

## **Excursions and Trips Request Form**

Code 603.3-R2

Date Request Received b	v CFO/COO:	-1	21	25	

A written request for overnight excursions/trips must be submitted to the Chief Financial/Operating Officer <u>not less than</u> <u>four weeks prior to the proposed excursion/trip and prior to any travel arrangements being finalized</u>.

Overnight excursions/trips require prior approval of the building administrator, the superintendent or designee, and the Board of Directors. In authorizing excursions/trips, the building principal shall consider the financial condition of the school district, the educational benefit of the activity, the inherent risks or dangers of the activity, and other factors deemed relevant by the superintendent including the participation of the membership of the regular activity group. Students who have graduated may not participate in school sponsored excursions/trips unless the event is sanctioned by the state athletic associations.

#### The request will include:

- ✓ Rationale for the excursion/trip including the purpose and objectives
- ✓ Clarification if request is dependent upon pre-qualifying for event
- ✓ Detailed plans for student supervision
- √ Proposed itinerary
- ✓ Cost and source of funding
- ✓ Number of student participants
- ✓ Copy of required participation paperwork
- 1. Within three weeks of the completion of the excursion/trip the sponsor shall submit a written summary of the event to the building principal.
- 2. The building will be responsible for obtaining a substitute teacher if one is needed.
- 3. Students eligible for a fee waiver will be covered through contingency/discretionary funds as appropriate.

**Excursion/Trip Criteria:** The following checklist <u>must be</u> signed and submitted to the Chief Financial/Operating Officer <u>with required documentation not less than four weeks prior to the proposed excursion/trip and prior to any travel <u>arrangements being finalized</u>:</u>

Group: Venture Science Submitted by: Lisa A. Skilang (Name)

Criteria		Description	Provided
Purpose	Required	Purpose of excursion/trip is clearly defined and " is a vital part of the curriculum or current activity." Reference Board Policy 603.3.	
Pre-Planning	Required	Evidence of pre-planning that will maximize the learning experiences of students on this excursion/trip. (Dates, location, number of student participants, plan for supervision, proposed itinerary, hotel, cost/budget source, required participation paperwork, clarification if request is dependent upon pre-qualifying for an event, etc.)	
Follow-Up	Required	Evidence of planning for follow-up in order to maximize the learning experiences of students on this excursion/trip.	
Assessment	Required	Evidence that students will be required to demonstrate their understanding of the learning expected from this experience.	
Funding	Required	Source of funding has been determined that meets Department of Education and district guidelines. <i>Reference Board Policy 603.3.</i>	
Common Experience	Recommended	This excursion/trip is a common experience that all students at this grade level or activity group should have.	
Multi-disciplinary	Recommended	This excursion/trip addresses more than one curricular area and offers the opportunity for curriculum integration.	
Building Principal Appro	oval	Date Date	7-21-25
Chief Financial/Operating Officer Approval		Date	7-30-25
Board of Directors Approval		Date	

# Linn-Mar Science Overnight Field Trip Request

Field Trip: Student Ocean Conference

Sept. 24 - 25, 2025 Dates:

Mississippi River Museum & Aquarium, Dubuque, Iowa **Destination:** 

Erin Martin, Director of Education Contact:

Mississippi River Museum & Aquarium - on site Lodging:

Supervision: Lisa Skilang, Science Teacher (Biology, Venture Biology, Bioethics) - LMHS

Charlotte McDermott, Teacher (Venture Earth Science) - LMHS

Submitted: July 21, 2025

## Rationale/Purpose:

The Mississippi River Museum & Aquarium Student Oceans Conference is a two-day (Sept. 24 - 25, 2025) immersive experience designed to empower high school students with the knowledge, tools, and motivation to become stewards of their local watershed and the global ocean. Through expert-led workshops, field experiences, and collaborative learning, students will practice Biology and Earth science standards, design and engineering standards and 21st Century/Venture skills in the context of real-world environmental problems and solutions in the Mississippi watershed. Preparations and conference information can then be applied to our local ecosystem and the Indian Creek watershed. where students can mentor peers regarding water quality testing, stewardship, and generating solutions for local problems, providing a broader impact on learning.

# Objectives:

- Deepen watershed literacy and the effects of human impacts understand ecosystem interdependence and local impacts on the health of ecosystems and larger bodies of water downstream; identify biogeochemical processes and cycling; explore biodiversity, human activities, sustainability challenges and actionable solutions
- Develop field-based scientific skills with water quality and soil monitoring; examine biodiversity and ecosystem services through data collection and analysis of physical, chemical, and biology parameters; gain exposure to how drones and other technologies help define problems and develop solutions.
- Promote stewardship and action engage in citizen science through water testing; apply knowledge and skills through peer teaching and community action with local water monitoring and exploring potential policy and conservation solutions
- Foster the development of 21st Century/Venture Skills collaboration, critical thinking, communication, leadership development; - present to peers, provide leadership for discussion and field activities to explore issues and solutions related to Indian Creek and the greater Mississippi watershed.

