## Cascade Creek Masterplan Rochester, Minnesota

Positioned a few blocks Northwest of the Mayo Clinic and the rest of Downtown Rochester, is the final mile and a half stretch of Cascade Creek before it empties into the Zumbro River and then into the Mississippi River.

Revitalizing the Cascade Creek corridor is a multi-step process that will take the cooperation and involvement of the surrounding neighborhoods, the city government and most importantly, the citizens that form the surrounding community.

The end result of the Cascade Creek Masterplan will be a revitalization of not only the physical elements of the corridor but also a revitalization of sense of community in the neighborhoods surrounding Cascade Creek.

As the far Western entrance to the Cascade Creek corridor

court system. Remodeling the existing tennis courts, while

adding more parking to the park provides a use for all

Kutzky Park currently supports and extensive yet outdated tennis

adding volleyball and basketball courts, modernizes the park to

generations and ages of users while providing for different sized

Located at the Eastern edge of Kutzky, visitors will notice the first

of over a dozen community planters that run along the creek

not produce oriented but focus on vegetation that helps

and the creek water that passes by during elevated water

banks. Unlike normal 'community gardens', these planters are

remediate and purify both the runoff water during storm events

**Kutzky Park** 

current day standards.

community gatherings.



## **Thompson Mill Race Park**

Located where Cascade Creek empties into the Zumbro River, Thompson Mill Race Park currently is a prime location for fishing and looking back on the Rochester skyline.

An amphitheater, performance stage and community shelter allows for various performance arts with the Zumbro River set as the backdrop. During the Fourth of July, the amphitheater and park can be utilized for a direct view of the fireworks that are displayed over Silver Lake half a mile away.

### Northrop Plains

What before were empty lots in the flood plain, Northrop Plains is now an entirely passive greenspace that serves as an entrance into Cascade Creek for Northrop Neighborhood, an open field for spontaneous pickup games, and a grassy rest area for people traveling through on the now

Paths connecting to the dead end roads create the entrance into Northrop Plains. A circular path populated with broadleaf trees fills up the once empty area and defines the new greenspace.

One of the many new covered bridges is located here in order to connect to the rest of the trail system while connecting Northrop and Washington Neighborhoods with pedestrian access.

### Cooke Park

Located in the center of the revitalization project is Cooke Park. The aging and mismatched park equipment is replaced with an expansive modern play system. Modern sports facilities are provided for both league play and

Winter activities include groomed trails for cross country skiing, sledding on Updating the community shelters and playground equipment and the retention basin's banks. The locker room is used as a warming house for

> Due to prevalent flooding in the lower portion of the park, the second retention basin along Cascade Creek is incorporated here to store runoff water during and immediately after storm events. When the creek is not flooding and still within the banks, the basin will still retain water and a 60'

# **Washington Neighborhood**

a full size hockey rink during the winter months.

long waterfall will keep the water from becoming stagnant.

Currently a low lying baseball and football field, Kutzky Field, as of recently is no longer used by the local high school as a practice field because the school relocated. One of the first areas to flood during even a 1-2 year storm event, the area is perfect for one of two retention basins that will be created along the Cascade Creek corridor. The retention basins will help reduce the

The retention basin provides enough storage for over 30 minutes of a 50 year storm event. Not only does the basin serve a physical purpose, the 60' long waterfall that faces Civic Center Drive provides an aesthetic view for

## Kutzky Field

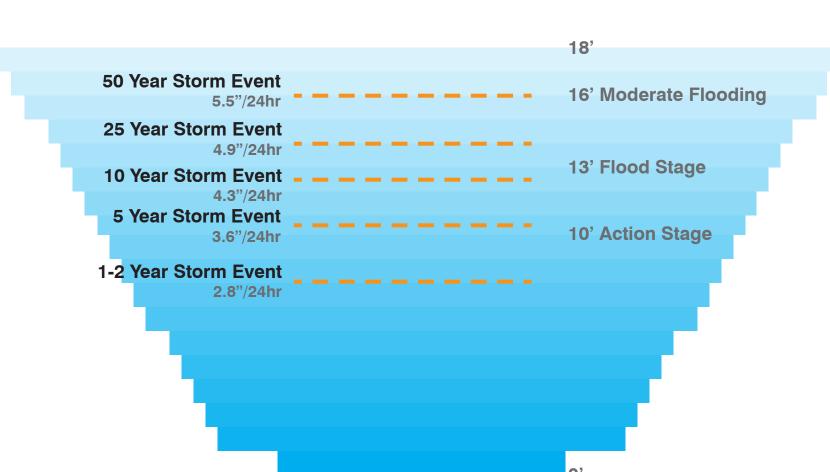
peak flow rate.

motorists heading downtown to the Mayo Clinic.

