

Agency: Department of Natural Resources**Project Title:****Project Type:** Maintenance and Repairs

Peters Creek Flooding and Erosion Control Project

State Funding Requested: \$116,000
One-Time Need**House District:** Mat-Su Areawide (13-16)**Brief Project Description:**

Peters Creek Flooding and Erosion Control Project - Reconnaissance, survey, design, and minor construction work associated with the next, and anticipated to be the final phase of this project

Funding Plan:

Total Project Cost:	\$286,000
Funding Already Secured:	(\$170,000)
FY2013 State Funding Request:	<u>(\$116,000)</u>
Project Deficit:	\$0

Funding Details:

FY08 SOA - construction of section west of Starnier Bridge; FY11 SOA - reimbursement for emergency expenses incurred to halt flooding of November 2006

Detailed Project Description and Justification:

Reconnaissance, survey, and design work in the last three locations of concern along Peters Creek, with minor construction to address the concerns at Study Area A.

Study Area A:

The ASWCD has been monitoring this section of creek since 2006 and has been contacted by a property owner in this area who needs assistance planning installation of measures to prevent his property from flooding. From past experience, it appears that a small survey, permitting assistance, and minor grading may be all that is needed.

Study Area B:

An assessment is needed from this reach of the creek downstream to another bridge. Aggradation and lateral channel migration have changed the conditions since the bridge was installed. A study needs to be performed to determine potential risks to the bridge and provide recommendations for cost-effective measures to prevent or limit destruction and/or limited usability.

Study Area C:

This section, running from the Old Glenn Highway upstream of the Starnier Bridge, needs to be studied. There have been two significant events that have been recorded since the ASWCD's involvement with the Starnier Bridge section. One of those events, occurring in November 2009, sent significant chunks of ice and debris through the constructed section. There are at least two homes built in proximity to this section of creek.

Project Timeline:

Work will be complete by June 30, 2014.

Entity Responsible for the Ongoing Operation and Maintenance of this Project:

Anchorage Soil and Water Conservation District
--

Grant Recipient Contact Information:

Name:	Ryan Stencil
Title:	Operations Manager, ASWCD
Address:	550 W. 7th Avenue, Suite 1400 Anchorage, Alaska 99501
Phone Number:	(907)677-7645
Email:	aswcd@aswcd.org

Has this project been through a public review process at the local level and is it a community priority? ☒ Yes ☐ No

**COMMUNITY PROJECTS:
RUTH ARCAND PARK TRAIL REHABILITATION PROJECT;
GIRDWOOD DRAINAGE & WATER QUALITY IMPROVEMENT; and
PETERS CREEK FLOODING & EROSION CONTROL PROJECT**

Amount requested: \$ 246,000.00 CIP appropriation to the Anchorage Soil and Water Conservation District (ASWCD), administered through the Office of the Commissioner of the Department of Natural Resources.

Purpose:

- To fund much-needed projects within the boundaries of the SWCD that serve the natural resources, residents, property owners, and future development and use.
 - Trail rehabilitation and drainage improvements within Ruth Arcand Park.
 - Drainage improvements in the Girdwood Valley that will provide much-needed infrastructure improvements and improve the runoff water quality in the area.
 - Reconnaissance, survey and design work in the last three locations of concern along Peters Creek, with minor construction to address the concerns at Study Area A.

Background:

Ruth Arcand Park Multi-Use Trail Rehabilitation Project

Ruth Arcand Park is a 330 acre public park, and home to the William C. Chamberlain Equestrian Center (WCCEC), two public schools, one private school, a golf course, and over 5 miles of multi-use trails used by hikers, runners, skiers, skijorers, and dog walkers. The park is also home to Rainbow Connection Therapeutic Riding Program (see attached letters of support).

The WCCEC is managed by the Anchorage Horse Council (AHC) who was also responsible for the construction of the park's trails since approximately 30 years ago. As a strictly volunteer organization with no public funding, these trails have seen minimal maintenance over the years and are in great need of repair. These improvements will address water quality issues, mud, impassable areas due to trail ponding, and return the park's trails to usable condition in all areas, and for all users.



