

# It's everyone's river

Restoring the Logan River system will have a variety of tangible benefits to the citizens of Cache Valley. Many sections of the Logan River are impaired and in need of restoration. This project, and others like it, are being undertaken to improve the 21 indicators of river health outlined in the Conservation Action Plan (CAP).

**The CAP includes social, recreational, ecological and flood conveyance objectives.**

The quality of the Logan River is of utmost importance to the project leaders: Logan City, Logan River Taskforce, and USU Extension. The bank restoration design was completed by BIO-WEST Inc. and Allred Restoration under contract with Logan City. Please see our contact information on the back of this brochure if you have feedback.



Example of a healthy, multi-layered riparian habitat.

## More information

Read the full Conservation Action Plan on the Logan City Parks and Recreation Website:

[http://www.loganutah.org/government/departments/parks\\_and\\_recreation/](http://www.loganutah.org/government/departments/parks_and_recreation/)

**Or you can call:**

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**\*The photo on the cover of this brochure shows the degraded riverbank at the Denzil Stewart Nature Park that this project aims to restore.**

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## What's happening at the Denzil Stewart Nature Park? *(find out here...)*

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### Conservation Action Plan Vision

**“Make the Logan River system a showcase of ecologically viable, socially beneficial river restoration”**

### Goals at the Denzil Stewart Nature Park:

- 1) Stabilize the riverbank
- 2) Control erosion
- 3) Plant native, riparian vegetation

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Example of erosion from the upper reach of the Logan River – erosion clogs the river with excess sediment.

## What is sediment?

**Sediment is loose sand, clay, silt and soil particles**

### *Why should I care about sediment?*

When a river has excess sediment, the riverbed can become clogged and backed up with the extra particles. This impedes the natural flow of the river, putting it at risk for flooding, and damages water quality.

### *Why does sediment harm the river?*

Because the river has been channelized by humans, the current is faster than usual. This causes excessive rock and gravel to carry downstream. Sediment moves quickly through areas like the Denzil Stewart Nature Park, increasing the channel incision, and contributing to sediment accumulation hotspots in the lower reach of the river – these hotspots create dangerous hazards for areas like Rendezvous Park and the Golf Course.

# The restored riverbank will:

## Stabilize soil

**How?** By planting generous numbers of **native** trees, shrubs, forbs and grasses along the riverbank, we will reduce the amount of bank and soil erosion. The roots from these plants will help stabilize the soil and prevent the bank from crumbling into the river (see photo to the left).

## Buffer the park from flood impacts

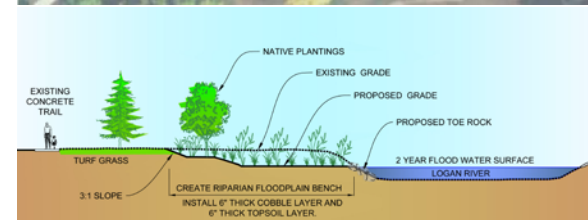
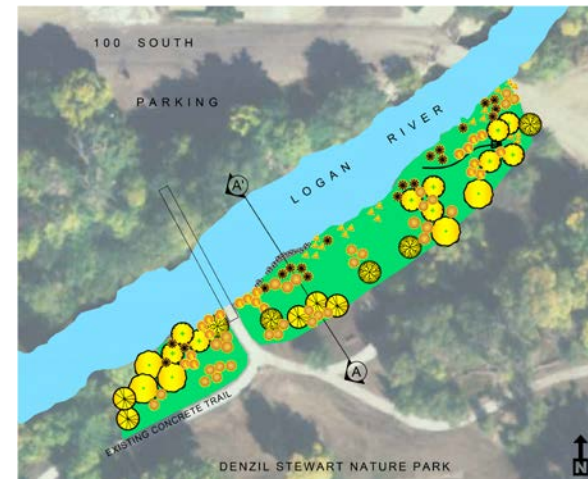
**How?** Rivers naturally flood. The Logan River has its highest volume and erosive power in the springtime after the mountain snow melts. Creating a vegetated floodplain within the park allows the river to spill onto the floodplain during these high volume events, thereby buffering the Denzil Stewart Nature Park from damage that flooding might have on the bank.

## Create riparian habitat

**How?** **Native** plants create habitat for fish, birds and other wildlife. Plants suited to thrive in the riparian zone also filter runoff water before it enters the river. Bankside vegetation shades the river which contributes to more consistent water temperatures – good for fish, invertebrates and water quality!

## What's changing?

During the Fall (2016) and Spring (2017) you will notice that a section of the riverbank upstream and downstream of the pedestrian bridge will be lowered and benched. The cross-section view below illustrates how the bench will be excavated from part of the currently eroding turfgrass area.



PROPOSED RESTORATION CROSS SECTION A - A'

**This new 'riparian floodplain bench' will be planted with native vegetation and be approximately 40 ft. wide and 350 ft. long.**