Sand Volleyball (Summer)

# Project Information

## Cascade Creek Flooding



Stormwater Remediation

### **Retention Basins**

Two retention basins will be located at Kutzky Field and Cooke Park as determined by the current ground elevations. As the two lowest locations, both parks naturally flood and become inundated with water even during 1-2 year storm events. The retention basins are designed to hold up to 40,000 cubic yards of water. This is enough storage to contain all the flow of Cascade Creek during a 50 year storm event for over half an hour in each retention basin, or over an hour total between the two basins.

As retention basins, they will never be dry, continually holding a couple of feet of water. Located on the far end of each basin there is a 60 foot long and seven foot tall waterfall. The waterfalls serve an aesthetic purpose for both pedestrians in the park but are also angled so that passing motorists can catch a glimpse of the falls. The waterfalls also serve a physical purpose of aerating the water to prevent algae growth and mosquito breeding.

# Community Development

### Involvement

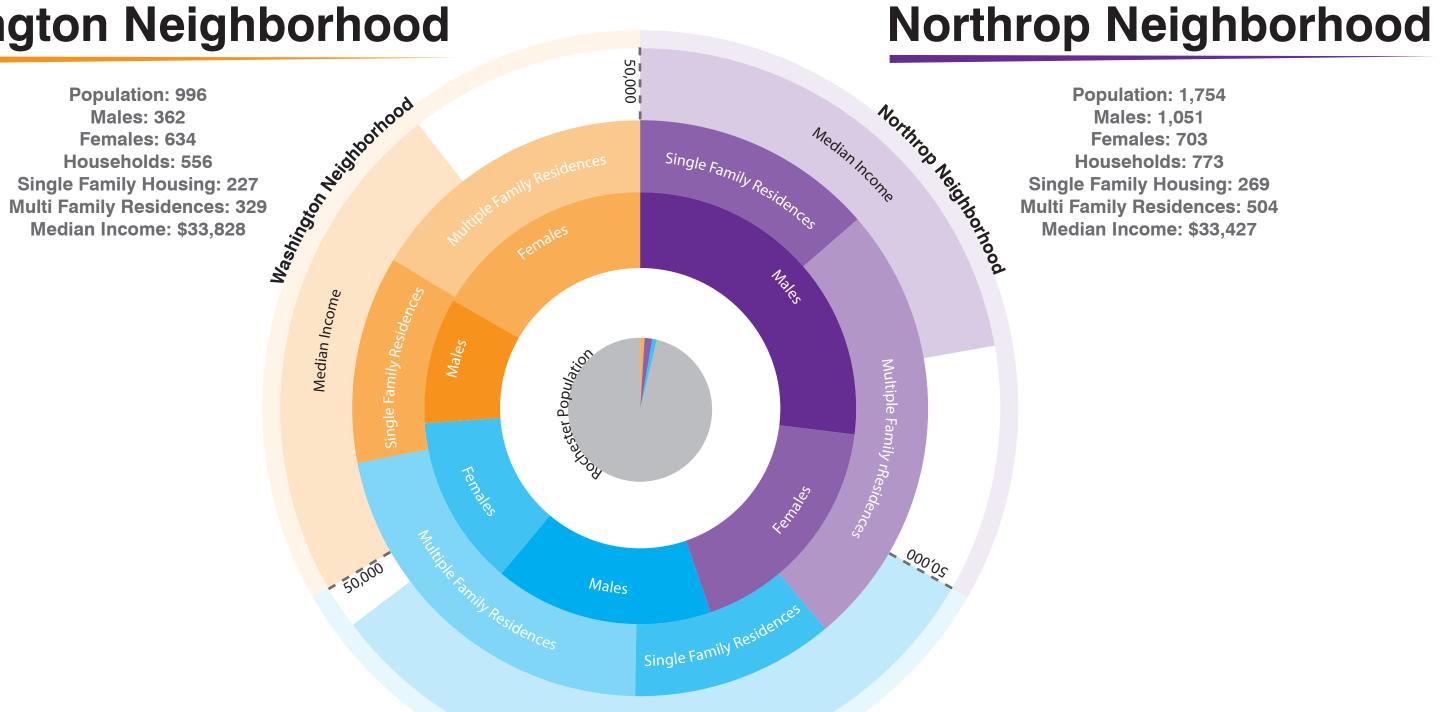
As one of the four stages in the revitalization of Cascade Creek, a major aspect of the design is not in the physical changes and revitalization, rather it is focused on the 'physical' work and involvement of the community. The ultimate goal in revitalizing the Cascade Creek corridor is to create a self-sustaining park system for the region.

