

# Be AIS AWARE: The Wonder Whys of AIS





# Why is Water Important?







# Water: A Sacred Resource

“Water is Life,” it provides:

- A sacred home
- A sense of place
- Water to sustain all life
- An important solvent
- Food (fish, wildlife & crops)
- Transportation
- Settlements (flat ground, good soil, & access to resources)
- Wood, electricity, waste removal, recreation





# Water: A Precious Resource

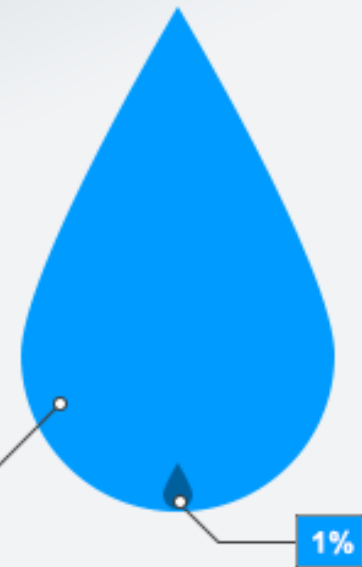
Freshwater makes up a very small fraction of the Earth's water



Percentage of the Earth's surface covered in water



Freshwater (most of it is locked up in ice and in the ground)



Readily available freshwater

Source: USGS

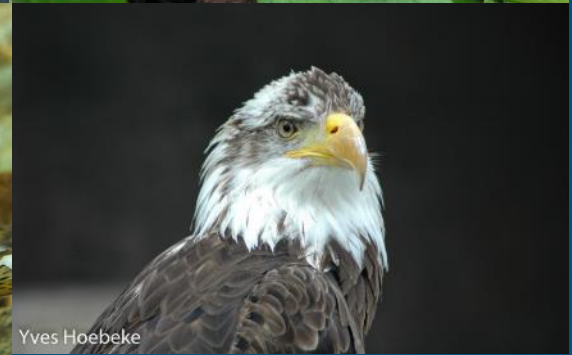
© DW

0.03% of the TOTAL is readily available freshwater found in rivers, lakes, etc.





Our native species need clean, cold, healthy water to survive!



Yves Hoebeke



# What are Aquatic Invasive Species (AIS)?

Aquatic, **non-native** species that **cause economic or environmental harm**.

Five traits all AIS have in common:

- Grow fast
- Reproduce quickly
- Spread easily
- Live in a wide range of environmental conditions
- Outcompete other species

Click [here](#) to see the “Below the Water Line” AIS video!



**FLOWERING RUSH**





# How are invasive species initially introduced and spread in a habitat?

## Spotted Knapweed



A **pathway of introduction** is how an invasive species is first brought to a new area.

How do you think spotted knapweed got to the U.S. from Europe?

## Dandelion



A **method of dispersal** is how an invasive species spreads through a habitat.

How do dandelions spread?



# Conduct your own AIS INQUIRY to learn about AIS threats in Montana...



## For each AIS find:

- Adaptations that make them invasive
- Pathway(s) of introduction & methods of dispersal
- Impacts
- Current locations in Montana





Conduct your own AIS INQUIRY to learn about AIS threats in Montana...



**What do all of these aquatic invasive species have in common?**



How could aquatic invasive species impact you or your family?



**Take one minute to record a response to the question above.**

**Be ready to SHARE your ideas with the class.**





# How can you help prevent the spread of aquatic invasive species?



Click [here](#) to see how YOU can help to protect our waters!



# Summarize Your Understanding of AIS

Use **specific EVIDENCE** from this activity to write a 4-sentence paragraph in response to the prompt below.

Be sure to include the following in your paragraph:

- ❖ Claim (topic sentence)
- ❖ Evidence (2 sentences with supporting ideas)
- ❖ Reasoning (wrap-up sentence)

*Interspecific Competition is a form of competition in which two individuals of DIFFERENT species compete for the same resources in an ecosystem (ex. food, shelter, water, nutrients, sunlight, etc.). Select one aquatic invasive species from this activity and explain how its adaptations help it to out-compete native species in Montana.*





# AIS can have great impacts...



Click [here](#) to hear a personal account of an AIS invasion!



# References

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# References

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