

## **Colorado Water Conservation Board**

## Water Plan

## Water Project Summary

Name of Applicant	Fort Collins Conservation District
Name of Water Project	Project-01859 -Cache La Poudre Basin Nutrient Trading Pilot
Grant Request Amount	\$125,000.00
Primary Category	\$75,000.00
Agricultural Projects	
Additional Funding Category	\$50,000.00
Conservation & Land Use Planning	
Total Applicant Match	\$116,000.00
Applicant Cash Match	\$40,160.00
Applicant In-Kind Match	\$75,840.00
Total Other Sources of Funding	\$0.00
Total Project Cost	\$241,000.00

Applicant & Gra	Intee Information
Name of Grantee: Fort Collins Conservation District Mailing Address: 2150 Centre Ave Bld A Ste 116 Fort Co FEIN: 846,013,752	ollins CO 80526
Organization Contact: Zach Thode Position/Title: Board Member Phone: 9707441444	Email: zthode@lehiwater.com
Organization Contact - Alternate: <b>Debi Randol</b> Position/Title: Phone: <b>970-576-5206</b>	Email: debi@bigthompson.org
Grant Management Contact: Zach Thode Position/Title: Board Member Phone: 9707441444	Email: zthode@lehiwater.com
Engineering Contact: Zach Thode Position/Title: Board Member Phone: 9707441444	Email: zthode@lehiwater.com
Description of C	Grantee/Applicant
No description provided	

Type of Eligible Entity

## □ Public (Municipality)

- Ditch Company
- Private Incorporated
- Private Individual, Partnership, or Sole Proprietor
- Non-governmental Organization
- Covered Entity
- Other

## **Category of Water Project**

Agricultural Projects
Developing communications materials that specifically work with and educate the agricultural community on
headwater restoration, identifying the state of the science of this type of work to assist agricultural users
among others.
Conservation & Land Use Planning
Activities and projects that implement long-term strategies for conservation, land use, and drought planning.
Engagement & Innovation Activities
Activities and projects that support water education, outreach, and innovation efforts. Please fill out the
Supplemental Application on the website.
Watershed Restoration & Recreation
Projects that promote watershed health, environmental health, and recreation.
Water Storage & Supply
Projects that facilitate the development of additional storage, artificial aquifer recharge, and dredging
existing reservoirs to restore the reservoirs' full decreed capacity and Multi-beneficial projects and those
projects identified in basin implementation plans to address the water supply and demand gap.

#### **Location of Water Project** Latitude 40.560380 Longitude -105.082739 Lat Long Flag Default/Proponent headquarters: If the location cannot be defined with flags above, use location of project proponent headquarters Irrigation Supplies in the Cache la Poudre Basin Water Source Basins South Platte Counties Weld; Larimer Districts 3-Cache La Poudre River

## Water Project Overview

Planning (e.g. watershed)

Agricultural

5/1/2022

Major Water Use Type Subcategory Scheduled Start Date - Design Scheduled Start Date - Construction Description

The intent is to determine how to have a better water quality solution for a whole basin than just spending millions on point source discharges and look to reduce nutrient loading on the river as a whole by paying farmers and park systems to do better practices to reduce nutrient loading.

The struggle is:

How does one coordinate this? (with farmers that operate independently and don't want to expose too much

information) Who actually verifies the practices? What or how much is the incentive? How long do the terms need to be to satisfy CDPHE? The Benefit is: Better water quality for the basin There isn't so much money spent on removing a small amount of nutrient, but a much larger scale Farmers get paid to do a good job Farmers don't have to get individual contracts with the Municipality (there is currently a trust problem here) Local economic externalities Maybe we could fit in some rotational fallow or cover cropping into the program to provide additional water supply

I am thinking that the Conservation Districts are the solution; they could have a number of acres of farms and parks contracted to practice certain nutrient management activities and validate them with the NRCS, and use some existing groundwater modelling to show impact timing and loading.

