

the Watershed Watch

Newsletter of the Salt Lake County Watershed Planning & Restoration Program

Spring 2012, Volume 10

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Salt Lake County
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New & Noteworthy

Wasatch Canyons Today
Symposium, March 26
[www.pw.slco.org/html/
Wasatch_Canyons_Toda.html](http://www.pw.slco.org/html/Wasatch_Canyons_Toda.html)

USU Spring Runoff Conference,
April 3-4
wetwater.usu.edu/html/conference/

National Prescription Drug
Takeback Day, April 28
www.medicationsdisposal.utah.gov

Purge Your Spurge &
Native Plant Sale, May 12
www.weeds.slco.org

Salt Lake Countywide
Watershed Symposium, Sep 26-28
www.watershed.slco.org

Questions? Comments?

Contact us at (801) 468-2711
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The New Invader on the Block

Garlic Mustard: Salt Lake County's Newest Invasive Weed

by Sage Fitch, Salt Lake County Weed Program

While relatively new to Utah, Garlic mustard (*Alliaria petiolata*) is a significant problem and a serious threat to forest understory habitat throughout the east coast, midwest, and Canada. First sighted locally in 2006, this non-native invasive weed has been slowly creeping its way across forested areas in Summit County and the Park City area, and is now found in several locations on the eastern fringe of Salt Lake County. Garlic mustard's most significant impact is its ability to displace native plants. Within just a few years it can become the dominant vegetation and inhibit the growth

of other plants (including trees) by producing chemicals that interrupt soil chemistry relationships, an aggressive mat-like growth habit, and prolific seed production. Deer tend to avoid garlic mustard and favor other plants, further promoting its competitive edge. It also threatens some native butterflies by impacting larval growth stages.

We Need Your Help

Get to know garlic mustard and its identifying features. Look for it in your neighborhood. Keep an eye out when you're in the foothills and canyons. Then report it to Salt Lake County Weed Program staff at www.weeds.slco.org. Remember to record detailed

continued on page 2



Photo: Salt Lake County Weed Program

Garlic mustard (*Alliaria petiolata*, flowering in spring) is a non-native invasive that dominates woodland ecosystems, changing soil chemistry and displacing native plants.

GARLIC MUSTARD *continued from cover*

location information when reporting weed infestations, including estimated size of the affected area and a GPS point if possible.

Look for the following key identifying features of this biennial herb:

First-Year Plants

- **Leaves:** Clusters of round to kidney-shaped leaves form a low ground cover; scalloped edges and wrinkled leaves resemble wild violet; prominent tap root; leaves stay green all winter

Second-Year Plants

- **Leaves:** Heart-shaped to triangular, coarsely toothed edges; 1-3 inches wide; alternate on stem; smaller towards the tip; new leaves have a distinct garlic smell when crushed
- **Flowers:** Small, four-petaled white flowers; clustered at the top of the stem; Flowering time: April-June
- **Height:** Flowering stalks 1-4 feet tall
- **Seeds:** Slender seed capsules develop soon after flowering; up to 1,000 seeds per plant; ripen and disperse mid-June to late September
- **Roots:** Distinctive "L" or "S" shaped crook just below the stem

What's Being Done Locally?

Local land managers are finding it difficult to eradicate garlic mustard in City Creek Canyon, and are gearing up for a long term battle as new infestations are being found in Parley's and Millcreek Canyons. Partnerships and strategic management plans are currently in development, including mapping and controlling known infestations.

Recommended control methods:

- For first year rosettes, spray with herbicide in late fall when other native plants have gone dormant. This timing also takes advantage of the fact that 80-90% of seedlings die off during the growing season. Hand pulling is not recommended for rosettes, as the stems tend to

break off at ground level enabling the plants to re-sprout.

- For second year plants, hand-pulling in spring (before seed production) is recommended for small infestations, or where large groups of volunteers are available to help! Care must be taken to remove the upper half of the root crown. Tamping down the soil after pulling will help to minimize soil disturbance and erosion potential.
- Infestations of second year plants that are too large for manual control methods require herbicide application in spring (before seed production). Ideally, spraying occurs early enough that other native plants are still dormant. Snow cover can affect timing.
- Proper disposal of pulled plants is crucial. Bag all plant parts and dispose as trash, *never compost*. Garlic mustard seeds can still ripen after plants are uprooted!

