TO: Colorado Water Conservation Board Members

FROM: Anna Mauss, Chief Operating Officer

DATE: May 17-18, 2022

CONSENT AGENDA ITEM: 4. Diane Hoppe Memorial Scholarship

Staff Recommendation
Staff recommends the Board approve a $2,000 scholarship to Student 2.

Introduction
The Colorado Water Conservation Board administers the Diane Hoppe Memorial Scholarship, which is a $2,000 one-year scholarship for a Colorado high school student or college freshman interested in western water issues planning to attend a public institution of higher education in Colorado.

Diane Hoppe was appointed to the CWCB as the South Platte Basin representative in 2012, and she was elected chairwoman of the board in 2015. Diane passed away on February 27, 2016. Her family worked with the Colorado Water Conservation Board to establish this scholarship in her honor.

In addition to serving on the board, Diane Hoppe served in the Colorado House of Representatives from 1999-2006 and was the chairwoman of the House Agriculture, Livestock & Natural Resources Committee, the Water Interim Committee, and the Water Resources Review Committee. She also served as the minority whip. Diane was a founding member of the Colorado Foundation for Water Education and served as president from 2002-07.

Staff received two applications for the Diane Hoppe Memorial Scholarship. In an effort to protect the privacy of minors, the applicants are referred to as a student number for this memo.

Applicants

Student 1
Student 1 attends Montrose High School and plans to attend Colorado State University to study Civil Engineering.

His recent accomplishments include taking eight AP classes, participating in Project Lead the Way Engineering classes, participating in sports including soccer and swimming, and participating in the marching band. His interests include fly fishing, kayaking, and paddle boarding. His application showed an impressive knowledge of western water projects.

Student 2
Student 2 attends Green Mountain High School and plans to attend Fort Lewis College to study Environmental Science and/or Ecology along with Indigenous Studies and Adventure Education.
She also intends to pursue a River Studies and Leadership certificate - a 400 hour program with curriculum based around emphases of river science, river-based policy and management, and river-based recreation, education and tourism in partnership with the River Management Society.

Her recent accomplishments include completion of two Senior Capstone projects, earning a legacy distinction from the Colorado High School Cycling League, and organizing a youth Global Youth Service Day event with the Volunteers for Outdoor Colorado program. Both of her Capstone projects were water focused. Her STEM Capstone project included a water quality assessment and a riparian invertebrate assessment. And her Academy Capstone project included the organization of a Senior Raft Trip down Browns Canyon of the Arkansas River for her graduating class and teachers.

Additionally, she has an impressive resume related to natural resources including: school President of the Eco Club, participation in the 2021 - 2022 Volunteers for Outdoor Colorado Cairn youth program, student judge for the 2022 Colorado Environmental Film Festival, and work with the organization GOALS on Rivers Wavemakers.

Discussion
While both applicants have impressive resumes, staff is recommending Student 2 because of her academic standing, motivation to work hard, passion for natural resources, efforts to become a leader at a young age, goals for the future, and the commendations in the letter of support.

Attachments: Applications
Q1. Tell us about your interests and ideas for the future. What would you like to study? What do you want to learn? Why? What is important to you? Is there a specific degree or certification that you would like to earn? How would you use what you learn in the future?

A1.

With all the different careers available it is difficult to choose what job to go into. In addition to areas of interest, you must consider job availability, financial considerations, and what careers you find meaningful and enjoyable. My long-term goal is to be employed as a civil engineer working on meaningful water management projects in Colorado.