Costs would be:

Payments to the Farmer, or Parks

Administration (for all involved)

Agronomist to develop practices and validate

Engineering to develop model and validate accuracy

CDPHE time to approve of process

## Measurable Results

New Storage Created (acre-feet)
 New Annual Water Supplies Developed or Conserved (acre-feet), Consumptive or Nonconsumptive Existing Storage Preserved or Enhanced (acre-feet)
 New Storage Created (acre-feet)
 105,000 Length of Stream Restored or Protected (linear feet)
 Efficiency Savings (dollars/year)
 Efficiency Savings (acre-feet/year)
 Area of Restored or Preserved Habitat (acres)
 Quantity of Water Shared through Alternative Transfer Mechanisms or water sharing agreement (acre-feet)
 300,000 Number of Coloradans Impacted by Incorporating Water-Saving Actions into Land Use Planning

300,000 Number of Coloradans Impacted by Engagement Activity

## Water Project Justification

This project is a very innovative pilot project to prove a concept that would greatly benefit ag producers for being good stewards, urban water providers by reducing the costs of removing additional amounts of nutrients from the wastewater stream, and lastly benefit the environment by reducing the tmdl loads on the river beyond just single point locations.

## **Related Studies**

There is related studies of nutrient trading in the Midwest where nutrient management is much more difficult and creates much larger environmental problems. This project would leverage some of the methods of how to account for these programs, model the flows, and recognize/prove/quantify the best management practices into a

tangible value. The CDPHE has administrative language built into their regulations to accommodate for nutrient trading, but have never been able to align all the parties to take advantage of this opportunity; having The Conservation District as the convener of this pilot creates a new and unique opportunity to isolate some of the individuals farmers from direct engagement with CDPHE and the Water Providers.

## Taxpayer Bill of Rights

The Conservation District is anticipating running a Mill-levy to the voters in 2022 that would provide some additional inkind funding for this type of Project.

### **Budget and Schedule**

This Statement of Work shall be accompanied by a combined Budget and Schedule that reflects the Tasks identified in the Statement of Work and shall be submitted to CWCB in excel format.

## **Reporting Requirements**

**Progress Reports:** The applicant shall provide the CWCB a progress report every 6 months, beginning from the date of issuance of a purchase order, or the execution of a contract. The progress report shall describe the status of the tasks identified in the statement of work, including a description of any major issues that have occurred and any corrective action taken to address these issues.

**Final Report:** At completion of the project, the applicant shall provide the CWCB a Final Report on the applicant's letterhead that: (1) Summarizes the project and how the project was completed. (2) Describes any obstacles encountered, and how these obstacles were overcome. (3) Confirms that all matching commitments have been fulfilled. (4) Includes photographs, summaries of meetings and engineering reports/designs. The CWCB will pay out the last 10% of the budget when the Final Report is completed to the satisfaction of CWCB staff. Once the Final Report has been accepted, and final payment has been issued, the purchase order or grant will be closed without any further payment.

### Payment

Payment will be made based on actual expenditures and must include invoices for all work completed. The request for payment must include a description of the work accomplished by task, an estimate of the percent completion for individual tasks and the entire Project in relation to the percentage of budget spent, identification of any major issues, and proposed or implemented corrective actions. Costs incurred prior to the effective date of this contract are not reimbursable. The last 10% of the entire grant will be paid out when the final deliverable has been received. All products, data and information developed as a result of this contract must be provided to as part of the project documentation.

#### **Performance Measures**

Performance measures for this contract shall include the following: (a) Performance standards and evaluation: Grantee will produce detailed deliverables for each task as specified. Grantee shall maintain receipts for all project expenses and documentation of the minimum in-kind contributions (if applicable) per the budget in the Budget & Schedule Exhibit B. Per Water Plan Grant Guidelines, the CWCB will pay out the last 10% of the budget when the Final Report is completed to the satisfaction of CWCB staff. Once the Final Report has been accepted, and final payment has been issued, the purchase order or grant will be closed without any further payment. (b) Accountability: Per Water Plan Grant Guidelines full documentation of project progress must be submitted with each invoice for reimbursement. Grantee must confirm that all grant conditions have been complied with on each invoice. In addition, per Water Plan Grant Guidelines, Progress Reports must be submitted at least once every 6 months. A Final Report must be submitted and approved before final project payment. (c) Monitoring Requirements: Grantee is responsible for ongoing monitoring of project progress per Exhibit A. Progress shall be detailed in each invoice and in each Progress Report, as detailed above. Additional inspections or field consultations will be arranged as may be necessary. (d) Noncompliance Resolution: Payment will be withheld if grantee is not current on all grant conditions. Flagrant disregard for grant conditions will result in a stop work order and cancellation of the Grant Agreement.



