



# Tyonek Tribal Conservation District Nugeli (Fall) 2022 Updates

## “SUBSISTENCE IS OUR AGRICULTURE”



Those who regularly put their hands in the soil understand the importance of rotating cover crops across garden beds. In some years, in some areas of the field, it may not look like much is happening. Beneath the surface, however, the cover crops are adding nutrients and organic matter that will significantly benefit future harvest crops. Similarly, 2022 has been a year in which TTCD maintained our ongoing field, garden, and outreach projects while simultaneously managing transitions, re-energizing partnerships, and furiously writing proposals to fund the next three years of strategic and ambitious projects for our District. To date, nine of our proposals have been funded and we are waiting to hear about six more by the end of the year. This means growth is on the horizon for TTCD’s field, garden, and outreach projects!

## Improving food security through community agriculture



When we learned that Nicole (architect of the Tyonek Garden) was leaving in April and that previous staff were not returning to manage the garden this summer, Programs Coordinator Tonya Kaloa stepped up. Tonya single-handedly maintained basic operations and trained five Garden Youth Staff, while the organization has worked towards rebuilding the Garden team and operations. After three seasons impacted by Covid closures, supply issues, flight reductions, and (this year) heavy rains – we will be repairing high tunnels and garden beds in 2023, as well as increasing production for late summer harvests. We are also planning additional improvements in 2024 which will increase the outreach capacity of the garden.

This year, the Garden Youth team participated in Beginning Farmers training at Calypso Farms in Fairbanks, hosted the Youth

Garden team from the Center for Alaskan Coastal Studies in Homer, toured a media team from NRCS on the conservation practices in the garden, and learned that successful gardening relies on teamwork.

The garden also hosted Farmer Nick and Meredith from the Fiskars company, who donated garden tools and then assisted Tebughna students in harvesting this year’s potatoes. Through Farmer Nick, TTCD has received three Lettuce Grow hydroponic farmstands which will be set up in the Tebughna School later this month. The vegetables from these stands should supplement student meals and snacks throughout the winter, and we are hoping that their success will lead to additional farmstands in the community!



## Providing conservation education and outreach

TTCD's first outreach grant through the Alaska Native Education Program [ANEP] ended in mid-September. With these funds, we created opportunities for the Garden Youth Team and formalized 16 hands-on classroom lessons plus materials kits. Happily, ANEP has awarded us a second three-year grant to continue this work! This second phase will allow us to hire a full-time outreach manager, include field work in our summer youth experience, and potentially construct an educational outbuilding in the garden. This new grant pairs well with an NRCS grant awarded in the spring through which the TTCD team is increasing our ability to incorporate traditional Dena'ina/Tebughna knowledge into the Tyonek Grown and Tyonek Youth Conservation Science programs. Over the next 16-24 months, our team will also be upgrading our website so that it is a resource hub about field work being done in the District.



## Monitoring and restoring fish and wildlife habitat



This year's field team included Jillian and three seasonal staff: Kaarle Strailey, Brian Peter, and Michael Braun. The annual "pike camp" was held in June with our partners from NVT and the Alaska Department of Fish & Game, and the team removed 1,246 pike from Threemile, Chuitbuna, and Rollercoaster lakes.

The team conducted two days of weed pulls in Beluga: Oxeye daisy and Orange Hawkweed at Viapan Lake, Orange Hawkweed at the pipeline easement. Two days of weed pulls in Tyonek found: Oxeye daisy and Tansy at the Cemetery, Oxeye Daisy at the Dump, Oxeye Daisy along the highway, and Yellow Sweetclover. The Yellow Sweetclover was over 50% reduced after it was pulled in Fall 2021. We also surveyed for invasives between Tyonek and Shirleyville, and in Beluga north to the Lewis River. Seven elodea surveys were conducted at Eightmile, Trail, Derf, Yensus, Otter, Keyhole, and Blood lakes.

Juvenile salmon monitoring occurred at Lower Threemile in June, July, and August; Upper Threemile in July; Robert's Creek in July and August, and Indian Creek in August. A major effort for our District is adding data to the State's Anadromous Waters Catalog [AWC] by sampling in the remote western Mat-Su. This year, 15 sites were visited and 4 streams were added to the AWC.

Barriers were removed at five culvert sites this summer, and we continue to work towards replacing the Lower Tyonek Creek culvert in 2023. This is anticipated to be a \$3M culvert with a 45-foot span and will be at least partially funded by Bilateral Infrastructure Legislation funds.

Our 2017-2022 Watershed Action plan for the District has met its goals, and the Habitat Team will be working towards the creation of a new Coastal Resilience Plan to update Tyonek's watershed priorities. Stay tuned for more information about 2023 projects!



Our deepest THANK YOU to the 13 people who donated to TTCD's efforts through Alaska's Pick.Click.Give program!

We could not do this work without your support --  
**Chiqinik!**