed restoration projects and threats to water quality.
Stewardship in Action!
Implementing the Countywide Water Quality Stewardship Plan

Watershed Planning & Restoration Program Staff

Salt Lake County has successfully received, and continues to seek, grants to implement recommendations made in the 2009 Salt Lake Countywide Water Quality Stewardship Plan (WaQSP). In addition to grant monies, County Council has allocated funds for continued stream restoration and WaQSP support. Ongoing and planned projects include:

Ecosystem Enhancement
- 561 S to 2100 S—Partnership with Salt Lake City to complete restoration at 4 different sites on the Jordan River (Funding: ARRA)
- 10400 S to 13200 S—Ecosystem restoration at 3 different sites on the Jordan River (Funding: ARRA)
- 6400 S to 7800 S (Midvale Slag/ Bingham Junction)—Large scale restoration on the Jordan River
- 8600 S to 9000 S—Restoration project on the Jordan River
- 8600 S—Finalize design drawings to construct overland flow stormwater treatment facility

Public Involvement & Planning
- Jordan River Watershed Council meeting facilitation
- Publish bi-annual Watershed Watch newsletter
- Develop a stream guide booklet for homeowners
- Organize and facilitate annual Watershed Symposium
- Expand outreach efforts, including I Love the Jordan River Program
- Provide assistance, coordination, facilitation and oversight for water quality improvement
- Develop sensitive areas overlay zone ordinance template for use on the west side of unincorporated Salt Lake County

Data Collection
- Calibration/trial runs of a Watershed Water Quality Model that will assist future watershed planning and implementation
- Installation of five flow gage stations for water quality monitoring
- Sampling of instream water quality during storm events, includes pilot instream sampling of Mill Creek during a storm event
- Expand water quality data collection to include E.Coli, physical habitat, macroinvertebrate, and random stream sampling
- Follow-up public survey about the Salt Lake Countywide Watershed
- Identify and map outfalls along the streams in the Salt Lake Countywide Watershed
- Identify funding for continued stewardship implementation

To review the WaQSP, go to www.waterresources.slco.org.

Thank you to everyone for your continued support!

County staff began macroinvertebrate sampling in summer 2009, shown here in upper Little Cottonwood Creek. This type of sampling is an effective tool for assessing water quality.

Salt Lake County’s Watershed Planning & Restoration Program is pleased to introduce I Love the Jordan River, a new theme to our educational programming designed to get people of all ages thinking about how to protect water quality, habitat, and overall watershed health!

I Love the Jordan River will expand our current outreach to include more interactive games, scavenger hunts, and hands on demonstrations. Join in the fun and you can win some cool prizes. Look for our booth at local events throughout the County.

Questions? Want us to attend your event? Contact Bob Thompson rthompson@slco.org (801) 468-3656

To review the WaQSP, go to www.waterresources.slco.org. Thank you to everyone for your continued support!