### **Colorado Water Conservation Board**

### Water Plan Grant - Statement of Work - Exhibit A

Statement Of Work						
Date:	11/30/2021					
Name of Grantee:	Fort Collins Conservation District					
Name of Water Project:	Cache La Poudre Nutrient Trading Pilot Project					
Funding Source:	Colorado Water Plan Grants					

Water Project Overview:

How to have a better water quality solution for a whole basin than just spending millions on point source discharges and look to reduce nutrient loading on the river as a whole by paying farmers and park systems to do better practices to reduce nutrient loading.

The struggle is:

- 1. How does one coordinate this? (with farmers that operate independently and don't want to expose too much information)
- 2. Who actually verifies the practices?
- 3. What or how much is the incentive?
- 4. How long do the terms need to be to satisfy CDPHE?

The Benefit is:

- 1. Better water quality for the basin
- 2. There isn't so much money spent on removing a small amount of nutrient, but a much larger scale
- 3. Farmers get paid to do a good job
- 4. Farmers don't have to get individual contracts with the Municipality (there is currently a trust problem here)
- 5. Local economic externalities
- 6. Maybe we could fit in some rotational fallow or cover cropping into the program to provide additional water supply

I am thinking that the Conservation Districts are the solution; they could have a number of acres of farms and parks contracted to practice certain nutrient management activities and validate them with the NRCS, and use some existing groundwater modelling to show impact timing and loading.

Costs would be:

- 1. Payments to the Farmer, or Parks
- 2. Administration (for all involved)
- 3. Agronomist to develop practices and validate
- 4. Engineering to develop model and validate accuracy
- 5. CDPHE time to approve of process



#### Project Objectives:

This project should be able to improve watershed health by reducing nutrient loads in more of the river, while reducing costs to the water providers by eliminating costly improvements to waste water treatment plants. This will also provide a mechanism to provide economic sustainability for ag producers to use improved best practices.

### Tasks

#### Task 1 - [Collaboration of Water Providers and CDPHE]

Description of Task:

This task is to convene workshops with the water providers, CDPHE, and the project coordinators to understand the limits of operation within this pilot project. A successful collaboration will yield an understanding of how discharge permits can be adjusted to make a pilot project effective.

#### Method/Procedure:

The plan would be to hold regional meetings to discuss costs/options for the pilot with CDPHE regulators.



#### Deliverable:

Report with approval from CDPHE for the structure of a temporary pilot project to analyze how nutrient trading can be implemented.

## Tasks

#### Task 2 – [Farmer Engagement]

Description of Task:

The project coordinator will engage with farmers in the upper Poudre Basin to understand willingness to provide acres to a pilot project. Initial conversations about BMP's will be held to understand costs and willingness to adopt management practices that will meet the requirements of the pilot project.



Last Updated: May 2021
The project coordinator will meet one on one with several farmers to understand operations and how
improving management practices will both improve their operation and also provide an economic incentive
to make changes to operations.
Deliverable:
After meeting with several upper basin farmers, the Conservation District will be able to identify a
sustainable number of acres that could be included in the Pilot Project.

## Repeat for Task 3, Task 4, Task 5, etc.

 Task 3 - [BMP development]

 Description of Task:

 The project engineers will work with the NRCS to develop an approved list of best management practices that can be used by the ag producers to reduce nutrient loading on the river. These BMP's will be discussed with the ag producers to understand their viability and economic impact.



Collaboration on existing practices, and using NRCS practices to further enhance a working toolbox of management practices that can be used to meet the objectives of the pilot project.

#### Deliverable:

A toolbox of Best Management Practices will be developed for ag producers to use in making management decisions.

### Tasks

#### Task 4 - [Modelling]

Description of Task:

The project engineers will work with a hydraulic modeling consultant to develop a model of how the improved return flows will engage with the river to ensure that the improved water quality matches the requirements of the CDPHE pilot parameters. This model will demonstrate timing and locations of return flows from regions of farmers within the Conservation District and above the Water Providers discharge points.



