



Environment and Natural Resources Trust Fund

2027 Request for Proposal

General Information

Proposal ID: 2027-133

Proposal Title: Disease Implications of Connectivity Among Metro Deer Populations

Project Manager Information

Name: Meggan Craft

Organization: U of MN - College of Biological Sciences

Office Telephone: (612) 625-5713

Email: craft@umn.edu

Project Basic Information

Project Summary: Our project aims to understand the implications of white-tailed deer density and population connectivity across the Twin Cities Metro region to inform more efficient deer management and disease control.

ENRTF Funds Requested: \$1,248,000

Proposed Project Completion: June 30, 2030

LCCMR Funding Category: Fish and Wildlife (D)

Project Location

What is the best scale for describing where your work will take place?

Region(s): Metro

What is the best scale to describe the area impacted by your work?

Statewide

When will the work impact occur?

During the Project and In the Future

Narrative

Describe the opportunity or problem your proposal seeks to address. Include any relevant background information.

White-tailed deer (*Odocoileus virginianus*) are an important natural resource across Minnesota, yet most deer studies occur in rural landscapes. Deer in suburban and exurban ecosystems are difficult to monitor using typical wildlife survey methods, such as aircraft-based aerial surveys or radio-collar deployment. As a result, key aspects of deer ecology (e.g., deer density, population connectivity, and disease dynamics) remain poorly understood in fragmented urban landscapes. Improved estimates of deer densities and connectivity in suburban and exurban areas can help guide deer population management and disease control strategies. These landscapes are also subject to rapid shifts in habitat availability and connectivity as development progresses. While white-tailed deer can adapt to many of these pressures, rapidly changing landscapes will change connectivity among deer populations, which in turn strongly influences disease spread. For example, chronic wasting disease (CWD) has been detected in the greater Twin Cities Metro area and disease spread may be facilitated by restricted movement corridors and fragmented habitat patches. SARS-CoV-2, the causative agent of COVID-19, has also been detected in regional deer populations and may be maintained through sporadic human-deer transmission in suburban areas. In short, deer density, connectivity, and disease dynamics in developed landscapes remain poorly understood.

What is your proposed solution to the problem or opportunity discussed above? Introduce us to the work you are seeking funding to do. You will be asked to expand on this proposed solution in Activities & Milestones.

To understand the implications of density and connectivity among Metro white-tailed deer populations, we will leverage our findings from prior ENRTF and U.S. Department of Agriculture (USDA)-funded studies of deer. Through these projects, we characterized fine-scale movement behavior and habitat selection using radio-collars deployed in several green spaces. This proposal builds on that by integrating additional survey methods to understand population connectivity and how it may change with future development.

First, the density of deer across the Metro area remains only partially understood, largely due to limitations of monitoring populations using aircraft for aerial surveys and a lack of collared animals with which to determine sightability models. We will calibrate and apply drone-based thermal survey methods, developed for other cervid populations, so they are suitable for developed environments. Second, we will engage community scientists to collect deer fecal samples for genetic analysis across the Metro area. Third, we will combine connectivity information from these genetic samples with existing deer movement data from prior projects to understand connectivity across the landscape. Finally, we will use urban growth models to project future development in the Metro area and model the consequences for deer population connectivity and disease transmission risk.

What are the specific project outcomes as they relate to the public purpose of protection, conservation, preservation, and enhancement of the state's natural resources?

Our efforts to understand current and future deer population densities and connectivity across the Twin Cities Metro area will provide managers across the state with several practical resources. We will develop drone-based survey protocols for wildlife monitoring in urbanizing environments. Community science efforts will produce a public-facing website describing fecal collection efforts and a genetic dataset for study of deer connectivity and gene flow. Connectivity mapping will identify critical movement corridors to inform city planning to minimize impacts on wildlife. Disease modeling will identify corridors important for pathogen transmission, where surveillance and management actions could mitigate the spread of disease.

Activities and Milestones

Activity 1: Precision estimates of deer densities in developed landscapes using thermal drones

Activity Budget: \$396,504

Activity Description:

Effective population and disease management of white-tailed deer requires an understanding of how the animals are distributed in space; however, accurate population estimates are often hampered by the logistical and safety constraints of crewed aerial surveys in urban landscapes. Traditional surveys provide broad indices but frequently fail to account for imperfect detection in complex human-dominated mosaics, require continuous snow cover, and are cost-prohibitive for repeated sampling. This activity will develop a flexible, low-cost protocol to deploy small uncrewed aerial systems (sUAS) and FLIR thermal sensors originally acquired through a previously funded ENRTF project.