# Standards Alignment:

• HS-LS2-7: Design, evaluate, and refine a solution for reducing human impact on the environment.

- HS-LS2-4: Use mathematical representations to support claims for the cycling of matter and flow of energy among organisms in an ecosystem
- HS-ESS3-4: Evaluate or refine a technological solution that reduces impacts of human activities on natural systems.
- 21st Century & Venture Skills: Critical thinking, collaboration, creativity, problem solving, communication, productivity and accountability, adaptability, and environmental literacy.

# **Pre-Planning:**

## Participants & Supervision

We have a tentative registration for 10 students from Linn-Mar. Participants, potentially from both Earth and Biology Venture classes, will be determined in early September based on interest, merit, maturity, and fair selection process. Lisa Skilang, Venture Biology and Charlotte McDermott, Venture Earth will be supervising. If fewer than 10 students attend, Lisa Skilang will be the only supervisor. Parental notifications, general information and required permission forms from both the Museum and Linn-Mar will be sent out on a timely basis. Sample Museum forms are provided as an attachment. Updated forms are forthcoming from the Museum Staff.

# **Additional Preparation**

In Venture classes, students often work in small groups. Although students may be covering the same standards, the projects they work on related to the standard may be completed in alternative contexts. Preparation for this activity would have students completing initial pre-trip learning and informational sheets provided by the museum, as well as building class knowledge of watersheds and the contributions of Indian Creek in particular to the greater watershed. Class work, either pre or post trip, will be augmented by professionals from the Flood Center and the lowa Geological Survey who work with water quality in our own back yard. In addition to the pre-planning paperwork provided, students will conduct preparation regarding the chemical, physical and biological parameters on which water quality designations are based.

# Tentative 2025 Itinerary:

Date/Time	Activities par your end of the same and the
Day 1 – Wednesda	y, September 24th
7:45 - 9:00 AM	Departure from Linn-Mar High School; Drive to Dubuque
9:00 – 10:15 AM	<ul> <li>Participant Check-in &amp; Conference Kickoff (350 East 3rd Street, Dubuque, Ia 52001) National Mississippi River Museum &amp; Aquarium [NMRMA]</li> <li>Conference overview; learning expectations</li> <li>Introductions of participants &amp; partners</li> <li>Get To Know You activities for all participants &amp; partners</li> </ul>
10:30 – 11:30 AM	Water & Resource Recovery Center (795 Julien Dubuque Dr, Dubuque)     Video Link
12:00 – 1:40 PM	<ul> <li>Explore urban and rural best management practices</li> <li>Bankston Park (17826 Bankston Park Rd, Holy Cross, IA 52053)</li> <li>Hands-on: Macroinvertebrate testing, water quality sampling</li> </ul>

2:00 - 4:30 PM	<ul> <li>Jack Smith Family Farm (20922 Asbury Rd Durango, IA 52039)</li> <li>Rainfall Simulator: full-size simulator provides a detailed demonstration of soil health concepts</li> <li>Soil Quality and Water Movement Simulator: shows how water moves through the soil, highlighting the effect of soil quality, structure and aggregation</li> <li>Activities: slake test, hayride around property, barn animals, drone seeding operation, etc.</li> </ul>
5:00 – 6:00 PM	Return to NMRMA & Participants unpack/settle in / prep for dinner
6:30 PM	<ul> <li>Fish Fry Dinner in Train Depot at NMRMA with Denny Weiss (Retired - DNR Fisheries)</li> </ul>
7:15 – 7:45 PM	Day 1 Discussion with participants
7:45 – 9:00 PM	After Hours Tour; Explore exhibits & MakerSpace; Free Time
9:00 PM	
11:00 PM	Lights Out (100from person refer to the end of the
Day 2 – Thursday,	and a final programme to the final programme to the final programme and the final programme to the final programme
8:00 – 9:00 AM	Participants wake up & pack up
9:00 AM	Breakfast at NMRMA 's Harbor Grill
9:30 AM – 12 PM	<ul> <li>Educational 'sightseeing' river tour (American Lady Cruise; Pick up participants at Port of Dubuque marina outside of NMRMA)</li> <li>Explore the Mississippi River wildlife, which are impacted directly by the waters rushing off the land and entering our streams, rivers, and lakes.</li> </ul>
12:00 – 12:30 PM	Lunch at NMRMA 's Harbor Grill
12:30 – 1:30 PM	Conference Conclusion & Ceremony
1:30 - 3:30 PM	Return to home campus

# Accommodation & Budget

Students and staff will be remaining on site after hours and overnight in the Museum. Meals and a spot on the floor in the museum for sleeping bags and blankets is provided. Budget items are restricted to transportation, gas, and substitutes for supervisors.

