Be AIS AWARE: Amazing AIS Adaptations
What is an adaptation?

A physical, chemical, or behavioral trait that helps an organism to survive in a particular environment.

**ZEBRA MUSSEL:**
- **Physical** - Planktonic larvae, razor sharp shells
- **Chemical** - Byssal protein threads
- **Behavioral** - Filter feeds at all hours

**NORTH AMERICAN BULLFROG:**
- **Physical** - Big eyes, webbed feet, camouflage
- **Chemical** - Slime on skin
- **Behavioral** - Ambush predation
Pick one animal and list its adaptations...
Clean, cold, connected, and complex aquatic habitats support life!

<table>
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<tr>
<th>Lakes</th>
<th>Ponds</th>
<th>Wetlands</th>
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<td>Rivers and streams</td>
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<tr>
<td>Benthic Zone (BOTTOM)</td>
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Each habitat is unique! Be sure to design your organism so it can survive!
Lake Zones

- Divided into 3 “zones” determined by light intensity/depth
  - Photic zone (light)
  - Aphotic zone (no light)
  - Benthic zone (bottom)

- Divided into 2 “zones” determined by distance from the shoreline
  - Littoral zone (shoreline)
  - Limnetic zone (open water)
Create your own AIS...

Design your AIS

1. Write a story
2. Draw a portrait
References

Slide #1: Photo of osprey by Bill Doherty

Slide #2: Photo of zebra mussels on shell by Randy Westbrooks (Bugwood.org / Public Domain)
Photo of North American Bullfrog by Carl D. Howe (CC BY-SA 2.5)

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Photo of Westslope cutthroat trout by Johnny Armstrong (USGS)
Photo of bald eagle by Yves Hoebeke (Wikimedia Commons / CC BY 2.0)

Slide #4: Photos of Yellow Bay & White Salmon River by Holly Church at FLBS
Photo of pond in near the base of Bugle Mountain in the Scapegoat Wilderness by Forest Service Northern Region (CC BY 2.0)
Photo of Western (boreal) toad by Andrew Johnson (Wikimedia Commons / CC BY 3.0)
Photo of adult cutthroat trout by National Park Service (public domain)
Photo of periphyton
Photo of flatworm by Ernie Cooper
Photo of tadpole snail

Slide #5: Diagram of lake zones created by Holly Church at the Flathead Lake Biological Station
References

Slide #6:

Photo of flowering rush by Dominicus Johannes Bergsma (CC BY-SA 4.0)
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