Drawing on our experience with sUAS-based population estimation, we will develop a repeated-sampling design to explicitly estimate deer densities in complex landscapes. We will rigorously calibrate this approach using sightability trials of existing radio-collared deer (leveraging previous ENRTF support) and will compare our estimates to counts from contemporaneous helicopter-based aerial surveys with a double-observer platform (Figure 1). Finally, we will combine our deer observations with land-cover data to build predictive deer density models for the entire metro area. This research will provide Minnesota managers with a scalable tool to estimate population densities, essential for predicting pathogen transmission risks and managing human-wildlife conflicts in developing landscapes.

Activity Milestones:

Description	Approximate Completion Date
Refurbish sUAS (drones), develop and test sampling protocol	December 31, 2027
Conduct repeated sUAS surveys of sites (e.g., Murphy-Hanrehan, Shakopee Mdewakaton Sioux Community)	March 31, 2028
Upgrade current helicopter size to include another observer to calculate deer sightability from surveys	March 31, 2028
Analyze thermal data and develop population estimates for sites and region	December 31, 2028
Conduct second year of surveys	March 31, 2029
Complete analysis, present results at conference, submit manuscript for publication, finalize protocol with managers	March 31, 2030

Activity 2: Engage community scientists in the study of deer population connectivity

Activity Budget: \$220,254

Activity Description:

Our objective is to develop a community scientist program that educates the public about the effects of human development on wildlife habitat connectivity, engages them in sample collection for landscape connectivity analyses, and disseminates the results. We will develop a website with project background information and directions for collecting fecal samples for deer connectivity analyses. We will then reach out to land management agencies to obtain relevant permits at ~30 sites in the Metro area (Figure 1) and 1-2 sites in greater Minnesota. We will work with outdoor education programs to facilitate recruitment of community scientists and will leverage existing relationships with Three Rivers Park District (TRPD), Shakopee Mdewakanton Sioux Community (SMSC), Minneapolis Park and Recreation Board, the School of Environmental Sciences, and Dakota County, among others, to accomplish these activities. We will provide supplies (gloves, plastic bags, freezers) and training for community scientists and schedule pickup of frozen fecal samples from each site. We will seek to recruit communities typically underrepresented in wildlife science and will share sample locations and Activity 3 connectivity results on an interactive map on the website.

Activity Milestones:

Description	Approximate Completion Date
Make website with project background and sample collection directions using ArcGIS Survey 123	September 30, 2027
Obtain permits for sample collection locations, recruit via nearby schools and outdoor education centers	November 30, 2027
Train community scientists, perform sample pickups	May 31, 2028
Update website with sample collection locations	June 30, 2028

Activity 3: Determine deer population connectivity and identify connectivity barriers between habitat patches in the Twin Cities using landscape genetics

Activity Budget: \$409,974

Activity Description:

The aim of this activity is to use non-invasive sampling to understand the connectivity among deer within the Twin Cities Metro area and identify movement corridors and barriers. Using a sampling approach that is stratified across major anticipated barriers (interstates, rivers) and augmented by community scientists (Activity 2), we will collect fecal samples from ~1000 deer. We will also collect samples at several sites in greater Minnesota. We will extract deer DNA from the fecal samples and use a method called GT-seq to measure genetic differentiation between individuals. We will examine how genetically differentiated deer are between green spaces using methods such as measuring fixation index and Bayesian Clustering analysis. We will map deer gene flow across the Twin Cities using Omniscape, which will aid in movement corridor identification (hypothetical results presented in Figure 1). Finally, we will measure the relative strength of landscape features, such as housing development, rivers, and roads, on shaping deer connectivity patterns using Generalized Dissimilarity Modeling. An outcome of this analysis will be to help predict how pathogens, such as CWD, could spread across the Metro area, which would help managers prevent its spread.