# Post Experience Follow up:

After the conference, the students will complete a series of additional learning activities.

- Individual Written Reflection of the learning experience
- Student-led Visual and Oral Presentation (Group)
- Stewardship in local watershed Leadership and active participation in class discussion & water quality monitoring/data collection and potential campus-based solution
- Continued Study, Testing and Data comparison between local measurements, to the Mississippi River and the ocean (hypoxic/dead zone)
- Speakers Thomas Doyle, Hydrologist, Iowa Geologic Survey; Iowa Flood Center personnel

The trip sponsor/sponsors will complete a final written summary to be submitted to the principal.

# Assessment of Venture/21st Century Skills and Content Standard:

- Pre-trip productivity and accountability related to pre-trip learning watersheds, water quality parameter standards, sources, and impacts; museum-provided pre-learning
- Observations before, during and after the conference (21st Century/Venture skills)
- Presentation to class and Leadership in discussion
- Leadership role/Experts in class water quality monitoring
- Documentation of experience included in Final Showcase assignment tied to content standards (Ecology & Human Impacts standards in Biology) & (Sustainability in Earth science)

# **Funding & Budget Considerations**

The Mississippi River Museum and Aquarium hosts this event free of charge to participating students and teachers. Accommodations for the overnight include sleeping in the museum after hours. Sleeping bags/blankets, etc. will be provided by individual participants. The Museum will host students for lunch, dinner, breakfast and lunch on the identified days as part of the conference activities.

#### Expenses & Sources:

2 Vans for Transportation (provided 10 students attend); plus gas Substitute coverage for 2 supervising teachers

# **Common Experience:**

This opportunity supports a shared core experience aligned with Biology and Earth science curriculum and standards. All Venture students learn about ecological interactions, human activities and environmental impacts, biodiversity loss, sustainability and designing solutions for environmental problems. Within the context of aquatic ecosystems, all students will learn about watershed ecosystems and water quality through class activities, speakers, discussion, and citizen science water quality monitoring protocols for testing chemical, physical, and biological parameters. Although this particular experience is limited to 10 students, these students will provide additional depth of knowledge and leadership through elevating discussion and guiding activities, thereby extending the learning opportunities of their peers.

# Multi-disciplinary:

<u>Venture/21st Century Skills</u> - The learning opportunities afforded by this experience include the development of 21st Century skills & Venture Skills in complex communication, collaboration, critical thinking, creativity, flexibility and adaptability, productivity and accountability. In addition, students will have access to a variety of professional contributors and partners during the conference who, as well as sharing content expertise and broadening content awareness, will share career opportunities.

<u>English & Rhetoric</u> - Students will be engaged in discussion, writing reflections, and preparing/delivering presentations.

<u>Biology Content</u> - Ecological interactions and the flow of matter and cycling of energy; Human impacts on biodiversity and the environment; Designing and evaluating solutions for environmental problems

<u>Earth Science</u> - General Hydrology, Sustainable practices - agriculture, waterway development, etc. and Sustainable solutions

<u>Social Studies</u> - Civic responsibility through citizen science participation and evaluation of policies and practices related to conservation

# **Digital Materials from NMRMA**

<u>IAAE Conference 2025 Exploring Community Connection.pptx</u> - We used these slides to present at the Iowa Association of Alternative Education conference. It includes pictures from 2024, conference summary & previous activities, and how this conference benefits to students & their hometown community.

Cost: Free - All meals, transportation, and overnight facility accommodations are provided during the conference

Welcome Packet 2024:

Packing Suggestions & tentative meals
Pre-Conference Student Worksheet
2024 End of Day 1 Discussion Questions

Student Requirements and Information we will need from participants:

2024 Photography Videography Release.pdf

2024 Liability and Hold Harmless Agreement.docx

First Name, Last Name, Age / Grade

Allergies, dietary restrictions, medical needs

Emergency contact information (or copies of school's Permission Forms)



September 11th, 2024

### Dear Teachers and Students,

We are looking forward to seeing you on September  $18^{th} - 19^{th}$  for the *Student Oceans Conference 2024: What Is Your Watershed?* hosted by the National Mississippi River Museum and Aquarium [NMRMA]. Along with our conservation partners, we will have fun while learning how to be part of the solution to improving the health of our waterways. This welcome letter includes check-in information, two permission documents, packing suggestions, conference itinerary, and a pre-conference student worksheet. Please let us know if you have any questions or concerns prior to arrival. We are excited to learn with you!

