Friends of Kootenay Lake

2021 Harrop Wetland Community Outreach Meeting

KCP Kootenay Conservation Program

COLUMBIA POWER

Friends of Kootenay Lake

Today's Speakers and Moderators

HOST

Camille LeBlanc
Program Manager
Friends of Kootenay Lake

MODERATOR

Kayla Tillapaugh
Environmental Program Coordinator
Friends of Kootenay Lake

GUEST

Tom Biebighauser
Wetland Biologist & Ecologist

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Agenda

- 10:00-10:10 am: Welcome and Introduction
- 10:10 -11:00 am: Wetland Restoration in the Kootenays (question period at the end)
- 11:00 – 11:05 am : Quick Break
- 11:05 – 11:35 am: Friends of Kootenay Lake and the Harrop Wetland Project
- 11:35 – 12:00 pm: Survey and Question Period

Who is Friends of Kootenay Lake?

Friends of Kootenay Lake

Sunshine Bay Regional Park

Presence of (rare) ephemeral wetlands

About the site

Friends of Kootenay Lake

About the site

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Initial Concerns

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Population sink for western toad – pond dry-up

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Decrease in roosting habitat for great blue herons

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ATV Activity in the wetland and breeding pools

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Sunshine Bay Regional Park

Presence of (rare) ephemeral wetlands

Restoration Activities

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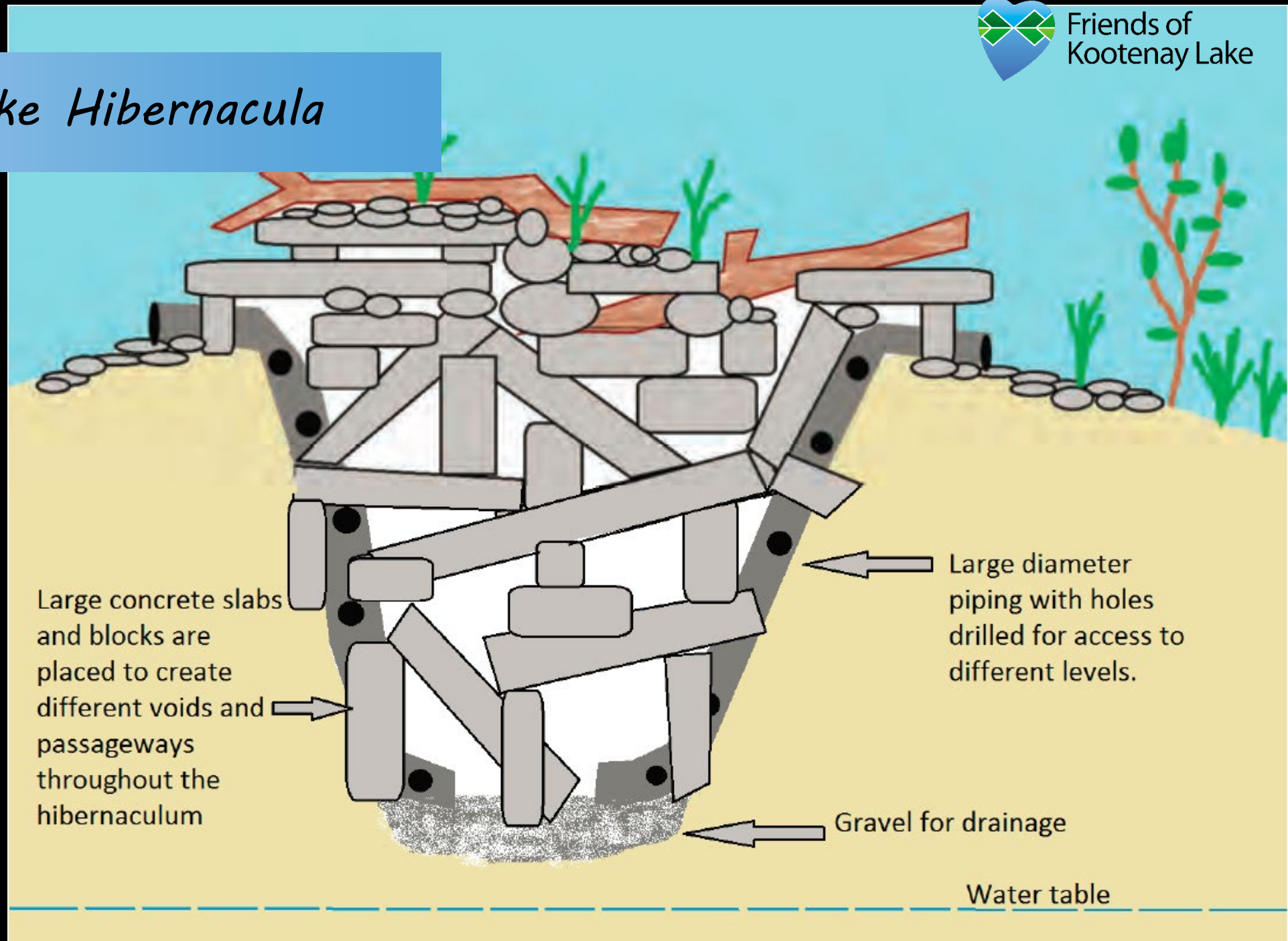
Sunshine Bay Regional Park