Activity Milestones:

Description	Approximate Completion Date
Assist community scientists in sample collection	May 31, 2028
Extract DNA, identify genetic markers for analysis (GT-seq)	December 31, 2028
Conduct genetic differentiation analyses, corridor identification, and barrier strength determination; results feed into Activity 4	April 30, 2029
Upload corridor maps to website (created in Activity 2)	June 30, 2029
Present results at conference, submit manuscript for publication, co-develop management implications from study results	June 30, 2030

Activity 4: Forecast deer connectivity and pathogen spread across an urbanizing landscape

Activity Budget: \$221,268

Activity Description:

This activity will integrate deer density estimates, population connectivity, and disease modeling to forecast how urban growth may alter disease transmission dynamics across the Metro area. Building on Activity 3's effort to map current movement corridors using genomic data, we will project population connectivity 20 years into the future under alternative urban expansion scenarios generated by the FUTURES urban growth model. These connectivity surfaces will inform spatially explicit simulations of disease transmission to evaluate how changing landscape structure influences spread and persistence of various pathogens of concern, such as CWD and SARS-CoV-2.

By linking observed population densities, observed movement behavior from previous ENRTF research by this team, and plausible future availability of habitat, this activity will quantify how development patterns may fragment or redirect dispersal corridors, alter contact networks, and shift epidemic trajectories. Outputs will include maps of future

connectivity, predicted disease spread metrics under multiple urban growth scenarios (Fig. 1), and identification of high-leverage management zones where surveillance or intervention could most effectively reduce transmission risk. These forecasts will provide decision-relevant guidance for wildlife and city planners seeking to balance development with long-term ecosystem and public health resilience. These outputs will be disseminated to contributing partners in the area.

Activity Milestones:

Description	Approximate Completion Date
Build FUTURES urban development model to predict future extent of development	December 31, 2028
Develop spatial disease model for disease transmission across focal area	January 31, 2029
Project population connectivity using future ecological conditions	October 31, 2029
Simulate disease transmission for pathogens given current and future landscape conditions and deer population connectivity	February 28, 2030
Present results at conference, submit manuscript for publication, co-develop management implications from study results	June 30, 2030

Project Partners and Collaborators

Name	Organization	Role	Receiving Funds
Tiffany Wolf	University of Minnesota, College of Veterinary Medicine	Co-PI / Help with oversight of entire project; advise on the sample management pipeline for Activity 2's community science deer sample collection and provide a wet lab for Activity 3's genetic research	Yes
James Forester	University of Minnesota, College of Food, Agriculture and Natural Resource Science	Co-PI / Lead the effort for the deer density estimates in Activity 1; provide small uncrewed aerial systems (sUAS) and thermal sensors	Yes
Steven Hogg	Three Rivers Park District	Collaborator / Provide access to Three Rivers Park District properties and facilities. Partner on the helicopter-based aerial surveys and aerial thermal sensors for density estimation. Utilize results from this study for managing white-tailed deer on Three Rivers Park District properties. Please see letter of support.	No
Elias Rosenblatt	University of Minnesota, College of Biological Sciences	Co-PI / Implement the drone survey in Activity 1; lead the Activity 4 analysis	Yes
Tyler Garwood	University of Minnesota, College of Biological Sciences	Co-PI / Be the second observer for the helicopter deer surveys; design the fecal collection for Activity 2; lead the Activity 3 population connectivity analysis	Yes
Ferin Davis Anderson	Shakopee Mdewakanton Sioux Community	Collaborator / Provide access to Shakopee Mdewakanton Sioux Community properties. Partner on the helicopter-based aerial surveys and aerial thermal sensors for density estimation. Utilize results from this study for managing white-tailed deer on Shakopee Mdewakanton Sioux Community lands. Please see letter of support.	No

Dissemination

Describe your plans for dissemination, presentation, documentation, or sharing of data, results, samples, physical collections, and other products and how they will follow ENRTF Acknowledgement Requirements and Guidelines.

Our plans for sharing of data and dissemination and presentation of research results are as follows: 1) We are partnering with Three Rivers Park District (TRPD) and the Shakopee Mdewaketon Sioux Community (SMSC) for this study; please see letters of support. 2) Results pertaining to deer management can be directly implemented by TRPD & SMSC managers and will be presented at Minnesota's The Wildlife Society Meeting. 3) Study findings will also be disseminated to management and academic audiences through conference presentations (e.g., the national meeting of the Wildlife Society) and peer-reviewed publications. 4) Study findings will be translated for outreach and public engagement via TRPD nature centers (e.g. Elm Creek and Carver Park Reserves) and via TRPD mechanisms such as TRPD's Wandering Naturalist Podcast and their social media. 5) We will acknowledge the Environment and Natural Resources Trust Fund through the use of the trust fund logo or attribution language on project print and electronic media, publications, signage, and other communications and outreach per the ENRTF Acknowledgment Guidelines.