Codi Sharkey, Conservation Leadesharkey@rivermuseum.com563-564-8203Erin Moodie, Education Programs Manageremoodie@rivermuseum.com563-581-9342

#### Check-In: 8:30 - 9:00 AM

National Mississippi River Museum & Aquarium's Paddlewheel Entrance (350 E. 3rd Street, Dubuque, IA)

- Conference Starts 9:00 AM, September 18th
- Conference Ends 2:30 PM, September 19th

#### Permission Documents for Check-in:

Students must fill out these two documents. A guardian signature is required for minors. Bring these documents to check-in on Wednesday, Sept. 18th, 2024.

- ☐ Photography/ Videography Release Form (Page 3 & attached)
- ☐ Liability and Hold Harmless Agreement (Page 4 & attached)

#### Packing Suggestions:

- Clothing Day 1: Weather & activity appropriate clothing. We will be outside and physically active much of the day. You will be able to leave items like umbrellas, bags, shoes, or jackets on the Charter bus.
- Closed-toed shoes
- Water shoes/sandals
- Clothing Day 2: Weather & activity appropriate clothing. Only 1 outdoor activity.
- Sleeping Accommodations: sleeping bag pillow, air mattress, etc.
- Lounge/sleeping Attire
- Personal toilettes
- Water bottle
- Extra snacks
- Portable phone charger
- Writing utensils
- Games, entertainment, homework, etc.

<sup>\*</sup>Upon Arrival: Leave all your overnight/personal items in your vehicle. You will get them at 5 PM once the NMRMA is closed to the public.

Overnight Reminders: No showers/locker rooms available. You will have access to restrooms that are not open to the public. You will spend the night inside the aquarium.

#### Meals Provided:

Day 1 Sack Lunch: Deli meat sandwich, 2 sides, drink

Day 1 Dinner: Domino's Pizza, side, dessert

Day 2 Continental Breakfast: Cereals, fruit, yogurt, etc.

Day 2 Hot Lunch: Hot Dogs, 2 sides, dessert

Pre-Conference Student Worksheet: (Pages 5-6) We strongly encourage participants to complete this worksheet and bring it to the conference. This pre-conference sheet ensures that all participants have a basic understanding of watersheds so we can immediately jump into the hands-on activities.

# Conference Itinerary

# Day 1: September 18th

9:00 AM Welcome to the National Mississippi River Museum & Aquarium [NMRMA]

9:30 AM Rainfall Simulator with Natural Resources Conservation Service

10:30 - 4:30 PM Hands-on activities at Bee Branch Watershed, Swiss Valley Nature Center, & Smith Farm

5:30 PM Return to NMRMA [closed to the public @ 5:00 PM]

6:30 PM Dinner

7:15 PM Small Group Discussion & Activity

9:00 PM Movie & Relaxation

9:00 PM Movie & Relaxation
Overnight: Sleep amongst the fishes

### Day 2: September 19th

8:00 AM Breakfast & Pack up [NMRMA opens to the public @ 9:00 AM]

9:30 AM – 12:30 PM Freshwater Mussel Conservation, Explore NMRMA's exhibits (Touch stingrays, Touch Tidepool), and 3D/4D Movie

12:45 PM Lunch

& Goodbyes

The transport of the first transp 1:30 PM Full Group Share Out & Goodbyes

2:30 PM End of Conference

Student Oceans Conference participants must bring this signed released form with them to Check-in on Wednesday, Sept. 18th, 2024. It will be collected by NMRMA Staff.

# Official Photography/ Videography Release

I hereby authorize the Dubuque County Historical Society and its entities (hereafter referred to as "Organization") to publish photographs and/or video taken of myself and/or the minor child or children listed below, and our names and likenesses, for use in the Organization's print, online, digital, and video-based marketing materials, as well as other Organization publications.

I hereby release and hold harmless Organization from any reasonable expectation of privacy or confidentiality for myself and for the minor child or children listed below associated with the images specified above. Further, I attest that I am the parent or legal guardian of any child or children listed below and that I have full authority to consent and authorize Dubuque County Historical Society to use my or their likeness(es) and name(s).

