



Tanana Valley Watershed Association

2015 Annual Report of Adopt-a-Stream Program Activities for the

Fairbanks Storm Water Advisory Committee

Program Description: How it Works

The Fairbanks Storm Water Advisory Committee (FSWAC) and the Tanana Valley Watershed Association (TVWA) continue the Memorandum of Agreement to implement Adopt-a-Stream programs within Fairbanks and North Pole. TVWA administers the Adopt-a-Stream programs with the support of FSWAC. FSWAC provides program support through annual funding and additional in-kind assistance to TVWA, as well as hosting an annual Stream Cleanup Day and River Walk. TVWA implements and schedules program activities and maintains the participant list of adoptees and their designated stream sections. TVWA also submits an annual Adopt-A-Stream report to FSWAC outlining tasks and community outreach accomplishments during the year.

The Adopt-a-Stream programs are community-based programs with a variety of volunteer activities. The primary activities encompass water-quality monitoring and stream restoration and maintenance that provide residents and other stakeholders with the opportunity to participate as proactive watershed stewards. These watershed stewards also partake in litter pick-up, invasive species identification, and management of flow restrictions. Community stewards and volunteers hold a sense of ownership and role in local water quality issues. As a result, FSWAC and TVWA raise community education and awareness through implementation of these programs while improving local water quality and develop a strong volunteer base.

The annual reporting includes records of program meetings held, number of community members participating in the programs, description of adopted stream sections, and a summary of cleanup efforts performed by adoptees and other volunteers. Measurable goals of the Adopt-a-Stream programs are to increase the number/length of stream sections adopted each year and to continue to expand cleanup efforts within the watershed. Highlights of the year's successes and achievements are included in the report.

The Alaska Department of Environmental Conservation (AK DEC) in accordance with Alaska Pollutant Discharge Elimination System (APDES) Permit No requires implementation of the Adopt-a-Stream programs. AKS-053406. The City of Fairbanks, City of North Pole, Alaska Department of Transportation & Public Facilities, and University of Alaska Fairbanks comprise the major member agencies of FSWAC who collectively hold this permit. AK DEC then submits the Adopt-a-Stream data to the EPA's Storage and Retrieval Data Warehouse (STORET), where the information is joined and preserved with National Water Information. All the data is accessible to agencies and the general public for exploring or for analytical details of each sample taken during the 2015 season.

2015 Community Outreach Accomplishments, Highlights & Resources

- 2015 Community Events: TVWA sought creative, visible solutions to engage community learning and care for local waterbodies in addition to traditional citizen-scientist framework. Several public events and educational sessions took place to address large threats to healthy waterbodies, such as storm water issues, uninformed public, and trends of disconnect between the youth and nature. Partnerships with the Fairbanks Downtown Association, City of Fairbanks and others facilitated a Storm Drain Art Contest. Other partnerships lead to a Watershed Discovery Zone at Thrive Alaska and Camp Habitat. Overall success of these projects enabled stronger community connection with the natural world and greater education publications, as with the Chena River.

ESCAPE into Nature Series

(3rd Saturday of each month)
10am - Noon

Workshops and Themes for 2015

At the TVWA Office • 516 2nd Avenue, Suite 412



Water Quality and Storm Drain Stenciling
May 16th

Habitat Types & Assessments
June 20th

Chinook - Life cycle and the Chena River
July 18th

Bugs - Invertebrate Intrigue
August 15th

Critters & Wildlife of the Chena River
September 19th



**Chinook Salmon
Citizen Scientist
Saturday Sampling**

(3rd Saturday of each month)

RSVP to reserve space to Bill.TVWA@gmail.com

The Chena River at Pikes Landing
2:00pm May - September

ESCAPE into Nature Series: TVWA created a series of classes held at the TVWA office, the 3rd Saturday of every month from May to September. We held classes ranging in topics from water quality and storm drain stenciling to Habitat Types and Assessments, Chinook, the lifecycle and why water quality is important to the bugs and critters of the Chena River. These classes were a lot of fun to host and garnered a lot of community interest. We hope to build on this momentum in the coming year as we grow our Adopt a Stream program and its classroom curriculum and community involvement.



