



## **Tanana Valley Watershed Association**

### **2021 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 monitoring 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 developing 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. TVWA and community volunteers collect water quality data from a minimum of 10 sites each summer starting in May after break up and concluding in October. 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 2021 season.

## 2021 Community Outreach Accomplishments, Highlights & Resources

2021 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.

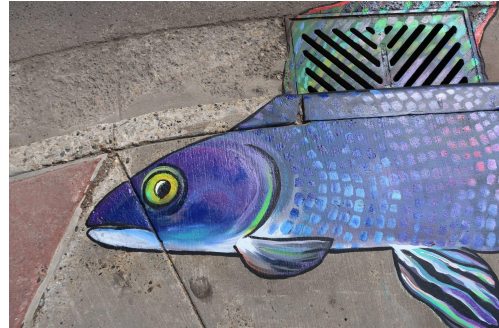
- **Storm Drain Art Contest:** Since 2014, TVWA has invited local artists to submit design proposals for storm drain art in downtown Fairbanks. The purpose of this project is to raise public awareness that ALL storm drains flow directly into the Chena River and to provide an opportunity for artists to 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), Noble Street (2015), Cowles Street (2016), Gilliam Way (2017), Barnette Street (2018) 5<sup>th</sup> Avenue (2019), and 3rd Avenue (2020). This year, artists painted the storm drains on Lacey St.



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 utilized eblasts, Facebook, and updated their website to announce the Storm Drain Art contest. 718 people were reached through Facebook and eblasts. The contest ran from April 1st-May 1st, and in that time 16 artists submitted 20 designs. On May 17th TVWA sent out an email to the Fairbanks Stormwater Advisory Committee requesting their votes on the submitted artwork. The vote tally was completed May 25th. TVWA



contacted the winning artists and coordinated with the COF to organize painting day.



The painting was done on June 5<sup>th</sup>, 2021. A total of 15 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 3pm. Staff from TVWA and the City of Fairbanks were on site to help with any questions they might have. TVWA supplied light snacks, masks, hand sanitizer, a pizza lunch, and other refreshments to the artists on the day of painting. Staff from TVWA 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.

One thing that made this year different was that private sponsors donated environmentally-friendly paints developed from a renewable resource, soybeans. BioStripe® is eco-friendly paint providing long-lasting safety without depleting our environment. The colors were outstanding!



The Fairbanks News Miner published a story on June 8th highlighting the event: [https://www.newsminer.com/news/local\\_news/storm-drain-art-project-paints-a-scene-of-wildlife-and-conservation/article\\_075c67a6-c80b-11eb-ab87-e355b811a338.html](https://www.newsminer.com/news/local_news/storm-drain-art-project-paints-a-scene-of-wildlife-and-conservation/article_075c67a6-c80b-11eb-ab87-e355b811a338.html)

Pictures of this and prior year's events are posted on our website <http://www.tvwatershed.org/storm-drain-art-pictures>.

- **May 15<sup>th</sup> – AAS Training:** Our AAS Training was held both in person and virtually via Zoom on May 15th from 1-2 pm at the FAST Planning conference room downtown. In addition, individual trainings were offered by appointment. We had 7 attendees. TVWA provided volunteers with individual water quality monitoring training at TVWA. Training was approximately thirty minutes. Information at the training covered proper sampling techniques and how to use a Hanna® meter to measure pH, conductivity, temperature, and record useful observations. TVWA staff then coordinated giving volunteers their handout documents and water testing kits. 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 30<sup>th</sup> and data was entered in the EPA water quality collection spreadsheet and submitted to AKDEC.

During the months of May to September – AAS volunteers and a TVWA field tech sampled 16 areas along the Chena River and surrounding waterways.

**AAS training ad posted:** TVWA Facebook page and TVWA mailing list eblast.

- **June 21st - Annual Stream Clean-Up Day:** TVWA assisted with the 17<sup>th</sup> Annual Stream Clean-Up Day. We posted invites to the event on our Facebook page. We also assisted with volunteer management and logistics. In 2017, over 25 volunteers cleaned up 560 pounds of trash and waste from Noyes Slough and the Chena River. At the 2018 event, over 30 volunteers cleaned 900 pounds of trash and waste. At the 2019 event, over 32 volunteers collected an estimate of 1,960 pounds of trash. In 2020 over 50+ community volunteers collected over 400 pounds of trash. This year 35 volunteers collected 540 pounds of trash.



The Fairbanks News Miner published a story about this year's event on Jun 14th: [https://www.newsminer.com/news/local\\_news/17th-annual-stream-cleanup-day-draw](https://www.newsminer.com/news/local_news/17th-annual-stream-cleanup-day-draw)

[s-volunteers-to-remove-trash-of-all-shapes-sizes-from/article\\_7370adc8-ccc3-11eb-a3df-1f12008e118d.html](https://www.tanana.org/s-volunteers-to-remove-trash-of-all-shapes-sizes-from/article_7370adc8-ccc3-11eb-a3df-1f12008e118d.html)

- **June 19th – Midnight Sun Festival:** The Midnight Sun Festival was held in Downtown Fairbanks from 12 pm – 12 am. TVWA staffed a booth at the event and we provided flyers for the AAS program, as well as material on our other programs. A sign up sheet was available for interested volunteers, and TVWA board and staff held many conversations about our programs, including AAS.

## **2021 Adopt-a-Stream Data**

**Locations:** TVWA and volunteers sampled 10 locations from May through October. The sampling sites include Goldstream Creek, Smith Lake, Tanana Lakes, Chena Lakes, Little Chena River, Chena River, and Noyes Slough. 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 1413 $\mu$ S.

**Data:** Historical graphs showing monthly trends by year were created for sites that were sampled for two or more years through 2019. These graphs are available as PDFs and can be found at the following link: [Adopt-A-Stream — Tanana Valley Watershed Association](#)

**Map:** An interactive Google Map was also created to showcase the AAS program locations. It shows a fish for locations that were sampled from 2013-2021. This map can be accessed via the following link: [Fairbanks AAS sampling locations](#).