I further acknowledge that participation is voluntary and that neither I, the minor children, or minor children will receive financial compensation of any type associated with the taking or publication of these photographs/video or participation in Organization marketing materials or other Organization publications. I acknowledge and agree that publication of said photos confers no rights of ownership or royalties whatsoever.

I hereby release the Dubuque County Historical Society, its contractors, its employees, and any third parties involved in the creation or publication of Organization marketing materials, from liability for any claims by me or any third party in connection with my participation or the participation of the minor children listed below.

#### Authorization

Participant's Name:	Grade/Age:	
Street Address:	. 5. c	
City:	State:	Zip:
IF UNDER 18 YEARS OF AGE:		
Guardian Printed Name:	e a me a mandrame de come a comba es es esta en esta e E	
Guardian Signature:		Date:
Street Address:		
City:	State:	Zip:
Relationship to Participant:	955.0	the distance of the second second
Email:	rent en	Langer Strong M. Sanki.

Student Oceans Conference participants must bring this signed agreement with them to Check-in on Wednesday, Sept. 18th, 2024. It will be collected by NMRMA Staff.

# WAIVER OF LIABILITY AND HOLD HARMLESS AGREEMENT

1. I hereby release, waive, discharge and covenant not to sue The Dubuque County Historical Society or its subsidiaries and affiliates as well as its officers, servants, agents and employees (hereinafter referred to as "releasees") from any and all liability, claims, demands, actions and causes of action whatsoever arising out of or relating to any loss, damage or injury, including death, that may be sustained by me, or to any property belonging to me, whether caused by the negligence of the releasees, or otherwise, while participating in an event, or while in, on or upon the premises an event is being conducted, while in transit to or from the premises, or in any place or places connected with the releasees.

2. I am fully aware of risks and hazards connected with participating, and I am fully aware that there may be risks and hazards unknown to me connected with participating, and I hereby elect to voluntarily participate, to enter upon the above named premises and engage in activities knowing that conditions may be hazardous, or may become hazardous or

dangerous to me and my property. I voluntarily assume full responsibility for any risks of loss, property damage or personal injury, including death, that may be sustained by me, or any loss or damage to property owned by me, because of my being a participant in an event, whether caused by the negligence of releasees or otherwise.

3. I further hereby agree to indemnify and save and hold harmless the releasees and each of them, from any loss, liability,

damage or costs they may incur, whether caused by the negligence of any or all the releasees, or otherwise.

4. It is my express intent that this release shall bind the members of my family and spouse, if I am alive, and my heirs, assigns and personal representative, if I am deceased, and shall be deemed as a Release, Waiver, Discharge and Covenant not to sue the above named releasees.

In signing this release, I acknowledge and represent that:

A. I have read the foregoing release, understand it, and sign it vol.  B. No oral representation, statements or inducements, apart from the I am at least eighteen (18) years of age and fully competent CD. I execute this Release for full, adequate and complete consider Participant Signature:	foregoing written agreement, have been made; OR my parent has signed this form; and eration fully intending to be bound by same.
atticipant dignature.	
Participant Name Printed:	
Participant Contact Information:	Age:
Emergency Contact Name & Phone Number:	
IF UNDER 18 YEARS OF AGE: Guardian Name Printed	P = 2
Guardian Signature:	_ Date:
Contact Information:	
Pre-Conference Student \	<u>Worksheet</u>

# Student Oceans Conference 2024: What Is Your Watershed?

The National Mississippi River Museum & Aquarium [NMRMA] and our conservation partners are excited to see you on September 18 – 19. Before you arrive, there are a few things we'd like you and your students to know. We look forward to meeting you! -Codi Sharkey & Erin Moodie [Program Managers]

# **Pre-Conference: Prior Knowledge**

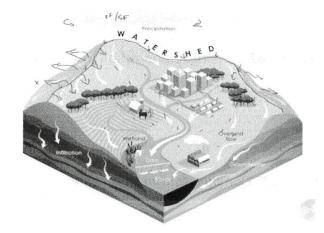
This year's Student Oceans Conference focuses on water and the importance of watersheds. During the conference you will hear from conservation professionals who work with landowners, cities, and counties on how to better the health of our watersheds and all the organisms that call watersheds their home. While at NMRMA you will see some of the creatures that

live in our watershed. In your own words, explain what you think a watershed is: **Pre-Conference Self Evaluation:** I can define watershed: (low) 1 5(high) Lunderstand the importance of watersheds: (low) 1 2 4 5 (high) I know how I can help conserve watersheds in my local area: (low) 1 5 (high) One thing I'd like to do or learn about during this conference is:

# **Knowledge to Know**

Below are some of the big concepts we will explore at this year's Student Oceans Conference. You may want to consider the following guiding questions before you arrive. For a more personalized experience, we encourage you to use this interactive map to **locate your local watershed beforehand**:

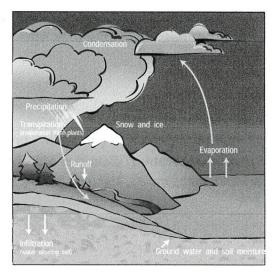
https://www.arcgis.com/apps/View/index.html?appid=8909697be04f40eaab0ee753547f4807



What is a watershed? A watershed is all the land that drains to the same body of water. Every area is a watershed that channels water into creeks/streams/rivers and eventually to a common body of water or outflow point. Smaller watersheds become part of larger watersheds, as streams feed into rivers, and rivers flow into oceans. Water tributaries from hundreds, and often thousands, of creeks and streams flow from higher ground to rivers that eventually wind up in a larger waterbody. As the water flows, it often picks up pollutants, which may have negative effects on the ecology of the watershed. Watershed is often used interchangeably with drainage basin.

#1. When rain falls to the ground around your home or school, where does it go?

#2. Review the Watercycle using this diagram →
How is watershed involved within this process?
#3. What is your local watershed? What is the *smallest*watershed where you live? What is the *largest* watershed you are
a part of? <u>Watershed Locator</u> from ArcGIS Online



How do landscapes and surrounding features play a part in watersheds? Water is an integral part of life and has shaped our landscape by seas, glacier ice, wind, and rivers. Our landscape constantly reminds us of the power of water. We interact

with these features everyday, but often forget to notice how they play a part in watersheds.

#4. What landscape features are in your local	area? How might these factors	influence a watershed?
Consider the geography & geology of Iowa, Illir	nois, and Wisconsin. Earth Rock	s Map from Concord
Consortium: Earth-rocks.concord.org		

#5. What other **natural features** might impact your local watershed? *Consider climate, soil type, wildlife, drainage network, waterbodies, etc.* 

#6. What **non-natural features** might impact your local watershed? *Consider farming, recreation, mining, urban developments, factories, dams, wells, etc.* 

What is Successful Watershed Management? Everyone has a part in watershed health. We all want clean water to drink, swim in, and eat from. We all want a river or lake that looks and is healthy and full of life. Therefore, we are all watershed stakeholders because we derive value from our watershed's resources. A stakeholder is a person who lives in, manages, restores, or protects their watershed. Many partnerships between various stakeholders have been formed to successfully manage their watersheds.

#7. What might a **healthy watershed** look like or what key things should it include? *Consider plant life,* animal habitats, drinking water, etc.

#8. Identify a person, organization, or job position within your community you'd label as a **stakeholder for your watershed**? Examples of stakeholders include urban and rural residents; local, state or federal government agencies; elected officials; agricultural producers; recreational users and wildlife enthusiasts.

#9. Do you think your **water footprint** is below average, average, or above average? Explain why. A water footprint is the amount of water consumed or used by individuals to produce goods and service. Consider your use of indoor water, use of outdoor water, and indirect water use.

Water Footprint Calculator: https://watercalculator.org

# **Student Oceans Conference 2024**

# **End of Day 1 Discussion Questions**

- 1. What was one valuable thing you learned or realized during each of these experiences today?
  - Rainfall Simulator
  - Bee Branch Watershed
  - Swiss Valley Park
  - Jack Smith Farm
- 2. What is one thing you are still confused about or unsure about from today's learning?
- 3. Revisit some of the questions from the **Pre-Conference Student Worksheet**. How do these questions relate to today's experiences?
  - Review the Watercycle. How is watershed involved within this process?
  - What is your local watershed? What is the smallest watershed where you live? What is the largest watershed you are a part of? <u>Watershed Locator</u> from ArcGIS Online
  - How do landscapes and surrounding features play a part in watersheds?
  - What landscape features are in your local area? How might these factors influence a watershed?
  - What other natural features might impact your local watershed?
  - What non-natural features might impact your local watershed?
  - What is Successful Watershed Management?
  - What might a healthy watershed look like or what key things should it include?
  - Identify a person, organization, or job position within your community you'd label as a stakeholder for your watershed?
- 4. What is a healthy watershed? What factors influence the quality of water in the watershed?
- 5. What does **wasting water** mean? Provide 2 examples of how you might be wasting water. Where does your community **obtain their drinking water**?
- 6. Are there any signs of **water quality degradation** in your community? What might be **causing** these negative alterations to the water in your community?
- 7. What **effects** have these negative alterations had on plant and animal communities in your regions? What kinds of **actions and changes** are currently underway to benefit your watershed? What others might be enacted?
- 8. How can students and the community **get involved in protecting** and improving the health of your watershed?
- 9. Brainstorm 1 thing **a person might do to conserve their local watershed** or reduce their negative impact.