Long-Term Implementation and Funding

Describe how the results will be implemented and how any ongoing effort will be funded. If not already addressed as part of the project, how will findings, results, and products developed be implemented after project completion? If additional work is needed, how will this work be funded?

Protocols for drone-based thermal surveys and data processing will be co-developed with managers at TRPD and SMSC. Training will be provided to ensure standardized surveys and reduce costs for long-term monitoring. Study findings will be shared with additional management and academic audiences through conferences (e.g., The Wildlife Society) and peer-reviewed publications. Results will be translated into outreach materials and presented at nature centers at Elm Creek and Carver Park Reserves. We will be well-positioned to submit proposals to the National Science Foundation and USDA to expand this work to additional rural and suburban areas across Minnesota.

Other ENRTF Appropriations Awarded in the Last Six Years

Name	Appropriation	Amount Awarded
Mapping the Ecology of Urban and Rural Canids	M.L. 2023, , Chp. 60, Art. 2, Sec. 2, Subd. 03l	\$601,000
White-Tailed Deer Movement and Disease in Suburban Areas	M.L. 2024, , Chp. 83, Art. , Sec. 2, Subd. 03u	\$699,000

Project Manager and Organization Qualifications

Project Manager Name: Meggan Craft

Job Title: Professor, University of Minnesota

Provide description of the project manager's qualifications to manage the proposed project.

Meggan Craft, PhD, is an infectious disease ecologist and professor at the University of Minnesota in the Department of Ecology, Evolution and Behavior. Since 2011 she has led a lab aiming to understand infectious disease dynamics in animal populations. Craft is interested in asking: How do animal interactions and movement affect the spread of infectious disease? Craft has published over 110 peer-reviewed articles; has been the primary research advisor for a high school student, 3 masters students, 7 PhD students, and 10 post-doctoral fellows; and conducts community-engaged research with public engagement. Craft has recently been studying the movement and diseases of white-tailed deer (*Odocoileus virginianus*) in the Twin Cities Metro region which has been funded by: 1) a cooperative agreement with USDA-APHIS ; 2) a National Science Foundation grant; and 3) ENRTF (2024-215). Funding for all three projects will run out by June 30, 2027. This proposed project will leverage the data and results provided by ENRTF (2024-215); for example, we will still have radio-collared white-tailed deer in the Metro region during the first year of this proposed study, which will be critical for estimating 'sightability' for helicopter density surveys (i.e. how many collared deer were missed while counting deer). We are excited to continue the successful partnerships between the UMN team (Co-PI's James Forester, Tiffany Wolf, Elias Rosenblatt, Tyler Garwood) and natural resource managers from Three Rivers Park District (Steven Hogg) and Shakopee Mdewaketon Sioux Community (Ferin Davis Anderson).

Organization: U of MN - College of Biological Sciences

Organization Description:

The University of Minnesota, Twin Cities, is a public land-grant research university in the Twin Cities of Minneapolis and Saint Paul, Minnesota, United States.

Budget Summary

Category / Name	Subcategory or Type	Description	Purpose	Gen. Ineligible	% Benefits	# FTE	Classified Staff?	\$ Amount
Personnel								
Meggan Craft/Professor/PI		Overall project management / Provide continuation of partnerships as well as expertise and mentorship for disease modeling in Activity 4			36.6%	0.36		\$109,001
James Forester/Associate Professor/ Co-PI		Lead the deer density estimates in Activity 1; provide small uncrewed aerial systems (sUAS) and thermal sensors			36.6%	0.24		\$57,208
Tiffany Wolf/Associate Professor/ Co-PI		Assist with oversight of entire project; advise on the sample management pipeline for Activity 2's community science deer sample collection and provide a wet lab for Activity 3's genetic research			36.6%	0.24		\$52,847
Tyler Garwood / Research Associate / Co-PI		Lead for Activity 2 and 3/ Organize the collection of fecal samples; process samples and conduct connectivity analysis. Also be the second observer for Activity 1's deer helicopter surveys.			36.6%	3		\$319,808
Elias Rosenblatt / Research Associate / Co-PI		Technician for Activity 1 and Lead for Activity 4/ Conduct the analyses to forecast deer connectivity and pathogen spread			36.6%	3		\$319,808
Civil Service (Biologist)		Advises on how to set up Survey 1,2,3 for community science website			32.3%	0.03		\$2,911
Graduate students		2 academic years and two summers of 2 graduate students, plus tuition during the academic year. One student helps with Activity 1 drones, the other student helps with Activity 2 lab work including multiplex PCR and library prep, data cleaning, and bioinformatics			24.2%	2		\$269,412
Undergraduate technicians		To process thermal images from sUAS/drones			0%	0.26		\$8,560
							Sub Total	\$1,139,555
Contracts and Services								
Helicopter survey contract (likely MN Helicopters)	Service Contract	TRPD normally hires a R22 helicopter (\$375/hr) for 60 hours. We are seeking funding to upgrade the size of the helicopter to a R44 (\$675/hr) to include				0		\$18,000