Choosing this path for my life has been a culmination of my love for the outdoors, and knack for problem-solving. Outdoor activities such as backpacking, fishing, and skiing have been a part of my life for years and are a key part of who I am. It is because of this that I searched for a career that would allow me to partially work outdoors. In school, I have excelled in math and science and have enjoyed the challenge of problem-solving involved in these classes. Not surprisingly, when I began taking Project Lead the Way Engineering classes at Montrose High School they easily became my favorite and most interesting courses. This inspired me to begin searching for a field that combines engineering with the outdoors. What further solidified my decision to pursue civil engineering is that it is a field that gives you the opportunity to find jobs in a variety of settings, such as private or public, and in pretty much any community. With the increasing number of people moving to Colorado infrastructure will have to be updated to accommodate the greater population. The necessity of this infrastructure being built will ensure that civil engineering is a field where I will be able to get a job after college. Civil engineering is also a job where I can be financially stable and support a possible future family.

Pursuing an advanced education of a master's degree in civil engineering is important to me because it will give me the tools to achieve my goal of working on projects that will help people in different communities. Examples of civil engineering projects that had a huge impact on my community are Blue Mesa, Morrow Point, and Crystal dams. These projects have benefited my community by storing water for release to support agriculture and towns. For instance, in the summer when the flow in the river drops, but crops need to be irrigated, the reservoirs release more water that is carried through the Gunnison Tunnel and delivered to farmers. They have also benefited my community by providing recreational activities in the reservoirs such as fishing, kayaking, and boating. These projects also generate hydropower and provide energy to our surrounding area. This example is the kind of project I want to work on because the dams are useful to people in so many ways and the achievement of designing a structure as massive as these dams would be amazing.

I am excited to work in a field where I can use math and science to help solve natural resource problems and work on outdoor projects. Civil engineers and the infrastructure they design will remain essential to providing clean water, energy, and recreational opportunities to communities throughout Colorado. These reasons make it a good choice for a future career that I will enjoy and be able to support myself and my future family. Getting an advanced education will allow me to be successful in achieving my goal of finding a job that is meaningful to me and beneficial to my community.

Q2. What do you consider to be your three most important accomplishments (personal and/or academic) during the past year and why?

A2.

In my freshman year of high school, I struggled with time management skills because I started in the fall playing soccer and participating in marching band. It was difficult to juggle my schoolwork and extracurricular activities, which resulted in my grades falling below my expectations at the beginning of the school year. This was disappointing for me initially, however, it caused me to reflect on how I could
better manage my time when my schedule is full by not procrastinating. Improving this important skill helped me dramatically improve my grades. In fact, managing my time better improved my cumulative GPA from 3.43 after my freshman year to 3.68 after my sophomore year. It was then that I set a goal to have a GPA above 4.0 by the time I graduate, and with one semester’s worth of grades to complete I am currently standing at 3.979. Although I have not yet reached my goal, I am very proud of the growth I have had as a high school student and I know with hard work during the couple of months I have left, I will be able to reach my goal of graduating with a GPA above 4.0.

In the spring of my sophomore year, our high school swim team was getting ready for our first meet when we got the news that COVID cases reached a severe enough level that it was not safe for our season to continue. During the next year of quarantines and other complications, I didn’t find time to get back into the pool until the high school season began. This year CHSAA made the decision to limit the state meet to the top 20 swimmers in each event making qualifying much more difficult than in previous years especially because I didn’t have time in the winter to improve my endurance. Still, I was determined to work hard and give myself the best shot I could to make state in the 100-yard butterfly. When the conference championship came I had a shot at making the cut. I finished my race and improved my time to below one minute, however, due to COVID restrictions they were only allowing the top 30 swimmers in each event. It took a week to find out that I made it to state in my individual event. At state, I was able to beat my previous best time by getting under 59 seconds. This accomplishment was very rewarding after all the hard work I have put into swimming since I started at 8 years old.