The method for this task is to improve upon existing and accepted models to create a toolbox model that will be utilized as a part of pilot permitting to ensure that stream nutrient loads are in fact reduced.

#### Deliverable:

There will be an interactive model that allows for regional inputs for crops and management practices, as well as pilot parameters for nutrient loading to produce an output for approval by the CDPHE.

## Tasks

#### Task 5 – [Permitting]

Description of Task:

The water providers will work with CDPHE to establish pilot permits that will allow for this trading to be monitored and ensure that there isn't lapses in point discharge requirements.



Using the models, management toolboxes and existing point source permits, the water providers can establish expected criteria for a pilot discharge permit. The intent of this task is to understand how to implement a long term permit utilizing nutrient trading.

Deliverable:

The project will deliver a pilot discharge permit, and a process for establishing longterm permits utilizing nutrient trading.

## Tasks

#### Task 6 – [Monitoring]

Description of Task:

The project coordinator will work with NRCS to establish a robust monitoring program that can be implemented by the NRCS to validate that ag producers are following best practices from the toolbox to ensure that the inputs into the model are accurate.



Field monitoring will be completed on the farms based upon what the management practices are that have been implemented to then report back to the engineers exactly what the inputs to the model should be.

#### Deliverable:

Monitoring reports that can be used as inputs to the return flow model.

## Tasks

#### Task 7 – [Reporting]

Description of Task:

The project team will develop a report to address the takeaways from each of the previous tasks, and to establish how successful or unsuccessful this pilot project is. The report shall establish a cost benefit analysis to nutrient trading in the basin, and also how successful the project was at reducing nutrients in the river.



 Last Updated:
 May 2021

 Through team efforts this data will be merged together to provide a succinct and reliable report.

 Deliverable:

 Deliverable:

 The final report will provide a decision support tool to better understand the feasibility to further pursue nutrient trading as a long term solution to degrading water quality in river basins across the state.

### Budget and Schedule

This Statement of Work shall be accompanied by a combined Budget and Schedule that reflects the Tasks identified in the Statement of Work and shall be submitted to CWCB in excel format.

### **Reporting Requirements**

**Progress Reports:** The applicant shall provide the CWCB a progress report every 6 months, beginning from the date of issuance of a purchase order, or the execution of a contract. The progress report shall describe the status of the tasks identified in the statement of work, including a description of any major issues that have occurred and any corrective action taken to address these issues.



**Final Report:** At completion of the project, the applicant shall provide the CWCB a Final Report on the applicant's letterhead that:

- Summarizes the project and how the project was completed.
- Describes any obstacles encountered, and how these obstacles were overcome.
- Confirms that all matching commitments have been fulfilled.
- Includes photographs, summaries of meetings and engineering reports/designs.

The CWCB will pay out the last 10% of the budget when the Final Report is completed to the satisfaction of CWCB staff. Once the Final Report has been accepted, and final payment has been issued, the purchase order or grant will be closed without any further payment.

#### Payment

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Costs incurred prior to the effective date of this contract are not reimbursable. The last 10% of the entire grant will be paid out when the final deliverable has been received. All products, data and information developed as a result of this contract must be provided to as part of the project documentation.

#### **Performance Measures**

Performance measures for this contract shall include the following:

(a) Performance standards and evaluation: Grantee will produce detailed deliverables for each task as specified. Grantee shall maintain receipts for all project expenses and documentation of the minimum in-kind contributions (if applicable) per the budget in Exhibit C. Per Grant Guidelines, the CWCB will pay out the last 10% of the budget when the Final Report is completed to the satisfaction of CWCB staff. Once the Final Report has been accepted, and final payment has been issued, the purchase order or grant will be closed without any further payment.

(b) Accountability: Per Grant Guidelines full documentation of project progress must be submitted with each invoice for reimbursement. Grantee must confirm that all grant conditions have been complied with on each invoice. In addition, per Grant Guidelines, Progress Reports must be submitted at least once every 6 months. A Final Report must be submitted and approved before final project payment.

(c) Monitoring Requirements: Grantee is responsible for ongoing monitoring of project progress per Exhibit A. Progress shall be detailed in each invoice and in each Progress Report, as detailed above. Additional inspections or field consultations will be arranged as may be necessary.