Presence of (rare) ephemeral wetlands

Installed Snake Hibernacula



Planted cottonwood, willow, red osier dogwood

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Installed signage

- *Inform*
- *Deter*

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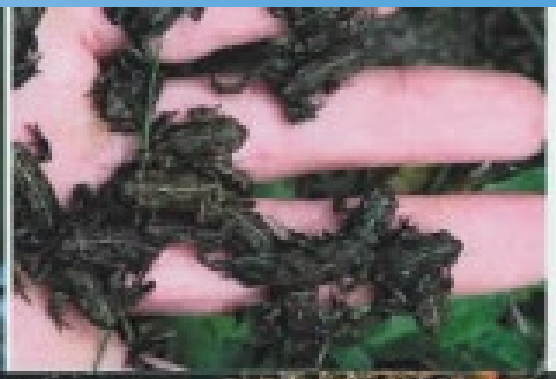
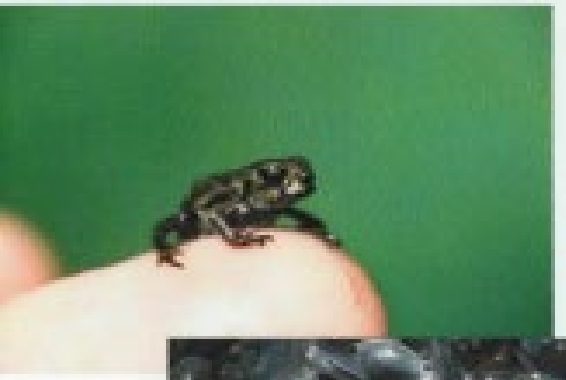
Western Toad





Citizen Science Monitoring

Amphibian Monitoring Workshop

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Kootenay Lake

2015 Monitoring Observations

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- 4 surveys conducted between June 25 and Aug 8
- Est. 500 tadpoles 25 June
- Drought year – pond dry up <5cm by July
- Opaque water and minimal vegetation
- Balfour Volunteer fire service pumped lake water into ponds

2016 Monitoring Observations

- 19 surveys conducted between June 3 and Oct 24
- Visible increase in pond vegetation and wildlife using ponds
- Murky water
- Max est. tadpole count ~4,000 near end of June
  - End of July: 1,000
  - End of Aug: 150
  - End of Sep: 25
  - End of Oct: 10
- Concerns tadpoles weren't developing normally – front leg development absent near end of season
- Water cleared by fall. Increase in bird tracks suggested tadpoles were likely being eaten.

2017 Monitoring Observations

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- 4 surveys between May 8 and July 31
- Notable increase in pond vegetation and aquatic insects
- Water levels ok all season
- Max est. tadpoles~8,500 on Jul 8
- Survey on Jul 31 noted 20 sub-adult emerged western toadlets
- 5 adult pacific chorus frogs also observed

2018 Monitoring Observations

- 4 surveys conducted between Jun 23 and Jul 23
- Late start was due to unusually high water preventing access
- Evident that pond vegetation and aquatic life had really taken hold
- Estimated 30,000 tadpoles “bumper crop”
- Tadpoles observed in all ponds for first time since restoration
- Last survey on Jul 23 found >200 emerged toadlets (but few tadpoles)

2019

- No regular surveys performed, but a casual site walk on Aug 17 noted an emerged toadlet and mostly dried ponds.

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Ongoing Concerns

- Potential unsuccessful maturation of western toad some years due to:
  - Pond dry up in drought years
  - Predation

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What's Next?

- Community outreach and feedback
- Monitoring and assessments
- Wetland enhancement design
- Continued restoration activities?