Storm Drain Art Contest: Decorate the Drains! Inspire the Inlets! Graffiti the Grates! TVWA was proud to host the 2nd annual Storm Drain Art Contest, in partnership with the City of Fairbanks, Fairbanks Stormwater Advisory Committee, Downtown Association, Festival Fairbanks, and US Fish and Wildlife. This is the second year we've invited local artists to submit proposals to create art for storm drains downtown. The goal of this project was to provide public art while also contributing to public awareness that storm water from Fairbanks drains directly into the Chena River. Local artists were invited to submit designs in the following categories: Storm Water Pollution (litter, vehicle fluids, pet waste, soapy water, etc.) Fish, Wildlife, Habitat (moose, beavers, ducks, salmon, grayling, willows, etc.) or Quality of Life (clean water for

recreation, drinking, natural beauty, etc.) This project garnered much attention and was widely celebrated as a success for improved community connection and spread stewardship of local waterbodies. The art will be displayed one year prior to construction on Noble Street (summer 2016). **15 local artists** submitted their creative ideas (many of whom submitted more than one idea) and **12 submissions** were chosen by the attendees at the 2015 1st Friday Event we held at City Hall on May 1th. **12 storm drain paintings** were completed on May 16th. We even garnered some local news for 2015. http://www.newsminer.com/blogs/fairbanks/features/contest-open-for-storm-drain-art/article_3e0fc276-e963-11e4-8107-1f6fddd1a91e.html

And one from 2014 as well. http://www.newsminer.com/news/local_news/fairbanks-artists-are-taking-it-to-the-streets/article_0c641850-efa7-11e3-b9dc-001a4bcf6878.html

“Out in the Community” Public Events: TVWA hosted educational booths at several events. These events include the Home Show, KTVF Summer Activities for Kids Fair, Fort Wainwright Earth Day Festival, AK Department of Fish & Game Kids days, Solstice Celebration, Red Green Regatta and Chena Hot Springs Renewable Energy Fair. TVWA facilitated the Watershed Appreciation Weekend was held on June 14th. The 10th Annual Stream Clean-Up Day successfully had 56 volunteers attend.



Fairbanks Children’s Museum: We started the 2015 at the Fairbanks Children’s Museum, as their first Super Saturday Event for the year on February 8th. They invited us to come talk about our different programs to the local families that attend their event. Approximately 150 children and family members attended. We had educational materials about the Chena River, water quality, salmon and our Adopt a Stream program.



Booth at Ft Wainwright Earth Day Festival: April 22. This was the third year we’ve attended this event with over 500 school aged kids and their families. We talked about recycling, storm water runoff and our Adopt a Stream program.

The flyer features three logos at the top: "RAIN TO RIVERS THE RESOURCE CENTER" on the left, a central "Celebrate Earth Day! April 22" logo with a smiling globe, and the "Tanana Valley Watershed Association" logo on the right. Below the logos, the text reads "Earth Day Open House April 22, 2015 (4pm-6pm)". At the bottom, it says "The Tanana Valley Watershed Association would like to invite you to the Earth Day Open House."

Earth Day Open House: Also on April 22, TVWA hosted an open house at our Rain to Rivers venue. We talked about our many programs, including Adopt a Stream. Approximately 45 local partners, agency members and community members attended this event.

Partnership with Camp Habitat: TVWA field technicians continued our collaboration with Camp Habitat this summer. On June 3rd, a TVWA field technician trained a dozen Camp Habitat adult staff members in water quality using our Adopt-a-Stream protocol and new kid kits. Staff members were given appropriate water quality kits to incorporate into their curriculum for use with the campers.



Chena River Summit: TVWA hosted the third annual Chena River Summit on June 12th at the Carlson Center. This year's topics included: an introduction to the Watershed Resource Action Plan (WRAP), Water Quality and Regulations Panel Discussion, Rivers to groundwater in the Fairbanks Area, Streambanks Bioengineering strategies, Green Infrastructure applications, Aquatic Ecosystems, Piledriver Case Study: Citizen Science and static booths where we had educational materials about our Adopt a Stream Program and volunteer signup sheets. Over 100 partner, agency and community members attended.

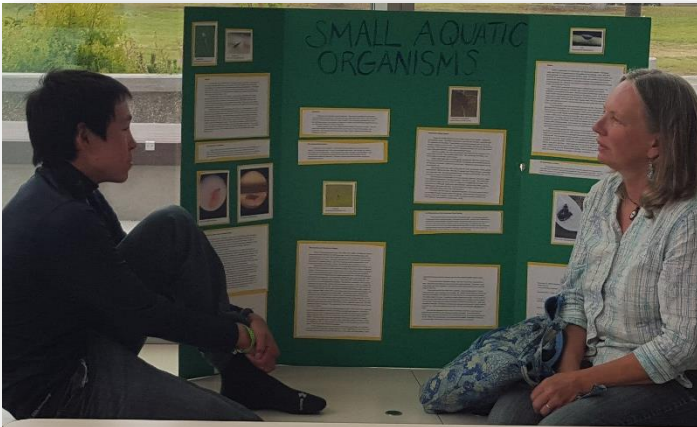


Chena Riverwalk Event: TVWA held the fourth annual Chena Riverwalk on June 13. This event is designed to get the community outdoors and educate them on all things about the Chena River as well as foster collaboration and cooperation among the Chena River's many user groups. Local organizations, businesses, and agencies were invited to host interactive, family-friendly booths to educate the public about many aspects of the Chena River. It had over 20 partner agencies involved and over 300 people in attendance. Adopt a Stream materials and volunteer signup sheets were at the registration table.