Throughout my time at Montrose High School I will have taken eight AP classes. One benefit of these classes is that you can get college credit by passing an AP exam, but each test costs ninety-six dollars to take. This cost has discouraged many students from taking the tests so our AP Government class decided to take the initiative and attempt to convince the superintendent to have the district pay for all AP tests. We began by collecting information that indicated that many other schools provide assistance to students that take AP tests. We also collected statistics on the number of students that take the AP tests and estimated costs to the district to cover those tests and compiled this data into a spreadsheet. A couple of days after we sent an email to the superintendent inviting her to hear our proposal during class she responded by offering to come and hear our presentation the following week. We then collected our main arguments and after what I felt was a good presentation she accepted our offer. This was a very rewarding accomplishment for me because I was able to feel like this project actually will be able to help other students to have the ability to take these tests which can save them thousands of dollars in college.

Q3. In what way(s) has water, or water-related issues, played a part in your life? How has that influenced your desire to pursue a water-related education?

A3.

Water is an essential part of everyone's life and its importance in my life has led me to decide to pursue a degree in civil engineering where I can work in a water-related field.

When my ancestors moved to America in 1894 the west was not yet fully settled and the government was still offering 160-acres of free property as an incentive for people to settle and improve the land. My ancestors took advantage of this opportunity to move to Colorado and build a farm. Once they were here and had the property for their farm they needed water rights in order to irrigate their land. The water they used to irrigate their farm impacted my life because their profit from the sugar beets they sold provided the opportunity for my family to go to college. Through learning about my family's history in farming I have learned how valuable water is and going into civil engineering would give me the opportunity to help manage this valuable resource.

Also growing up in Montrose I have had exposure to multiple engineering projects that involve water. The most impressive of these projects is easily the Gunnison Tunnel. This tunnel was created in
1909 to carry water from the Gunnison River through Vernal Mesa in order to help irrigate land for farmers around Montrose. At the time this was the longest irrigation tunnel in the world taking around 4 years to complete and is still essential in providing water to houses and farms. Other projects that I have had an interest in are the Crystal, Morrow Point, and Blue Mesa Dams just east of Montrose. These have always fascinated me because of their size and strength to hold back the pressure from the reservoirs they create. Seeing these projects has inspired me to go into a field involving these important and impressive structures.

Water has also provided me with different recreational opportunities that I enjoy. Within the past few years, a hobby I recently discovered was fly fishing. I love going out into the wilderness wading through different streams with the challenge of finding what flies fish will bite on. My family also enjoys going to lakes and reservoirs to kayak and paddleboard. These experiences have made me want to go into a water-related field because going into civil engineering would give me the possibility of helping create or manage reservoirs that provide different boating opportunities and tailwaters under the dams for fly fishing.

Water has been an important part of my life and I am excited to go into civil engineering where I will be able to manage this important resource.

Q4. Is there anything else you would like the selection committee to know as it considers your application?

A4.
Throughout my high school career, my focus on academics and participation in multiple extracurricular activities has limited my ability to work and save money for college. I have an older sister who is currently in her third year of college studying aerospace engineering and a younger brother who is a sophomore and plans to attend college to study aviation science. Consequently, my family will be supporting three children who are attending college. My parents planned on providing support for our college aspirations and started college savings accounts for each of us to help with college expenses. However, life circumstances prevented them from saving as much money as they had planned. In August of 2015 my younger brother, [name], was diagnosed with a cancerous tumor in his cervical spinal cord. Thankfully they were able to remove the tumor completely, but he has needed annual brain and spinal cord MRIs and visits to the Children’s Hospital in Denver to catch any signs of regrowth or spread. Thankfully, these regular checkups have not found any signs of regrowth. Although we have had good health insurance, this has caused our family to reach our maximum out-of-pocket expenses for the last seven years. Scholarship support will allow me to choose my college based upon their academic programs rather than tuition costs and will reduce the amount of debt I start my career with.
Date: January 4, 2022

Dear Sirs or Madams,

This letter is to recommend that [redacted] be a recipient of some of your scholarship generosity.