(d) Noncompliance Resolution: Payment will be withheld if grantee is not current on all grant conditions. Flagrant disregard for grant conditions will result in a stop work order and cancellation of the Grant Agreement.



COLORADO

Colorado Water Conservation Board

Department of Natural Resources

## **Colorado Water Conservation Board**

Water Plan Grant - Exhibit C

**Budget and Schedule** 

Prepared Date:11/30/21

Name of Applicant: Fort Collins Conservation District

Name of Water Project: Cache La Poudre Nutrient Trading Pilot Project

Project Start Date: 05/01/2022

Project End Date: 05/01/2025

Task No.	Task Description	Task Start Date	Task End Date	Grant Funding Request	Match Funding	Total
1	Collaboration of Water Providers and CDPHE	5/1/2022	5/1/2025		\$25,000	\$25,000
2	Farmer Engagement	10/1/22	1/1/2024	\$23,600		\$23,600
3	BMP development	6/1/2022	1/1/2023	\$15,100	\$12,000	\$27,100
4	Modelling	6/1/2022	1/1/2023	\$42,000	\$20,000	\$62,000
5	Permitting	6/1/2022	1/1/2023	\$25,300	\$30,000	\$55,300
6	Monitoring	4/1/2023	1/1/2025		\$25,000	\$25,000
7	Reporting	1/1/2025	5/1/2025	\$35,960	\$5,000	\$40,960
						\$0
						\$0
						\$0
						\$0
						\$0
						\$0
			Total	\$141,960	\$117,000	\$258,960
		Page 1	of 1			
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## Colorado Water Conservation Board

Water Plan Grant - Detailed Budget Estimate Fair and Reasonable Estimate

Prepared Date: Name of Applicant: Name of Water Project: 11/30/2021 Fort Collins Conservation District Cache La Poudre Nutrient Trading Pilot Project

## **EXAMPLE B: Engineering**

Task 1 - Engineering					Wate	er Consultants					
					Senior Wat	er					
			Water Pro	vider	Resources	Water					
	Sen	ior Principal	Water Res	ource	Engineer/	Resources	5				
Sub-task	I	Engineer	Engine	er	Consultan	t Engineer	Administrato	or			
	\$	190	\$	160	\$ 1	50\$13	0 \$ 10	0 <b>S</b> i	ubtotal	1	Lun
	Estim	ated Hours								C	Cost
Project Initiation / Stakeholder identification		12	50		50	50	16	\$	26,380		
Farmer Engagement			50			120		\$	23,600		
BMP implementation		10	40		20	120		\$	27,100		
Return Flow Modelling		50	50		50	150	50	\$	50,000		
Permitting		20	200		50	50	50	\$	55,300		
Project Management		50	30		30		24	\$	21,500		
Report, Conclusions, & Recommendations		40	54		54	16	40	\$	30,960		
	Ś	34.580.00	Ś 75.	340.00	\$ 40,640.	00 \$65.780.0	0 \$ 18.000.0	0 Ś	234.840.00		

TOTAL

Subco	ntracts					
Environmental and Cultural Resources Lump Sum	(Other)	Subtotal	I	Project Total	CWCB Funds	Matching Funds
	\$ 12,000	\$ \$ \$	- 12,000 -	\$26,380 \$23,600 \$27,100 \$62,000 \$55,300		
	\$ 10,000	\$ \$	- 10,000	\$21,500 \$40,960		
				\$256,840		
				- · ·		



# **Answer Some Questions on Nutrient Trading?**

**Diker - CDPHE, Kenan** <kenan.diker@state.co.us> We To: CAWA Colorado Ag Water Alliance <coagwater@gmail.com> Cc: Zach Thode <zthode@lehiwater.com>

Wed, Jun 16, 2021 at 12:21 PM

Hey Greg and Zack,

Glad to hear that there are some considerations for nutrient trading out there. I am sending you a link for the trading policy for Colorado.

https://www.colorado.gov/pacific/sites/default/files/WQ\_Pollutant-Trading-Policy.pdf

Nutrient trading can be done under Water Quality Control Commission Policy 17.1 (link below, Section X). This really depends on the municipality's opting in or out for the program.

https://drive.google.com/file/d/1u750955JR2XQTLdxnJjKebP12oRKQwL5/view

I and potentially some other(s) from the division will be happy to meet and discuss it.

