

Tanana Valley Watershed Association 2018 Annual Report of Adopt-a-Stream Program Activities for the Fairbanks Stormwater Advisory Committee

Program Description: How it Works

The Fairbanks Stormwater Advisory Committee (FSWAC) and the Tanana Valley Watershed Association (TVWA) continue the Memorandum of Agreement to implement Adopt-a-Stream (AAS) programs within Fairbanks and North Pole. TVWA administers the AAS 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 other events. TVWA implements and schedules program activities and maintains the participant list of adoptees and their designated stream sections. TVWA also submits an annual AAS report to FSWAC outlining tasks and community outreach accomplishments during the year.

The AAS 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 the 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 AAS 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. AKS-053406 requires implementation of the AAS programs. The City of Fairbanks, City of North Pole, Alaska Department of Transportation & Public Facilities, and the University of Alaska Fairbanks comprise the co-permitted agencies who are responsible for permit compliance. AK DEC then

submits the AAS 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 2018 season.

2018 Community Outreach Accomplishments, Highlights & Resources

- 2018 Community Events: TVWA sought creative, visible solutions to engage community learning and care for local water bodies in addition to the traditional citizen-scientist framework. Several public events and educational sessions took place to address large threats to healthy water bodies, such as storm water issues, an uninformed public, and trends of disconnect between the youth and nature. Overall success of these projects enabled stronger community connection with the natural world and greater education publications, as with the Chena River.
 - Storm Drain Art Contest: Since 2014, TVWA has invited local artists to submit design proposals for storm drain art in downtown Fairbanks. The purpose of this project is to raise public awareness that ALL storm drains flow directly into the Chena River and to provide an opportunity for artists to create public works of art in the downtown and surrounding Fairbanks area. The past art was displayed for one year prior to the construction on Cushman Street (2014) and on Noble Street (2015), Cowles Street (2016), Gilliam Way (2017), and Barnette Street (2018).

During the month of April - TVWA asks local artists to submit their art proposals to TVWA. The artist is asked to consider the following design ideas for their art entries. When designing the artwork, artists were encouraged to think of the following three themes.

- 1. **Storm Water Pollution** (litter, vehicle fluids, pet waste, soapy water, etc.)
- 2. Fish, Wildlife, Habitat (moose, beavers, ducks, salmon, grayling, willows, etc.)
- 3. **Quality of Life** (clean water for recreation, drinking, natural beauty, etc.)

TVWA created/sent out eblasts, Facebook posts, and updated their website to announce the Storm Drain Art contest. The contest ran from April 1-30 and in that time 14 artists submitted 22 designs. TVWA hosted an open house and First Friday on May 4th to showcase our AAS program, advertise our Summer Camp and have the public vote on the Storm Drain Art. We had 73 attendees that voted on the art. TVWA contacted the winning artists and coordinated with the COF to organize painting day.

The painting was done on June 2nd, 2018. A total of 12 designs were painted. The City of Fairbanks provided signs for traffic revision and cones/high visibility vests for artist's safety. The artists are asked to paint between the hours of 9 am and 5 pm. Staff from TVWA and the City of Fairbanks were on site to help with any questions they might have. TVWA supplied light snacks and refreshments to the artists on the day of painting. The City of Fairbanks then sealed the art on the storm drains with a high durability sealer so that everyone could enjoy the colorful pieces for the rest of the summer.

TVWA posted pictures and updates to their website and Facebook page. The Fairbanks Daily News-Miner contacted TVWA for details on artists, photos of the art, and information about the contest, for an article. Click here to see the article.

Pictures of this and prior year's events are posted on our website and on the second floor hallway wall at Fairbanks City Hall: www.tvwatershed.org/storm-drain-art/

- "Out in the Community" Public Events: TVWA hosted AAS training and participated in the Stream Clean-Up Day and the Floating Film Festival community events during the spring and summer this year. We've found these events to be very successful at promoting the Adopt-a-Stream program and education family and youth about water quality issues and watershed stewardship.
 - May 19th Training: Our AAS Training was held on May 19th from 12-2 pm at our office downtown. We had 33 attendees. TVWA provided volunteers with individual water quality monitoring training at TVWA and the Golden Heart Plaza in downtown Fairbanks on May 19th. Training was approximately two hours in length, and included both handout documents and hands-on learning for how to use the water testing kits. 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. Volunteers turned in their data by October 30th and data was entered into the EPA water quality collection spreadsheet and submitted to AK DEC.

During the months of June to September – AAS volunteers and a TVWA field tech sampled a total of 121 times at 12 areas along the Chena River and surrounding waterways.

AAS training ad posted@ FairbanksAlaska.org, KUAC, Fairbanks Daily News-Miner online and print, TVWA Facebook page, TVWA mailing list eblast, Downtown Association Fairbanks Calendar.

• June 9th Annual Stream Clean-Up Day: TVWA assisted with the 14th Annual Stream Clean-Up Day. We posted invites to the event on our Facebook page. We also assisted with volunteer management and logistics. There were over 25 volunteers that cleaned up 560 pounds of trash in 2017. At the 2018 event over 30 volunteers cleaned 900 pounds of trash and waste from Noyes Slough and the Chena River. We had more volunteers and collected more trash than the previous year.

• Aug 10th – Floating Film Festival

TVWA partnered with US Fish and Wildlife Service to host the Floating Film Festival on the Tanana Chief sternwheeler as a celebration of the third annual Wild Salmon Day on August 10th. 90 people attended and watched over 15 short films about salmon, salmon habitat and clean water. The main film was our "Voices of the Chena" and we passed

out educational material including "Living Stream Side" both of which include information on our Adopt a Stream program and how to become involved. Copy of video shorts and films are on our website at www.tvwatershed.org/film-fest. Thank you to Jonathan Huff at Alaska Universal Productions for providing sound and audio services.

2018 Adopt-a-Stream Data

Locations: TVWA and volunteers sampled 19 locations from May through October. The sampling sites include Chena River (14), 30-mile Slough in North Pole (1), Fox Creek (1), Smith Lake (1), and Cripple Creek (1). Water quality (temperature, pH, and conductivity) were 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 1413μS.

Data: Graphs showing monthly trends by year were created for sites that were sampled for two or more years. These graphs are available as PDFs and can be found at the following link: http://www.tvwatershed.org/aas/

Map: An interactive Google Map was also created to showcase the AAS program locations. It shows a fish for locations that were sampled from 2013-2018. This map can be accessed via the following link: Fairbanks AAS sampling locations