I first had [redacted] last year as a student in my Trig/Pre-Calc class. I teach this class as concurrent enrollment via the University of Colorado-Denver and therefore must meet the criteria set forth by their Department of Mathematics. Due to the pandemic, we condensed year-long classes into a single semester in case there was another full shutdown and that meant I had to cover 87 topics in 68 class periods. For many students, my class was their first exposure to the expectations of a college level class and when that was combined with the pacing require to address all 87 topics, some students struggled mightily. [redacted] was one of the few students to earn an ‘A’ both semesters and many students simply dropped the class altogether.

This year I have him in AP Physics 1. In my opinion, this is the most difficult AP class taught at Montrose. Every other AP science class requires an ‘honors’ class as a prerequisite, but due to the time constraints of a high school schedule, I was not able to do that. So, students are required to tackle the equivalent of a first semester college Physics class with no preparation at all. As you might expect, high grades are not the norm for the first few weeks of the semester.

As a testament to his focus and drive, [redacted] scored 52 out of 48 points on our first exam. He earned a perfect 100% on the main part of the exam and answered an extra credit question correctly. He finished the semester with a 92% A-.

I highly recommend [redacted] to be a recipient of some of your generosity. He’s a stellar young man who is kind, funny, intelligent, and very focused. He can be a little quieter than some students, but that’s because he’s much more focused on learning than he is on socializing. I’m sure that he will successfully complete college and represent a very good investment for whatever monies you can award to him.

Daniel Herod
Math & Physics
Montrose High School
1) This upcoming fall I am planning to attend Fort Lewis College in Durango, Colorado, studying Ecology and/or Environmental Science along with Indigenous Studies and Adventure Education. I will also pursue a River Studies & Leadership certificate, which is a 400 hour program with curriculum based around emphases of river science, river-based policy and management as well as river-based recreation, education and tourism in partnership with the River Management Society. I want to learn about this intersectional range of topics because I am passionate about all of them and would like to support my passion for these topics with education so that I can provide a good foundation for a dynamic career influencing impactful positive change. I will use what I will learn at Fort Lewis in the future in many ways. I anticipate that my education will support my intended career as an Adventure Scientist, which is an outdoor researcher that collects hard-to-obtain data from the backcountry while on incredible expeditions and uses that data to inform conservation efforts and engage with the public on matters of environmentalism.

2) What I consider to be my three most significant accomplishments within the last year are my completion of two Senior Capstone projects, earning a legacy distinction from the Colorado High School Cycling League, and my work organizing a youth Global Youth Service Day event with the VOC Cairn program. I have completed two Senior Capstone projects this year, both a STEM and an Academy Capstone. My STEM Capstone was a water quality assessment of Clear Creek over a period of several weeks taking and analyzing data based on the parameters of pH, temperature, dissolved oxygen content and phosphate and nitrate levels. I worked with a mentor from the Bozeman-based nonprofit Adventure Scientists to guide and inform my project. I also worked with a STEM teacher from my high school to complete a riparian invertebrate assessment. I then presented my project to a panel of judges from STEM industries, and through my work on this project and other STEM requirements I will be earning the Colorado STEM endorsement with my high school diploma. I am now taking spatial data at different locations along Clear Creek to further my project. My Academy Capstone project was organizing a Senior Raft Trip for my graduating class and our teachers which will be taking place on the Browns Canyon of the Arkansas River in May 2022. I believe that these two capstones represent one of the most significant of my accomplishments because I dedicated a lot of my personal time and resources to completing these projects and grew in many ways as student and a person through doing so. Another significant accomplishment of mine this past year has been earning the Colorado High School Cycling League Legacy distinction. I have been racing on the CO HS Cycling League circuit for all of my high school career as a member of the Green Mountain High School Mountain Bike Team. I am very grateful for the time that I have spent with the League community and because of my passion for mountain biking and the gratitude I feel for the opportunity to have been a part of many incredible experiences through the
league, I am very proud of my Legacy distinction that recognizes my four years of commitment to racing mountain bikes, the League, and my team. Finally, another significant accomplishment of the past year that I am proud of is my work with the organization Volunteers for Outdoor Colorado planning a Global Youth Service Day event. The event is taking place at the end of April as a full day high schoolers only project performing ecological restoration on the banks of Lowry Reservoir so that the area can regain health, remain open to public recreation, and the waters of the Reservoir can remain clean due to the erosion of the bank being mitigated through our efforts. I am serving as the Project Manager for this event, and while I have engaged with many environmental volunteering projects as a part of Cairn over the last year, I consider this project to be one that I am most proud of because myself and other Cairn youth took initiative in planning it and I anticipate that we will have a significant positive impact on the ecological and human community of the Lowry Reservoir area.