Zack, please let me know if that would work for you and glad to meet you!!

Thanks Kenan [Quoted text hidden] --Kenan Diker Agricultural Water Quality Specialist Protection and Restoration Unit

P 303.692.3597 4300 Cherry Creek Drive South, Denver, CO 80246 kenan.diker@state.co.us | www.colorado.gov/cdphe/wgcd



Diker - CDPHE, Kenan <kenan.diker@state.co.us> To: Zach Thode <zthode@lehiwater.com> Cc: Roy Otto <Roy.Otto@greeleygov.com>, adam.jokerst@greeleygov.com, jarndt@fcgov.com, "Adams, Sam - NRCS, Fort Collins, CO" <sam.adams@co.usda.gov>, Donnie Dustin <DDUSTIN@fcgov.com>, "Owsley, William - NRCS, Greeley, CO" <william.owsley@usda.gov>, Gregory Peterson <petersongap@comcast.net>, DOUGLAS J Ochsner <dougochsner@msn.com>, Greg Kernohan <gkernohan@ducks.org>, John Kefalas <kefalajm@co.larimer.co.us>

Hey all,

Thanks for the communication about the potential nutrient trading. There are two paths as of not in the nutrient trading in Colorado:

1) It is under Colorado Pollutant Trading Policy (https://www.colorado.gov/ pacific/sites/default/files/WQ\_Pollutant-Trading-Policy.pdf). Expectation would be meeting all the requirements in the policy. Currently there is not a lot of pollutant trading going on in Colorado. The trading policy is primarily focused on nutrients, but because Colorado hasn't had state-wide nutrient criteria, this type of trading has been limited to only a few reservoir watersheds that had reservoir nutrient criteria and some control regulations with phosphorus. This option will be an involved one for sure.

2)The other option is trading/nutrient credit building for WWTFs under Policy 17-1 (https://drive.google.com/file/d/1u750955JR2XQTLdxnJjKebP12oRKQwL5/view) which would have been relatively simpler but it required opting-in and as far as I know no facility in the area opted-in for the program in this nature. There are a couple of other facilities that are interested in this one.

Addressing Zack's suggestions / questions would be a good part of any proposal for trading to be comprehensive enough to satisfy policy requirements (option 1). Division's permit unit and (maybe engineering section) will be an integral part of trading communications, reviewing a proposal and approval of it.

Thanks,

Kenan

Colorado is in the process of adopting nutrient criteria more broadly, so trading may come up in the future.

[Quoted text hidden]

Kenan Diker Agricultural Water Quality Specialist Protection and Restoration Unit

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P 303.692.3597 4300 Cherry Creek Drive South, Denver, CO 80246 <u>kenan.diker@state.co.us | www.colorado.gov/cdphe/wqcd</u>

Jeni Arndt <jarndt@fcgov.com>

Mon, Jul 19, 2021 at 1:07 PM

To: Greg Kernohan <gkernohan@ducks.org> Cc: Zach Thode <zthode@lehiwater.com>, Roy Otto <Roy.Otto@greeleygov.com>, "adam.jokerst@greeleygov.com" <adam.jokerst@greeleygov.com>, "Adams, Sam - NRCS, Fort Collins, CO" <sam.adams@co.usda.gov>, Donnie Dustin <DDUSTIN@fcgov.com>, "kenan.diker@state.co.us" <kenan.diker@state.co.us>, "Owsley, William - NRCS, Greeley, CO" <william.owsley@usda.gov>, Gregory Peterson <petersongap@comcast.net>, DOUGLAS J Ochsner <dougochsner@msn.com>, John Kefalas <kefalajm@co.larimer.co.us>

Dear All,

Thank you for including me in this thread. I am following along . . . . and very supportive.