#### **Digital Activities:**

- https://www.watercalculator.org/wfc2/
- https://river-runner.samlearner.com/?fbclid=lwAR1-d2Bb2wQv2ye-48ldO\_QAdyHuh4cHlQBwhQVmY2Rl5rDCNzWGSprKE7E
- https://earth-rocks.concord.org/
- Watershed Locator:

https://www.arcgis.com/apps/View/index.html?appid=8909697be04f40eaab0ee753547f4807

•

#### Helpful Resources:

- https://guides.itsi.concord.org/part-i-exploring-my-watershed-teacher-guide.html
- https://extapps.dec.ny.gov/docs/remediation hudson pdf/hrlpwatershedhs.pdf
- <a href="https://www.caryinstitute.org/eco-inquiry/teaching-materials/hudson-river-ecology/watersheds-reading">https://www.caryinstitute.org/eco-inquiry/teaching-materials/hudson-river-ecology/watersheds-reading</a>
- https://www.caryinstitute.org/sites/default/files/public/downloads/curriculumproject/watershed.pdf
- https://www.epa.gov/hwp/basic-information-and-answers-frequent-questions
- https://mostreamteam.org/assets/watershed.pdf
- https://ctic.org/files/Getting%20To%20Know%20Your%20Local%20Watershed.pdf
- https://apps.ecology.wa.gov/publications/documents/0801018.pdf
- https://www.usgs.gov/special-topics/water-science-school/tools



#### Presenters:

- Codi Sharkey, Conservation Programs Manager
- · Erin Martin, Director of Education
- · Chuck Tonelli, IAAE President & S.O.C. Advocate



NATIONAL SSIPPI RIVER MUSEUM & AQUARIUM

#### National Mississippi River Museum & Aquarium [NMRMA]

- Mission: To inspire stewardship by creating educational experiences where history and rivers come alive.
- 14 acre campus on the Mississippi & Mattias Ham Historic Site
- Museum + Aquarium + Science Center
- · 200,000 Guests per year
- · 19,504 Students participant in an Educational Experience in 2024
- · Accolades: Smithsonian Affiliated, AZA, IMA, etc.
- Highlights related to S.O.C.: Rivers to the Sea Exhibit, Ice Harbor & River Access, Watershed Map, and more

#### History:

- Started in 2005 through Coastal Ecosystem Learning Centers, NOAA, and Nat Geo Gran
- Evolved over the years to the current Student Ocean Conference: Know Your Watershed

#### What is Student Oceans Conference:

- Two-day watershed workshop for high schoolers with their teacher(s)
- Interactive and hand-on experiences:

   water stewardship, protecting natural resources, sustainable agriculture, conservation practices, etc. Collaborate with environmental professionals & like-minded peers from other communities  $\,$

#### Previous Activities:

- Field trips to urban watersheds and rural watersheds
- Hayride tour of heritage/ regenerative ag farm and barn
- Soil and Slake testing & water quality testing
- Catching and classifying macroinvertebrates
- Rainfall Simulator to compare root systems
- Seeding-drone demonstration & no-till drill demonstration
- Boating and running nets on the Mississippi River
- Freshwater connections: Freshwater Mussels on the Lower Dock



#### Benefits for Students:

- · Hands-on learning and real-world experiences
- · Exposure to Careers
- · ESL: Teamwork, collaboration, grit
- · Low-stakes Networking & Bonding Amongst Peers
- Knowledge Gains
  - Upper River to Lower River Connections
  - · Watershed to Ocean Connections

#### Benefits for Community:

- Impactful Perspective
  - Hometown Stream > Mississippi Watershed > Oceans
- · Apply new knowledge to local community
- · Think Tank & Exchange of Ideas



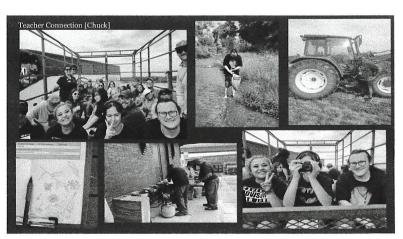
#### Student Oceans Conference Community Partners:

- Iowa Natural Resources Conservation Service
- · Dubuque County Conservation
- · Jack Smith Family Barn & Farm
- Denny & Teresa Weiss, Retired IADNR biologist, Retired NRCS
- · Mike Freiburger, Dubuque Soil & Water Commissioner

#### Why these Partnerships Matter:

- · Network of Community Connections
- Help us stay up to date with Best Practices & New Techniques (drone seeding)
- · Support one another's Conservation Initiatives
- Career Pathways for Students





Student Oceans Conference 2025:

Wednesday, September 24th Thursday, September 25<sup>th</sup>

Price: Free 50 Participants Total (Please limit group size to 10)

Reservations go live starting April 17th on rivermuseum.org



Scan me!