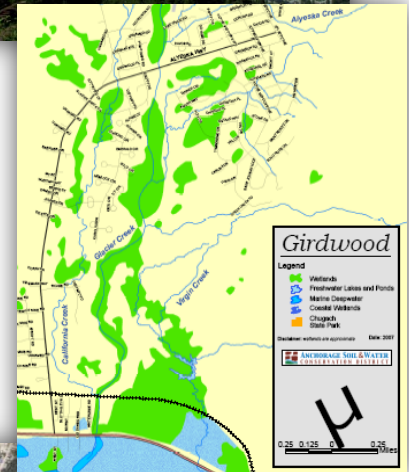
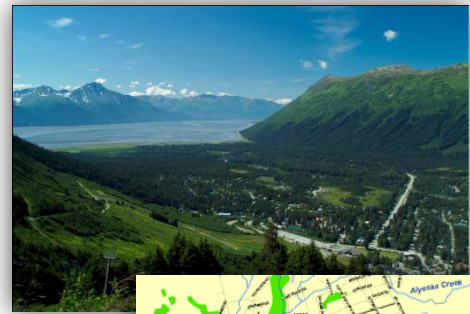
Girdwood Drainage & Water Improvement Project

Girdwood's surface water quality has been, and continues to be, impacted by a increased development within the valley. Drainage and maintenance issues will continue to increase if measures are not taken to improve the drainage infrastructure in the valley. Further, the project is within the coastal zone, home to many species of anadromous fish and all Girdwood Valley's drainage and creeks flow immediately into Turnagain Arm...

The community of Girdwood has experienced significant growth and development in recent years and is expected to double in size within the next decade, with the addition of up to 710 new housing units on 1,000 acres of Heritage Land Bank holdings along Crow Creek Road, as many as 1,000 new units along the base of the mountain on land owned by the Alyeska Resort, an aggressive resort expansion and upgrade, a new cross-country venue, a possible golf course, a new town center that includes a new library/meeting facility, a new high school and many other infrastructure expansions.

Drainage has always been a concern in Girdwood, but the issues have recently become more prominent due to a lack of planning and maintenance funding to keep up with the development. New environmental guidelines and design criteria for the Municipality of Anchorage require that new developments take responsibility for the drainage on the properties. This was not always required and the current owners and developers in Girdwood see that the lack ditching, drainage infrastructure, and a drainage plan is severely impacting their properties, water quality and other environmental concerns in the area. Severe glaciation and flooding of property and roads occurs annually, which adds significant amounts of sediment, animal waste, motor oil and fuel from the roads, and other environmental contaminants to the areas creeks, drainages, wetlands, which eventually end up in Turnagain Arm.

In 2006, the Municipality of Anchorage commissioned HDR Alaska, Inc. to draft the Girdwood Area Drainage Study, however, this study has not been implemented, which is what the ASWCD is proposing.



Peters Creek Flooding & Erosion Control Project

Study Area A:

The ASWCD has been monitoring this section of creek since 2006 and has been contacted by a property owner in this area who needs assistance planning installation of measures to prevent his property from flooding. From past experience it appears that a small survey, permitting assistance and minor grading may be all that is needed.



Study Area B:

An assessment is needed in this reach of the creek downstream to another bridge. Aggradation and lateral channel migration have changed the conditions since the bridge was installed. A study needs to be performed to determine potential risks to the bridge and provide recommendations for cost-effective measures to prevent or limit destruction and/or limited usability.



Study Area C:

This section, running from the Old Glenn Highway upstream of the Starner Bridge needs to be studied. There have been two significant events that have been recorded since the ASWCD's involvement with the Starner Bridge section. One of those events, occurring in November 2009, sent significant chunks of ice and debris through the constructed section. There are at least two homes built in proximity to this section of creek.



Project Budget:

Ruth Arcand Park Multi-Use Trail Rehabilitation Project	\$ 30,000.00
Girdwood Drainage & Water Quality Improvement	\$ 100,000.00
Peters Creek Flooding & Erosion Control Project	\$ 116,000.00
	\$ 246,000.00

Project Timeline:***Ruth Arcand Park:***

Design and permitting complete by Spring 2012; construction to be complete by Fall 2012.

Girdwood Drainage

This project will begin immediately upon funding approval and run through three construction seasons, projected date of completion fall 2014:

- Project Year 1: \$400,000.00; Survey, design, engineering, environmental permitting, planning of construction including prioritization of projects, and completion of minimum 20% of construction.
- Project Year 2: \$750,000.00; Completion of minimum 50% of construction
- Project Year 3: \$333,693.00; Completion of all outstanding construction (up to 30%) and closure of the project.

Peters Creek

Reconnaissance Fall 2011 through Spring 2012, construction at Study Area A Summer/Fall 2012, study, design, etc. of Study Areas B and C Winter 2012

Project Contact: If you have any questions or would like further information, please contact the ASWCD's Operations Manager, Ryan Stencil, at 907.677.SOIL (7645) or by e-mail at aswcd@aswcd.org.