3) All throughout my life, I have felt a deep connection to water issues, western water issues in particular, because I have grown up rafting rivers in Colorado and surrounding states with my family. As an environmentally passionate individual that is a part of an environmentally conscientious family, I have been able to connect experiences that I have had on the river with larger water and environmental issues in the Rockies, on the Colorado Plateau, and globally through research and engagement in my community. My time on the river has influenced me to pursue any projects I can that are related to conservation and protection of water or of the environment in general because I feel a deep gratitude for the ways that water has shaped my life and a desire to share our natural world with others. This is also what has influenced my desire to pursue studying river health in higher education, as well as intersectional topics like recreation (Adventure Education), Ecology and Indigenous Studies.

4) I would like the selection committee to know that I have demonstrated caring for natural resources throughout my high school career, including serving as my school’s Eco Club president, being a part of the 2021 - 2022 Volunteers for Outdoor Colorado Cairn youth program, being a 2022 Colorado Environmental Film Festival Student Judge, and beginning work with the new organization GOALS on Rivers Wavemakers, which aims to bring awareness about the health of Idaho Salmon populations through research, public outreach, the creation of art and written word material, and advocating for policy change.
March 30th, 2022

To Whom It May Concern:

It is my pleasure to write this letter of recommendation for [Name]. She is a self-motivated, kind and hard-working young woman with a determination to be successful in whatever she sets out to do. She has a genuine concern for others, the environment and the world around her and she works hard to make a difference in her community.

I have enjoyed getting to know and working with [Name] over the past year as her Senior Capstone instructor and as the advisor for the Eco Club, which [Name] is the president for this year. The Eco Club is a student organization working towards making positive change for the environment and educating others.

During her time as the president of this club, I have been impressed with [Name]'s leadership abilities, her maturity and patience in working with others. She steps up to the plate to run and organize meetings, plan small school and community events, and collaborate on ways to make improvements within the club, the school and community. Her passion and desire to make change has been demonstrated in her communication with her peers and the way she rallies others to make change.

Academically, [Name] is a strong, self-motivated student and I have been witness to this through her two senior Capstone projects that she took on this year. She is the only student in her senior class that completed both a STEM Capstone as well as an Academy Capstone. These are optional projects and both have a rigorous set of requirements that the students must complete. This exemplifies her dedication and commitment to her education by taking these opportunities to prepare herself for her future.

I was her instructor for the Academy Capstone. This project is designed to showcase each student’s academic achievement, enduring knowledge, and unique talents. The Capstone project must be successfully completed as well in order to earn honors recognition for their completed pathway in our Academy program. A successful project entails fieldwork outside of school, working with a mentor in their chosen field, writing a reflection paper, developing a portfolio and presenting their project to a panel of staff and community member judges. Both projects that [Name] completed reflected her passion for the outdoors and her strong desire to learn more about the environment and ways to preserve it.

In conclusion, I most enthusiastically recommend [Name]. She has sterling character and is a self-driven student who is committed to overcoming obstacles to make change in this world and the environment. She is dedicated and compassionate and will be successful in whatever she sets out to do. Please feel free to contact me if you have any questions. Thank you for your consideration of this outstanding young woman.

Sincerely,

Tracy L. Csavina

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