Codi Sharkey Erin Martin Chuck Tonelli

learning@rivermuseum.org

563-557-9545 x215 563-557-9545 x235



Community Connections Programs: Earth Optimism

NMRMA Educational Opportunities:



IN ASSOCIATION WITH THE SMITHSONIAN INSTITUTION









Student Oceans Conference participants must bring this signed agreement with them to Check-in on Wednesday, Sept. 18<sup>th</sup>, 2024.

It will be collected by NMRMA Staff.

#### WAIVER OF LIABILITY AND HOLD HARMLESS AGREEMENT

- 1. I hereby release, waive, discharge and covenant not to sue The Dubuque County Historical Society or its subsidiaries and affiliates as well as its officers, servants, agents and employees (hereinafter referred to as "releasees") from any and all liability, claims, demands, actions and causes of action whatsoever arising out of or relating to any loss, damage or injury, including death, that may be sustained by me, or to any property belonging to me, whether caused by the negligence of the releasees, or otherwise, while participating in an event, or while in, on or upon the premises an event is being conducted, while in transit to or from the premises, or in any place or places connected with the releasees.
- 2. I am fully aware of risks and hazards connected with participating, and I am fully aware that there may be risks and hazards unknown to me connected with participating, and I hereby elect to voluntarily participate, to enter upon the above named premises and engage in activities knowing that conditions may be hazardous, or may become hazardous or dangerous to me and my property. I voluntarily assume full responsibility for any risks of loss, property damage or personal injury, including death, that may be sustained by me, or any loss or damage to property owned by me, because of my being a participant in an event, whether caused by the negligence of releasees or otherwise.
- 3. I further hereby agree to indemnify and save and hold harmless the releasees and each of them, from any loss, liability, damage or costs they may incur, whether caused by the negligence of any or all the releasees, or otherwise.
- 4. It is my express intent that this release shall bind the members of my family and spouse, if I am alive, and my heirs, assigns and personal representative, if I am deceased, and shall be deemed as a Release, Waiver, Discharge and Covenant not to sue the above named releasees.

In signing this release, I acknowledge and represent that:

- A. I have read the foregoing release, understand it, and sign it voluntarily as my own free act and deed;
- B. No oral representation, statements or inducements, apart from the foregoing written agreement, have been made:
- C. I am at least eighteen (18) years of age and fully competent OR my parent has signed this form; and
- D. I execute this Release for full, adequate and complete consideration fully intending to be bound by same.

Participant Signature:		Date:
Participant Name Printed:		Age:
Emergency Contact Name & Phone Numb		
IF UNDER 18 YEARS OF AGE:	Guardian Name Printed: _	
Guardian Signature:	Γ	Pate:





#### PROPERTIES OF THE



#### Official Photography/ Videography Release

I hereby authorize the Dubuque County Historical Society and its entities (hereafter referred to as "Organization") to publish photographs and/or video taken of myself and/or the minor child or children listed below, and our names and likenesses, for use in the Organization's print, online, digital, and video-based marketing materials, as well as other Organization publications.

I hereby release and hold harmless Organization from any reasonable expectation of privacy or confidentiality for myself and for the minor child or children listed below associated with the images specified above. Further, I attest that I am the parent or legal guardian of any child or children listed below and that I have full authority to consent and authorize Dubuque County Historical Society to use my or their likeness(es) and name(s).

I further acknowledge that participation is voluntary and that neither I, the minor children, or minor children will receive financial compensation of any type associated with the taking or publication of these photographs/video or participation in Organization marketing materials or other Organization publications. I acknowledge and agree that publication of said photos confers no rights of ownership or royalties whatsoever.

I hereby release the Dubuque County Historical Society, its contractors, its employees, and any third parties involved in the creation or publication of Organization marketing materials, from liability for any claims by me or any third party in connection with my participation or the participation of the minor children listed below.

#### **Authorization**

Participant's Name:		Grade/Age:	
Street Address:			
City:	State:	Zip:	
IF UNDER 18 YEARS OF AGE:			
Guardian Printed Name:			
Guardian Signature:		Date:	
Street Address:			
City:	State:	Zip:	
Relationship to Participant:			
Email:			