ATTACHMENT A: GIRDWOOD DRAINAGE

The following budgets are from the Girdwood Area Drainage Study. Yellow highlighted projects are those selected for this funding. Projects may be substituted upon further investigation or unseen circumstances affecting construction viability and/or cost-effectiveness. Projects may also be added to the list depending on availability of funding, as it is anticipated that the ASWCD may be able to accomplish construction at a lower cost than HDR's estimated costs.

Improvement Description	Budget
Alta Dr., between two branches of creek	\$ 71,586.00
Alyeska Ave., between Edelweiss and Garmisch	\$ 62,550.00
Banff Circle and Donner Drive, intersection	\$ 42,570.00
Brighton Road and Crystal Road, intersection	\$ 154,080.00
Cortina Road, between Alyeska View Ave. and Alpine Ave.	\$ 49,980.00
Alpine Ave., north and south of Vail	\$ 96,720.00
St. Johann Loop and Vail Drive, intersection	\$ 70,140.00
Gstaad and Timberline	\$ 6,600.00
Timberline Dr., west of L5, B7	\$ 4,800.00
Davos Road, between Donner Dr. and Alpine Ave.	\$ 229,320.00
Alpine Way, north side	\$ 316,560.00
Timberline Drive., Lot 7, Block 7	\$ 181,296.00
Alpine Dr., north of Vail Dr.	\$ 27,180.00
Echo Ridge Road	\$ 36,570.00
Vail Drive, north of Alpine Ave.	\$ 87,540.00
Arlberg Road, east side, between Brighton and Moose Meadow Creek	\$ 140,490.00
Echo Ridge Drive and St. Moritz Drive, intersection	\$ 37,710.00
Tanaka Creek	\$ 550,000.00
Higher Terrace	\$ 27,780.00
Kitzbuhel Road, intersection	\$ 56,760.00
Lower Terrace stream crossing	\$ 6,600.00
Arlberg Road, Moose Meadow Creek crossing	\$ 27,840.00
Loveland Road and Alpine Ave., intersection	\$ 126,900.00
Alpine Ave. and St. Moritz Drive, intersection	\$ 40,488.00
Stowe Circle and Stowe Drive, intersection	\$ 74,340.00
Innsbruck Road, west end	\$ 31,770.00
Okemo, south side	\$ 69,864.00
Megreve Road, south side	\$ 130,380.00
Johann Loop, south and east sides	\$ 139,500.00
Northland Drive, south side	\$ 48,360.00
Taos Road, uphill side	\$ 146,490.00
Timberline Drive and Vail Drive, intersection	\$ 47,760.00
Timberline Drive, north of Vail Drive	\$ 271,800.00
Donner Drive	\$ 11,880.00
Snowy Circle, west end	\$ 44,124.00
Cortina Road	\$ 202,050.00
Alpine Ave., east side	\$ 207,840.00
Davos Road, south side	\$ 193,440.00
Mt. Hood Drive, south of Moose Meadow Creek	\$ 14,190.00
Aspen Mountain Road	\$ 22,800.00
Echo Ridge Drive and St. Moritz Drive, intersection	\$ 22,800.00
Garnish and Alyeska Ave	\$ 170,844.00
Moose Meadow Creek, between Mt. Hood Dr. and Alyeska Creek	\$ 120,000.00

CLERK'S OFFICE

APPROVED

Date:

5-12-09

Submitted by: ASSEMBLY MEMBER JOHNSTON AND
ASSEMBLY MEMBER BIRCH

Prepared by: Assembly Counsel

For reading: May 12, 2009

ANCHORAGE, ALASKA

AR NO. 2009-124

**A RESOLUTION OF THE ANCHORAGE MUNICIPAL ASSEMBLY IN SUPPORT OF THE
ANCHORAGE SOIL AND WATER CONSERVATION DISTRICT SURFACE WATER
QUALITY PROJECT IN GIRDWOOD.**

WHEREAS, the infrastructure of Girdwood has been impacted by unmanaged surface drainage; and

WHEREAS, the Girdwood Street and Drainage Improvements, Phase B (Drainage Master Plan) evaluates drainage needs throughout the Girdwood Valley; and

WHEREAS, the Girdwood Board of Supervisors lacks the requisite funds to implement the recommendations of the Girdwood Master Drainage Plan; and