Kindly,

Jeni

Jeni Arndt, Mayor of Fort Collins 970-413-3146

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With limited exceptions, emails and any files transmitted with them are subject to public disclosure under the Colorado Open Records Act (CORA). To promote transparency, emails will be visible in an online archive, unless the sender puts #PRIVATE in the subject line of the email. However, the City of Fort Collins can't guarantee that any email to or from Council will remain private under CORA

On Jul 7, 2021, at 9:59 AM, Greg Kernohan <<u>gkernohan@ducks.org</u>> wrote:

Good morning, Zach et al;

This is probably my number one priority for our program and would be extremely interested in helping move the ball forward. Let's get together in the near future.

Warmly, Greg



# <image001.png>

**Greg Kernohan, Director** *Conservation Programs Ecosystem Services* 

1825 Sharp Point Dr. Suite 118 Fort Collins, CO 80525

970-481-7793 (c) gkernohan@ducks.org

[Quoted text hidden]



**John Kefalas** <kefalajm@co.larimer.co.us> To: Zach Thode <zthode@lehiwater.com> Fri, Jul 23, 2021 at 1:58 PM

Zach,

What do you see as the County's role in this effort? Do you think the ESAB can help with some of the research and analysis? I did mention this nutrient trading concept to the Chair and Vice Chair and the staff liaison when we met a couple of weeks ago. Thank you.



## John Kefalas County Commissioner, District 1

Commissioners' Office 200 W Oak St | 2nd Floor PO Box 1190, Fort Collins, CO 80522-1190 W: (970) 498-7001 Cell: (720) 254-7598 jkefalas@larimer.org | www.larimer.org

[Quoted text hidden]



**Greg Kernohan** <gkernohan@ducks.org> To: Zach Thode <zthode@lehiwater.com>, Roy Otto <Roy.Otto@greeleygov.com>, "adam.jokerst@greeleygov.com" <adam.jokerst@greeleygov.com>, "jarndt@fcgov.com" <jarndt@fcgov.com>, "Adams, Sam - NRCS, Fort Collins, CO" <sam.adams@co.usda.gov>, Donnie Dustin <DDUSTIN@fcgov.com>, "kenan.diker@state.co.us" <kenan.diker@state.co.us> Cc: "Owsley, William - NRCS, Greeley, CO" <william.owsley@usda.gov>, Gregory Peterson <petersongap@comcast.net>, DOUGLAS J Ochsner <dougochsner@msn.com>, John Kefalas <kefalajm@co.larimer.co.us>

Good morning, Zach et al;

This is probably my number one priority for our program and would be extremely interested in helping move the ball forward. Let's get together in the near future.

Warmly,

Greg



**Greg Kernohan**, Director

**Conservation Programs** 

Ecosystem Services

1825 Sharp Point Dr. Suite 118

Fort Collins, CO 80525

970-481-7793 (c)

gkernohan@ducks.org



Gmail

Adam Jokerst <Adam.Jokerst@greeleygov.com>Wed, Jul 7, 2021 at 5:06 PMTo: Zach Thode <zthode@lehiwater.com>, Roy Otto <Roy.Otto@greeleygov.com>,"jarndt@fcgov.com" <jarndt@fcgov.com>, "Adams, Sam - NRCS, Fort Collins, CO"<sam.adams@co.usda.gov>, Donnie Dustin <DDUSTIN@fcgov.com>, "kenan.diker@state.co.us"<kenan.diker@state.co.us>Cc: "Owsley, William - NRCS, Greeley, CO" <william.owsley@usda.gov>, Gregory Peterson<petersongap@comcast.net>, DOUGLAS J Ochsner <dougochsner@msn.com>, Greg Kernohan<gkernohan@ducks.org>, John Kefalas <kefalajm@co.larimer.co.us>

## Zach,

The City of Greeley supports a nutrient trading program on the Poudre River that directs funding to local ag producers. We are currently planning over \$70 million to upgrade our wastewater treatment plan to meet new, higher regulatory limits, including on nutrients. We would much rather see that money going to crops than concrete.

Colorado has a nutrient trading policy in place through the Water Quality Control Division, available here: https://www.colorado.gov/pacific/sites/default/files/WQ\_Pollutant-Trading-Policy.pdf. Greeley is presently investigating the feasibility of a water temperature trading credit system on the Poudre, and we are working with an organization familiar with these trades, Freshwater Trust. I can see what they know about nutrient trading models.



## Adam Jokerst, PE

Deputy Director, Water Resources

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