Upward Bound: Upward Bound is a high school program serving both low-income students and students with neither parent having earned a Bachelor's degree. The program allows for students to take summer classes at the local university/college and earn college credit. May 26th-July 3rd, TVWA partnered with Jenny McDougall (a Master's student at UAF and one instructor for Upward Bound in 2015). Together, we took 10-12 students from rural Alaska,

ages 17-18 and helped them learn about stream monitoring, clean-up, restoration, water quality monitoring, and overall awareness for waterways in and around Fairbanks. TVWA helped host a science fair for the students to showcase their projects up at UAF the last week of their class. More than 40 UAF faculty, students and local residents attended the event.



Watershed School: Due to the huge success of the curriculum for the Piledriver program, we were able to utilize that same curriculum for a program with the Watershed School. On September 4th, we took a field trip with 25-30 students and five adults to the Chena River at Pike's Landing. While there, we had the students assist us with water quality testing. Taking advantage of the new kid's kits which allow us to test – pH, dissolved oxygen and turbidity. We also did a habitat assessment, talked about riparian zones and checked on the water insects. With the success of the Salcha Elementary/Piledriver program and this outreach to the Watershed school we have had several teachers/schools approach us with an interest in repeating this in the coming years.



Watershed Discovery Zone at Thrive Alaska:

On September 18, ThriveAlaska and TVWA held an open house to showcase the Watershed Discovery Zone Project. Elements of this project include a dry creek bed, rain garden, rain barrel, and more. We believe that this project can act as a model, planting a seed for creating spaces for kids to explore our watershed and connect deeply to water. This project continues encourage the next generation of good stewards with years to come. We discussed our Adopt a Stream program with the families that attended.

- *2015 Resource Highlights and Accomplishments:* Water-quality monitoring equipment was inventoried, cleaned, and serviced before and after the sampling season. Based on the inventory, TVWA was able to obtain more kits that are more kid-friendly. Capacity building and volunteer training took place this summer.
 - *New Kits:* TVWA field technicians designed a new “kid kit,” World Water Quality Testing Kits, for the Adopt-A-Stream program in efforts to engage more youth into our program. These kits allowed younger participants to measure turbidity, dissolved oxygen, pH and temperature. Technicians created simplified data sheets to accompany the kits within a colorful clipboard package and needed smaller buckets. Many adults enjoyed the World Water Quality Testing Kits as well as encouragement for shared adult participation in the project with their kids.
 - *Trainings:* TVWA provided volunteers with individual water quality monitoring training at the Pioneer Park pavilion on May 10th and at Moose Creek Dam on July 12th. Additional in-office training was held on July 22nd. Each training was approximately two hours in length, included a PowerPoint presentation and handout document. Information at the training covered proper sampling techniques and how to use a Hanna® meter to measure pH, conductivity, temperature, and record useful observations. Volunteers were also given information about invasive weed identification and were asked to report their presence along with the water quality monitoring data. For more information see the *Adopt-a-Stream (AAS) PowerPoint Training*.

- *Volunteers:* TVWA maintained a list of stream adoptees and their respectable stream sections they were responsible for conducting water quality sampling. A total of 78 volunteers participated in our program this year. Of these, 11 adults and 5 youths participated in the traditional water-quality sampling. An additional 50 youth and 12 adult participants were engaged as part of TVWA's partnership with Camp Habitat.
- *Locations:* A total of 23 locations were sampled on local waterbodies. These water bodies were: Chena River (7), Noyes Slough (1), Creamer's Field (3), Piledriver Slough (7), Nenana River (2), and Beaver Slough (1). Water quality (temperature, pH, and conductivity) was tested during each sampling event using a Hanna HI 98129 pH/EC/TDS/Temperature meter. Meter calibration was done prior to and after the water testing each week using solution standards of pH 4, pH 10, and 1413 μ S.
- 2015 Future Goals
 - *Green Map:* We are in the process of making an online, interactive map.
 - *Chena River Video:* Currently, we are working on putting together a video of the Chena River.
 - *Salmon Booklet:* Revisions are being made to a book about salmon in the interior of Alaska.