WHEREAS, the Anchorage Soil and Water Conservation District is an authorized entity of the State of Alaska within the Department of Natural Resources; and

WHEREAS, the Anchorage Soil and Water Conservation District has the reputation of professional, cost-effective, community-sensitive, and results-oriented project management; and

WHEREAS, the Anchorage Soil and Water Conservation District is seeking funding to support a Surface Water Quality Improvement Project in Girdwood; and

WHEREAS, both the Girdwood Board of Supervisors and the community business and citizens' organization Girdwood 2020 support this Anchorage Soil and Water Conservation District project; and

WHEREAS, the proposed project will have significant benefit and impact in improving the surface water quality in this area of Girdwood;

NOW, THEREFORE, the Anchorage Assembly resolves that the Anchorage Assembly supports the Anchorage Soil and Water Conservation District and the Surface Water Quality Improvement Project in Girdwood.

PASSED AND APPROVED by the Anchorage Assembly this 12th day of

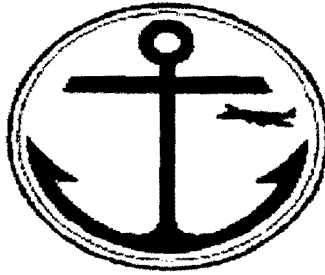
May, 2009.

Debbie Osslander
Chair

ATTEST:

Balan E. Gust
Municipal Clerk

Municipality of Anchorage



P.O. Box 390
Girdwood, Alaska 99587
<http://www.muni.org/gbos>

Matt Claman, Acting Mayor

GIRDWOOD VALLEY SERVICE AREA BOARD OF SUPERVISORS

Tim Cabana, Chairman

Erin Eker, Bryan Epley, John Gallup, Jake Thompson

April 2, 2009

The Girdwood Board of Supervisors hereby supports the efforts of the Anchorage Soil and Water Conservation District in soliciting approximately \$1.5M in Federal grant money for drainage work pursuant to the recommendations of HDR Alaska in their 2006 Girdwood Area Drainage Study.

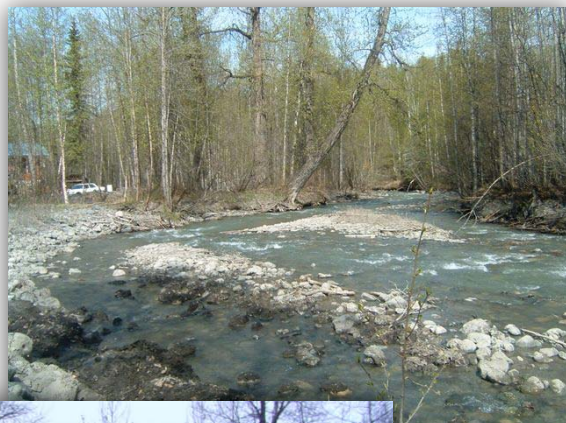
A handwritten signature in black ink, appearing to read "Tim Cabana", is written over a horizontal line.

Tim Cabana, Chairman

Diana Stone Livingston, Chair

ATTACHMENT B: PETERS CREEK FLOODING & EROSION CONTROL PROJECT

The following photos show the successfully constructed section of Peters Creek.





Therapeutic Horseback Riding Program
for People with Disabilities

Board of Directors

Deborah Teanyson, President

Tracy Suoke, Vice President

Rosa Meehan, Secretary

Shannon Hall, Treasurer

BJ Gravley

Chris Gravley

Kim LaFlamme

Dan Rogers

Stephanie Rogers

Lynette Walker

October 20, 2009

TO: The Anchorage Horse Council
Lori Hackenberger; President
FROM: Annie Mabry; Program Director, The Rainbow Connection
RE: Trails Grant for the Chamberlin Equestrian Center

Dear Lori,

I am writing this letter in support of the Trails Grant that the Anchorage Horse Council (AHC) is submitting for funding to make much needed improvements on the trails at the Chamberlin Equestrian Center (also referred to as Section 16).

As you know, The Rainbow Connection Therapeutic Horseback Riding Program has operated out of the Center since it's opening in 1985, and was instrumental in helping plan and build the Center under the guidance of Mayor Knowles and Bob Robertson and John McCleary from the Department of Parks and Recreation. With the acquisition of our long term lease on a designated area at the Center, we are constructing a Cover-All indoor arena and will be a much more visible entity at the Center, with increased numbers of riders and programs available for Anchorage's special needs community.