For more information on the Salt Lake County Weed Program, or to get involved in the Bonneville Cooperative Weed Management Area (CWMA) Garlic Mustard Task Force, contact Sage Fitch at sfitch@slco.org, or go to www.weeds.slco.org. □

Garlic mustard first year rosettes (top) form a low groundcover that stays green all winter; leaves resemble wild violets.

Long, slender seed pods called siliques (bottom) are very distinctive; robust plants can produce upwards of 1,000 seeds per plant!



6th Annual
Purge Your Spurge & Native Plant Sale
Saturday May 12

Got spurge? Get rid of it! Purge this nasty weed from your garden and we'll exchange it for 5 free native plants. Join us for a weed-pull on Grandeur Peak to help make an even bigger dent in the spurge invasion!

bring spurge get plants

8am-1pm
Spurge-Pull on Grandeur Peak

10am-3pm
Myrtle Spurge Exchange & Native Plant Sale
REI, 3285 E 3300 S

Details at
www.weeds.slco.org



Photo: Salt Lake County Weed Program



Photo: King County Noxious Weeds

What's up with Red Butte Creek?

Red Butte Creek Mitigation Fund Projects Selected

by Hilary Arens, Division of Water Quality

On February 14, 2012, the Division of Water Quality (DWQ) awarded \$3 million dollars in funding to 14 projects designed to enhance waterways affected by the June 2010 Red Butte Creek Oil Spill. The money comes from a settlement agreement with Chevron Corp., and is to be used for projects that go above and beyond Chevron's required cleanup and mitigation efforts.

The DWQ received proposals for 17 different projects totalling over \$5.3 million dollars. After a thorough selection process, the \$3 million dollars was allocated to projects within the University of Utah and in Miller Park on Red Butte Creek, Liberty Lake, and a number of projects along the Jordan River.

DWQ is excited to work with the successful applicants, including Salt Lake City, Salt Lake County, Jordan River Commission, Utah Division of Wildlife Resources, Salt Lake Valley Health Department, Farmington Bay

Water Fowl Management Area, and Tracy Aviary, to name a few. There will be many different on-the-ground restoration and rehabilitation projects to improve water quality and riparian habitat, as well as numerous outreach and education opportunities for the citizens of Salt Lake City. These educational efforts mainly focus around Liberty Park, Tracy Aviary and the Jordan River trails.

DWQ is also pleased to fund projects that will enhance citizen use and enjoyment of areas that were closed to the public during the oil spill cleanup. These areas include Miller Park, Liberty Lake and parts of the Jordan River Trail.

The settlement agreement states that the projects must be completed by November 2014, three years after the signing of the agreement.

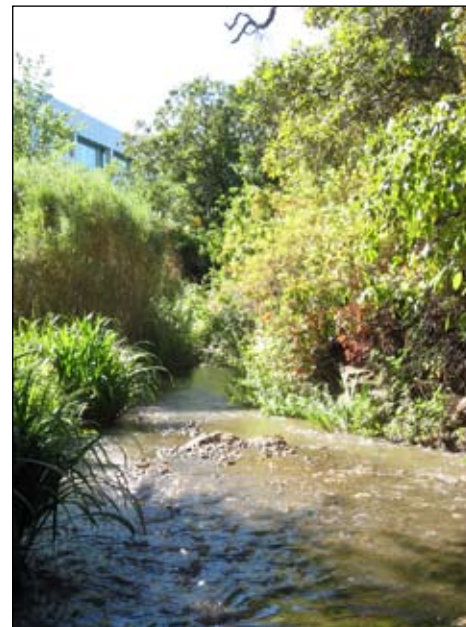
For more information on the selected projects, go to www.deq.utah.gov/locations/redbutte/index.htm, and keep your eyes out for the countless improvements along our waterways! □

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riparian *adj.* [ri-pair-ee-uhn]

1. of, pertaining to, or situated on the bank of a river or other body of water

Trees in the riparian zone provide shade needed to keep stream waters cool.

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Healthy stands of riparian vegetation along this stretch of Red Butte Creek provide a reference for restoration goals.



Salt Lake County staff assessing impacts to Red Butte Creek, post 2010 oil spills.

Riparian Restoration on Red Butte Creek

The riparian ecosystem of Red Butte Creek sustained serious damage as a result of the crude oil releases in 2010—whether from direct contact with toxic substances, or as a result of the cleanup activities performed by Chevron. Salt Lake County's Watershed Planning & Restoration Program is pleased to report that our proposal for "Riparian Restoration on Red Butte Creek" was one of the 14 projects selected by the Division of Water Quality to receive Chevron mitigation funds!