		an additional observer. (\$675/hr-\$375/hr)*60 hours= \$18,000.						
University of Minnesota Genomics Center (UMGC)	Internal services or fees (uncommon)	DNA extraction lab costs for 1000 samples; Get DNA from fecal samples for Activity 3, includes labor				-		\$25,000
University of Minnesota Genomics Center (UMGC)	Internal services or fees (uncommon)	DNA library preparation for 1000 samples; Prepare DNA for sequencing (i.e., molecularly label samples, purify DNA, add sequencing adapters)				-		\$4,000
University of Minnesota Genomics Center (UMGC)	Internal services or fees (uncommon)	UMGC costs for sequencing 1000 samples; Needed to identify genetic variation from which to determine gene flow for Activity 3				-		\$3,000
							Sub Total	\$50,000
Equipment, Tools, and Supplies								
	Tools and Supplies	sUAS replacement batteries, required flight identification devices, new motors and rotors, replacement legs	To upgrade a ENRTF-purchased sUAS to meet project objectives.					\$7,432
	Tools and Supplies	Supplies for collecting deer feces (1,500 WhirlPaks, 1,500 sets of gloves)	Supplies for collection of deer feces for population connectivity study					\$400
	Tools and Supplies	Supplies for organizing deer feces (Barcode scanner, labels, printer ink)	To organize and keep track of fecal samples and metadata.					\$100
	Tools and Supplies	Primer costs for ~200 96 well plates for GT-seq	Isolate and amplify genetic markers for deer fecal samples for genotyping					\$20,000
	Tools and Supplies	10 small freezers at \$200 each	To store fecal samples collected by community scientists					\$2,000
							Sub Total	\$29,932
Capital Equipment								
							Sub Total	-
Acquisitions and Stewardship								
							Sub Total	-

Travel In Minnesota								
	Miles/ Meals/ Lodging	Vehicle mileage for fieldwork to and from field sites. 3500 miles for Activity 1 and 3000 miles for Activity 2 at \$0.725/mile.	To conduct sUAS surveys for Activity 1 and to collect fecal samples (including picking up samples from community scientists) for Activity 2.					\$4,713
	Conference Registration Miles/ Meals/ Lodging	3 formal presentations by research scientist or graduate student at the state chapter Wildlife Society Meeting for each of ENRTF Activity 1, 3, and 4 results. \$500/conference for 3 presenters on 3 different topics.	Presenting at the Minnesota Chapter of The Wildlife Society will highlight the research in the state and serve an outreach function to statewide managers.					\$1,500
	Miles/ Meals/ Lodging	Research scientist per diem in Minnesota at \$300/week (Monday-Friday, 2 trips per year, for each of 2 years) for Activity 1	Elias Rosenblatt to lead deployment of sUAS surveys					\$1,200
							Sub Total	\$7,413
Travel Outside Minnesota								
	Conference Registration Miles/ Meals/ Lodging	3 formal presentations at \$1600/conference by research scientist or graduate student at a professional society meeting to separately present the results of ENRTF's Activity 1, Activity 3, and Activity 4.	Formal presentation at a national level professional society research conference (e.g. The Wildlife Society). An out-of-state conference is necessary to: (1) get feedback from a diverse set of colleagues who are doing similar work (there are few experts in MN on this subject) which will improve the quality of our research, and 2) disseminate our results more broadly to additional management audiences. Dissemination to a national audience will raise the profile of Minnesota's research to a national stage.	X				\$4,800
	Miles/ Meals/ Lodging	Research scientist travel from Vermont to Minnesota (4 trips at \$700/flight over 2 years)	Dr. Elias Rosenblatt to lead deployment of sUAS surveys	X				\$2,800
							Sub Total	\$7,600
Printing and Publication								
	Publication	An open access publication for the results of each of 3 Activities (Activities 1, 3, 4) at \$4500 a publication.	To publish scientific findings from Activities 1, 3, and 4 in high quality, open access, peer reviewed journals					\$13,500