Volunteer days and events will involve community members. Setting up regular maintenance days and events will get community members involved and interested in the parks and creek. Community social events will reward those that have put time and equity into the park. In the end, this community action will help members foster personal connections to the park and to each other, strengthening the community as a whole.

### **Unified Theme**

In order to create a holistic design that connects the entire mile and a half of the Cascade Creek corridor, it is necessary to design thematic elements that are consistent throughout the entire area. A parts kit consisting of shelters, signage, reflective of the architecture of the surrounding neighborhoods, which ranges from Cape Cod, Foursquare, and Colonial to modern split level and rambler houses.

## Washington Neighborhood



Median Income

## **Kutzky Neighborhood**

**Single Family Housing: 215** Multi Family Residences: 420 Median Income: \$46,771

# Plant Palette

Plants selected for Casade Creek and the five parks connected to the creek are a combination of remediation based plants (NPK focused), native plants, and zone (4b) friendly plants.

# **Remediation Plant List**

Fraxinus pennsylvanca - Green Ash Pinus mugo pumilo - Dwarf Mugo Pine Salix alba 'Tristis' - Golden Weeping Willow

Viburnum odoratissimum - Sweet Viburnum

Agapanthus africanus - Lily of the Nile Hemerocalis hybrid - Daylily Typha latifolia - Broad Leaved Cattail

Typha angustifolia - Narrow Leaved Cattail

Cynodon dactylon - Bermuda Grass Festuca arundinacea - Tall Fescue Festuca rubra - Red Fescue Lolium multiflorum - Ryegrass

## **Plant List**

Acer platanoides - Norway Maple Acer saccharinum - Silver Maple Betula nigra - River Birch Tilia americana - American Linden Quercus macrocarpa - Bur Oak Pinus strobus - Eastern White Pine

Buxus 'Green Gem' - Green Gem Boxwood Cornus sericea - Redosier Dogwood Forsythia 'Northern Gold' - Forsythia Northern Gold Physocarpus opulifolius 'Diablo' - Diablo Ninebark

Physocarpus opulifolius 'Center Glow' - Center Glow Ninebark

Females: 703

Households: 773

Median Income: \$33,427

Achillea millefolium 'Paprika' - Paprika Yarrow Heuchera 'Can Can' - Can Can Coral Bells Hosta 'Abiqua Drinking Gourd' - Abiqua Drinking Gourd Hosta Hosta fluctuans 'Sagae' - Sagae Hosta Spirea japonica 'Firelight' - Firelight Spirea





Picnic Table





**Entry Gate** 

Park Sign

Silver Lake

Northrop Neighborhood

Cascade Creek: Revitalizing Community

A four stage project set to revitalize Cascade Creek and Kutzky, Northrop, and Washington Neighborhoods.

## Community Connection

The first stage of revitalizing Cascade Creek is to redevelop the park system with a holistic masterplan that physically links the parks to the neighborhoods, the trails to the community, and maintains the health of the creek. Creating thematic elements that pervade throughout the entire Cascade Creek corridor will help visually link the multiple parks. A plant palette based on remediating the runoff and creek water will

further ensure the health of the creek ecosystem for future generations.

## Community Involvement

The second stage in the process of revitalizing the Cascade Creek area is reinvigorating the existing community groups and associations. Instigating community involvement and volunteer days will get community members involved in items such as maintaining the parks plants and vegetation. This will help the community's residents foster personal connections with the parks at an individual level.