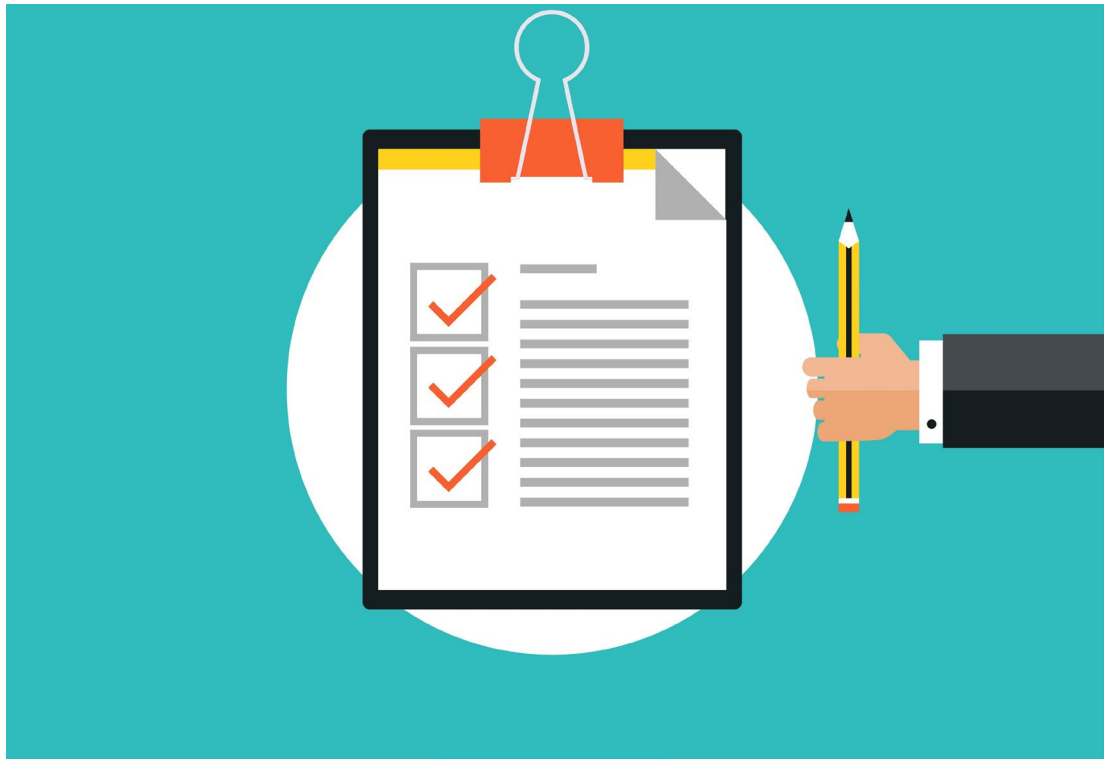
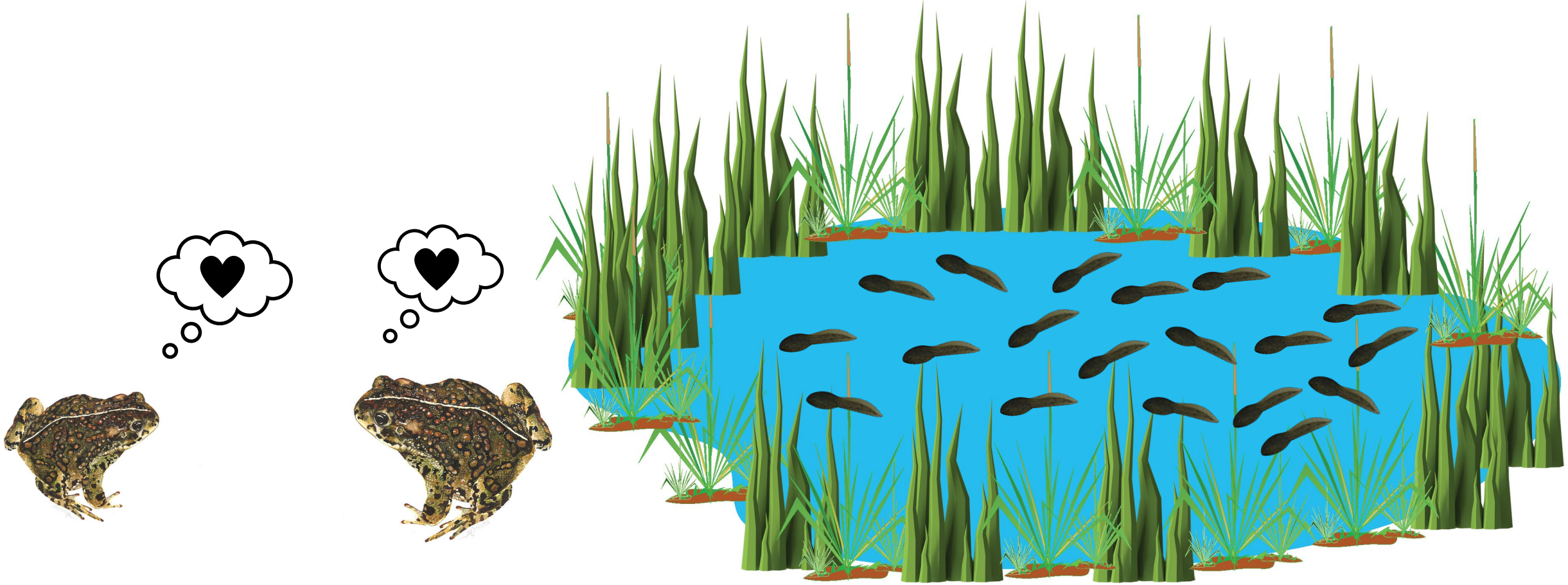
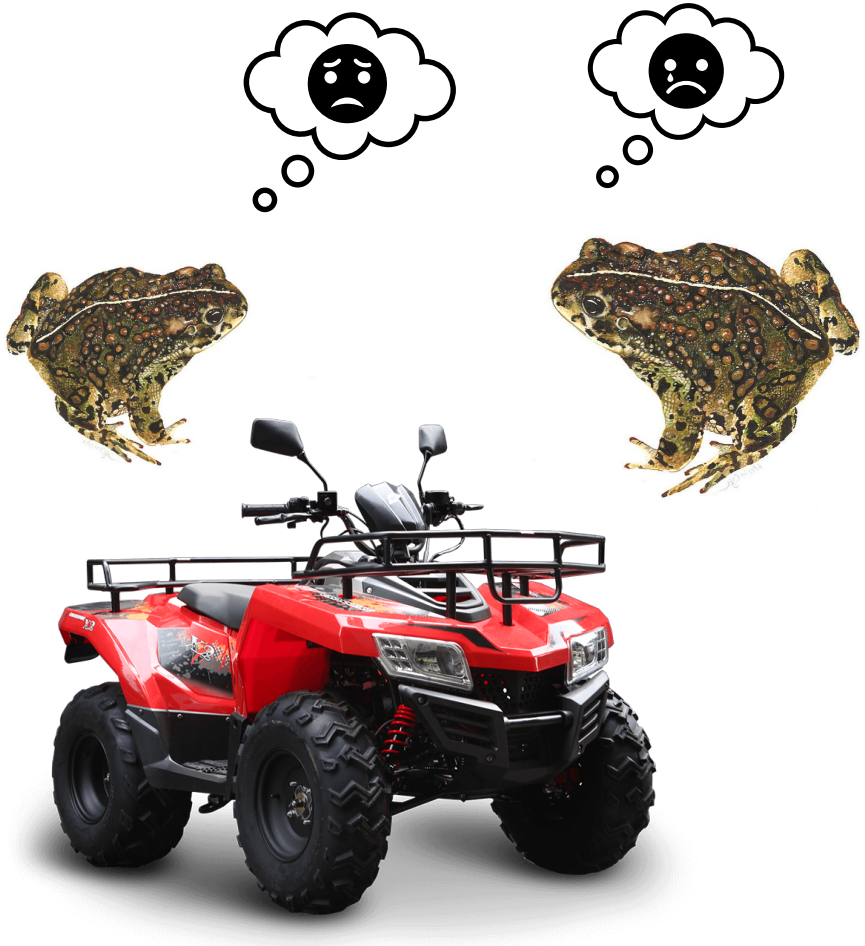
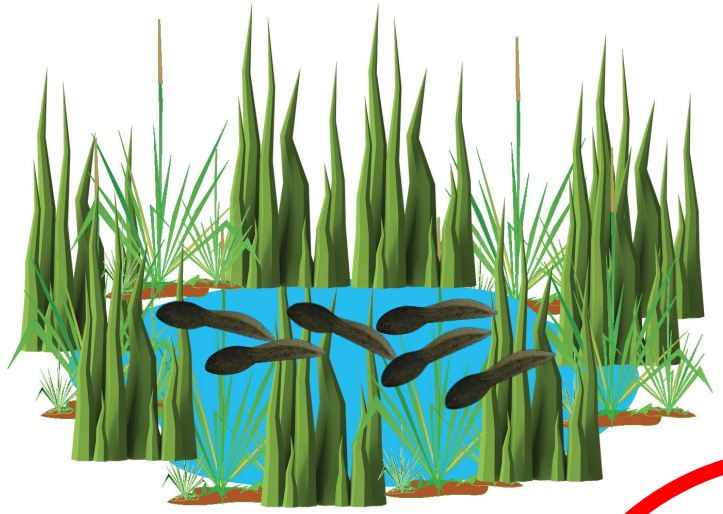
Work done this year

Amphibian Monitoring Workshop

Selkirk Education Day

Staff Gauge Install

Questions & Answer

- Participant survey
  - Please answer the incoming survey questions
  - Can choose more than one answer
  - Anonymous
  - Results will be shared after answers are submitted

- Question period
  - Feel free to unmute
  - Or type your questions into the chat box