Using streambank bioengineering techniques, this project proposes to restore vegetation with minimal impact and maximum benefit to the ecosystem. Replanting native riparian shrubs that were destroyed will help restore the many benefits that trees and shrubs provide to riparian ecosystems, including: 1) a source of food and habitat for terrestrial and aquatic organisms; 2) stabilizing streambanks with their extensive root systems; 3) helping to protect water quality by preventing erosion and slowing overland flows of rain and snowmelt; and 4) reducing instream flows. We will target the stretch of creek that flows through the University of Utah campus from just below Red Butte Garden to just above Foothill Blvd, approximately 4,580 feet of stream length.

Flood Season Prep

How to Be a Good Streamside Steward!

by Watershed Planning & Restoration Program Staff

For streamside landowners, flood season preparedness involves two key components: 1) protecting your home and property, and 2) protecting the stream corridor as a naturally functioning floodway. These go hand-in-hand, and both can be accomplished with thoughtful landscaping and yard maintenance strategies.

Streamside landowners can help protect their property and help the floodway function by planting native



trees, shrubs, and plants in the riparian zone. The roots from the vegetation help strengthen stream banks and reduce erosion. Vegetated riparian zones help slow floodwater velocities, act as a “buffer” by preventing pollutants from reaching streams, and provide valuable habitat for fish and wildlife.

Refraining from building any structures (sheds) or storing piles of yard debris (grass clippings, branches, etc.) near the stream is another way to prevent damage. When high runoff occurs these items can be swept away by floodwaters, blocking bridge and culvert openings. This can lead to additional flooding and property damage for you and/or your downstream neighbors.

Even in dry years such as this one, it's worthwhile to be a streamside steward because you never know when flooding will occur! □

6th Annual
Salt Lake Countywide
**Watershed
Symposium**
September
26-28, 2012

save
the
date!

Join the conversation about water quality, pollution control, and nature protection. Find out what's being done and what you can do to help! Presentations, workshops, and field trips.

www.watershed.slco.org

Salt Lake County
Watershed Planning &
Restoration Program



Legislative Roundup

Status at time of newsletter publish date (early March):

Passed Pending Tabled/Postponed Failed

It's that time of year again and the 2012 Utah State Legislative Session is in full swing. Several bills are in front of the Legislature that could significantly affect water quality and watershed function in Salt Lake County.

Here are a few bills of interest:

§S.C.R. 7, Concurrent Resolution Approving the Interlocal Agreement Creating the Jordan River Commission (Sponsor: Sen. Aaron Osmond)

The Jordan River Commission is an interlocal cooperation comprised of three counties, eight cities, and two special service districts. The Commission envisioned the participation of the Utah Dept. of Natural Resources (DNR) and the Dept. of Environmental Quality (DEQ), but joining the Commission requires approval from the Utah Legislature. The DNR's Division of Forestry, Fire, and State Lands is the official owner of the bed of the Jordan River, and has a vested interest in all decisions made along the river. Similarly, the DEQ's Division of Water Quality is actively working to better understand the causes of water quality concerns in the Jordan River and is working to set standards and strategies to improve the river's water quality. If this bill is passed, both state agencies

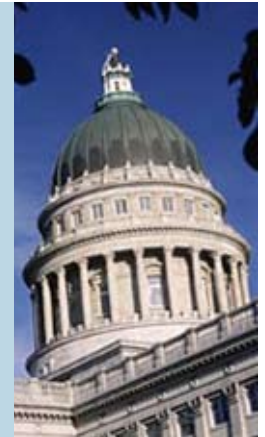
will have an official voting position on the Jordan River Commission's Governing Board.

§S.B. 164, Transportation Funding Amendments (Sponsor: Sen. Jerry W. Stevenson) If this bill is passed, it will provide \$1.1 million to West Jordan City to fund 75% of design and construction of a pedestrian underpass at 9000 South.

§H.B. 173, Transportation Funding Modifications (Sponsor: Rep. Brad Dee)

§H.B. 369, Adjudication of Water Rights (Sponsor: Rep. Joel K. Briscoe) If this bill is passed, it will make changes to the procedure for the general determination of water rights.

§H.B. 489, Safe Drinking Water Disclosure Act (Sponsor: Rep. Roger E. Barrus)



Visit the Utah
Legislature
website for more
information
on these and
other bills

<http://le.utah.gov>



The views expressed in this periodical are those of the authors, not necessarily those of Salt Lake County, the Salt Lake County Mayor, the Division of Engineering & Flood Control, or any other entity.