## Community Identity

**Kutzky Field** 

The third stage of the revitalization process is the combination of the

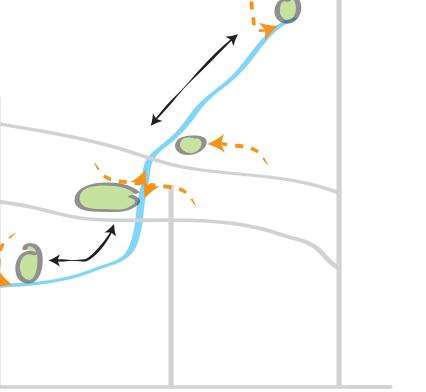
## **Creek Reclamation**

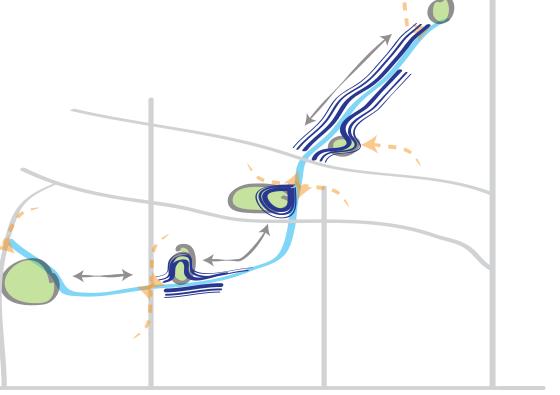
The end of the four stage project will be the culmination of the holistic master plan and the newly reinvigorated community resulting in a reclaimed creek that is maintained locally, void of pollutants (NPK, pesticides, salt, heavy metals and petroleum products), and responsive to water runoff during storm events. As a result the Cascade Creek will be able to progress into the future along with the surrounding and continually evolving



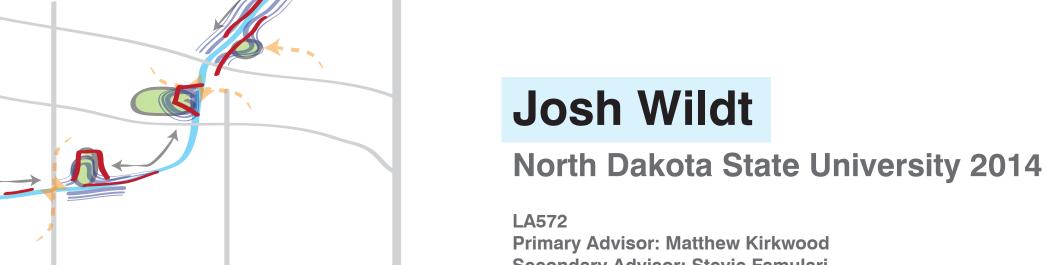
1 Existing Greenspace

**Cooke Park** 





4. Remediation



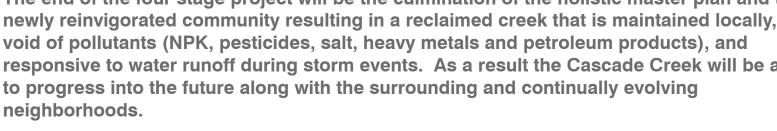
Secondary Advisor: Stevie Famulari
Programs: ArcMap, AutoCad, Sketchup, Microsoft Word, Photoshop,
Illustrator, InDesign, Google Earth Pro, Lumion

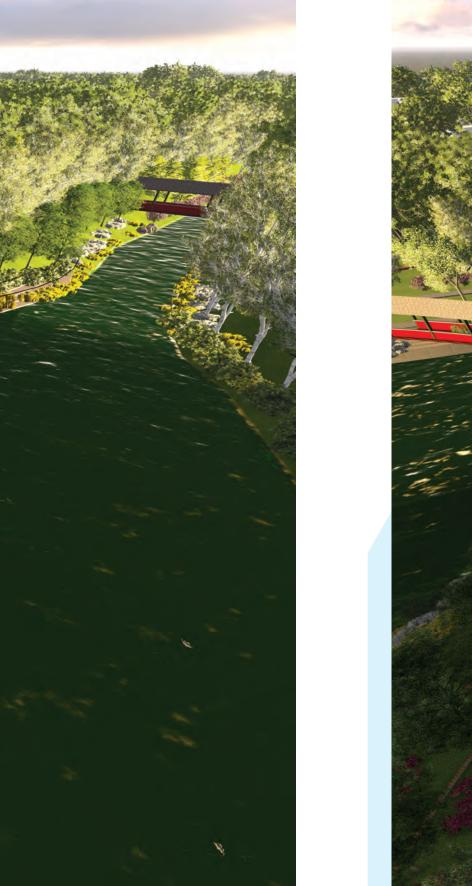


**Kutzky Park** Above: View of Kutzky Park looking East towards the Mayo Clinic and the rest of downtown Rochester.



new community activism with the new park system. This will help create a radiating sense of pride that designates the Cascade Creek corridor as not only a local hub but a destination for the greater





Above: View of Kutzky Field retention basin looking Northeast with the waterfall in the background.



sports facilities to the West.

2. Public Access

Above: View of the Cooke Park retention basin with community shelter and

3. Flooding

**Thompson Mill Race Park** Above: View of Thompson Mill Race Park from the opposing banks of the Zumbro River with the Mayo Clinic to the South.



Northrop Neighborhood