							Sub Total	\$13,500
Other Expenses								
							Sub Total	-
							Grand Total	\$1,248,000

Classified Staff or Generally Ineligible Expenses

Category/Name	Subcategory or Type	Description	Justification Ineligible Expense or Classified Staff Request
Travel Outside Minnesota	Conference Registration Miles/Meals/Lodging	3 formal presentations at \$1600/conference by research scientist or graduate student at a professional society meeting to separately present the results of ENRTF's Activity 1, Activity 3, and Activity 4.	The Wildlife Society annual meetings normally occur outside of Minnesota. An out-of-state conference is necessary to: (1) get feedback from a diverse set of colleagues who are doing similar research (there are few experts in MN on this subject) which will improve the quality of our research, and 2) disseminate our results more broadly to additional management audiences. Dissemination to a national audience will raise the profile of Minnesota's research to a national stage.
Travel Outside Minnesota	Miles/Meals/Lodging	Research scientist travel from Vermont to Minnesota (4 trips at \$700/flight over 2 years)	Dr. Elias Rosenblatt is working remotely from Vermont. We are asking for travel for Dr. Rosenblatt to come to the Metro area to conduct the surveys. Dr. Rosenblatt has the necessary skill set to deploy the drones and can train the graduate student.

Non ENRTF Funds

Category	Specific Source	Use	Status	Amount
State				
			State Sub Total	-
Non-State				
In-Kind	University of Minnesota Indirect Costs	54% MTDC	Potential	\$628,000
			Non State Sub Total	\$628,000
			Funds Total	\$628,000

Total Project Cost: \$1,876,000

This amount accurately reflects total project cost?

Yes

Attachments

Required Attachments

Visual Component

File: [54d8c767-ac6.pdf](#)

Alternate Text for Visual Component

- 1) A map of the Twin Cities Metro showing areas surveyed by helicopter, areas surveyed with drones, and the extent of deer fecal collection.
- 2) Hypothetical heat maps of present and future deer connectivity, where connectivity decreases with urbanization.
- 3) Present and future implications of connectivity on disease spread....

Supplemental Attachments

Capital Project Questionnaire, Budget Supplements, Support Letter, Photos, Media, Other

Title	File
University of Minnesota Approval Letter Craft	327c9e37-68c.pdf
Letter of Support from Shakopee Mdewakanton Sioux Community	0fb3c84c-191.pdf
Letter of Support from Three Rivers Park District	f70db2e4-0b0.pdf

Administrative Use

Does your project include restoration or acquisition of land rights?

No

Do you understand that travel expenses are only approved if they follow the "Commissioner's Plan" promulgated by the Commissioner of Management of Budget or, for University of Minnesota projects, the University of Minnesota plan?

Yes, I understand the UMN Policy on travel applies.

Does your project have potential for royalties, copyrights, patents, sale of products and assets, or revenue generation?

No

Do you understand and acknowledge IP and revenue-return and sharing requirements in 116P.10?

N/A

Do you wish to request reinvestment of any revenues into your project instead of returning revenue to the ENRTF?

N/A

Does your project include original, hypothesis-driven research?

Yes

Does the organization have a fiscal agent for this project?

Yes, Sponsored Projects Administration

Does your project include the pre-design, design, construction, or renovation of a building, trail, campground, or other fixed capital asset costing \$10,000 or more or large-scale stream or wetland restoration?

No

Do you propose using an appropriation from the Environment and Natural Resources Trust Fund to conduct a project that provides children's services (as defined in Minnesota Statutes section 299C.61 Subd.7 as "the provision of care, treatment, education, training, instruction, or recreation to children")?

No

Provide the name(s) and organization(s) of additional individuals assisting in the completion of this proposal:

Elliot Skurich, University of Minnesota

Do you understand that a named service contract does not constitute a funder-designated subrecipient or approval of a sole-source contract? In other words, a service contract entity is only approved if it has been selected according to the contracting rules identified in state law and policy for organizations that receive ENRTF funds through direct appropriations, or in the DNR's reimbursement manual for non-state organizations. These rules may include competitive bidding and prevailing wage requirements

Yes, I understand