The Rainbow Connection offers classes in Hippotherapy, which is direct one on one therapy with licensed Occupation, Physical and Psychotherapists, a sports riding and adaptive riding program for our Special Olympic athletes, Equine Facilitated Mental Health classes, therapeutic riding with our 4 NARHA (North American Riding for the Handicapped Association) certified instructors, and a Carriage Driving program with our wheelchair accessible Thornlea Carriage with hydraulic lift. We are a non-profit volunteer organization dedicated to improving the health and quality of life for children and adults with special needs in the Anchorage and surrounding areas, through the use of horses. Our clients and students have a wide range of conditions including Cerebral Palsy, Spina Bifida, Neuromuscular disorders, Autism, Down Syndrome, Multiple Sclerosis, Muscular Dystrophy, Fetal Alcohol Syndrome, visual and hearing impairments, emotional disorders, and many other disabilities.

P.O. BOX 240663
ANCHORAGE, AK 99524
(907) 566-TROT (8768)

WWW.THERAINBOWCONNECTION.ORG RIDE@THERAINBOWCONNECTION.ORG

In addition, we have been approved by NARHA to offer a Horses for Heroes program that we are calling "Freedom Reins" for our injured servicemen returning from Iraq and Afghanistan to do rehab on horseback that will parallel their therapy treatment at the clinic. Horses have been a part of the United States Armed Forces since its inception, dating back to the 1st Calvary. What better way to rehabilitate than using these powerful animals and time honored tradition of our nation's mounted Calvary.

The trails at the Chamberlin Equestrian Center have always been a vital part of our lesson plans and programs. Our normal hour long therapy sessions begin with grooming and mounting, proceeded by a half hour of therapy and riding lessons, and always end with a well chaperoned trail ride. Since the majority of our riders are not able to walk or ride by themselves, a typical trail ride consists of our "scout" who goes out ahead to clear the path, a horse leader and two sidewalkers for each rider for safety, and another scout at the back, again for safety. We often plant various articles like stuffed animals and scavenger hunt items for recognition to encourage our riders to be visually aware of their surroundings, and reach and stretch to acquire them. All of this is therapy, but it's FUN! This is what our program is all about. The movement of the horse, which mimics the human walk - anterior/posterior, rotation and side to side - causes the rider to strengthen their core muscles, which in turn allow the extremities to work better. On every trail ride, as the horse has to step over roots, walk up and down hills, this movement is amplified, thus working those muscles even harder. But do our riders think of it as work? Not when there is so much to see in nature - trees, birds, plants, animals - so much stimulation! For a large number of our riders, this is the only way that they are able to get out into the woods and experience these things. A wheelchair certainly cannot navigate these trails.

The other important use of the trails is with our carriage driving program. With this program headed up by our two NARHA certified driving instructors, Rainbow Connection is able to offer students with physical, sensory, mental or emotional conditions the rewards of interaction and control of a horse or pony while driving from a carriage seat or in their own wheelchair. Using a horse and carriage gives participants an alternative or an addition to riding, opening up the world of horses to those who may not be able to ride due to weight, balance, fatigue, fear of heights, the inability to sit astride, or other issues. As with sitting astride a horse, driving addresses the physical issues of trunk strength and flexibility, hand/eye coordination, and upper body strength. Taking our carriage out on the trails is the highlight of each lesson. Each student has a certified instructor with a second set of reins for safety, but imagine the powerful feeling and self confidence that the student feels driving a horse and carriage through the trees of a beautiful forest!

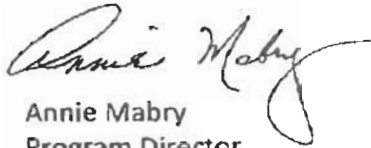
As you can imagine, trails require constant care and upkeep, and every user contributes to wear and tear on them. In 1984 when the Chamberlin Equestrian Center was being built and the trails were being put in, our volunteers worked right alongside Bill Chamberlin and countless other volunteers to clear the trees and brush and help develop the trails system. As we did then, Rainbow Connection will pledge our help as volunteers to work on trail improvements and to help maintain their integrity and keep them clean so that all user groups can enjoy

the wonderful recreational and therapeutic opportunities that these trails offer our community.

Thank you for the chance to express our gratitude to the Anchorage Horse Council for your continuing support of The Rainbow Connection and for allowing us to share this very special Center and beautiful trail system surrounding it.

Please let me know how we can be of service, or if you need any other information.

Sincerely,

A handwritten signature in cursive script, reading "Annie Mabry". The signature is written in dark ink and is positioned above the printed name and title.

Annie Mabry
Program Director
566-8768