



TURTLE GUARDIANS

GEORGIAN BAY WATERSHED

EGBI INITIATIVE

ganawenim meshkiki
INCORPORATED UNDER THE CANADA NOT-FOR-PROFIT CORPORATIONS ACT



FOCUS

CITIZEN/COMMUNITY SCIENCE

PRIORITIZATION MODELS AND TARGET MAPPING

UNDERPASS PILOT

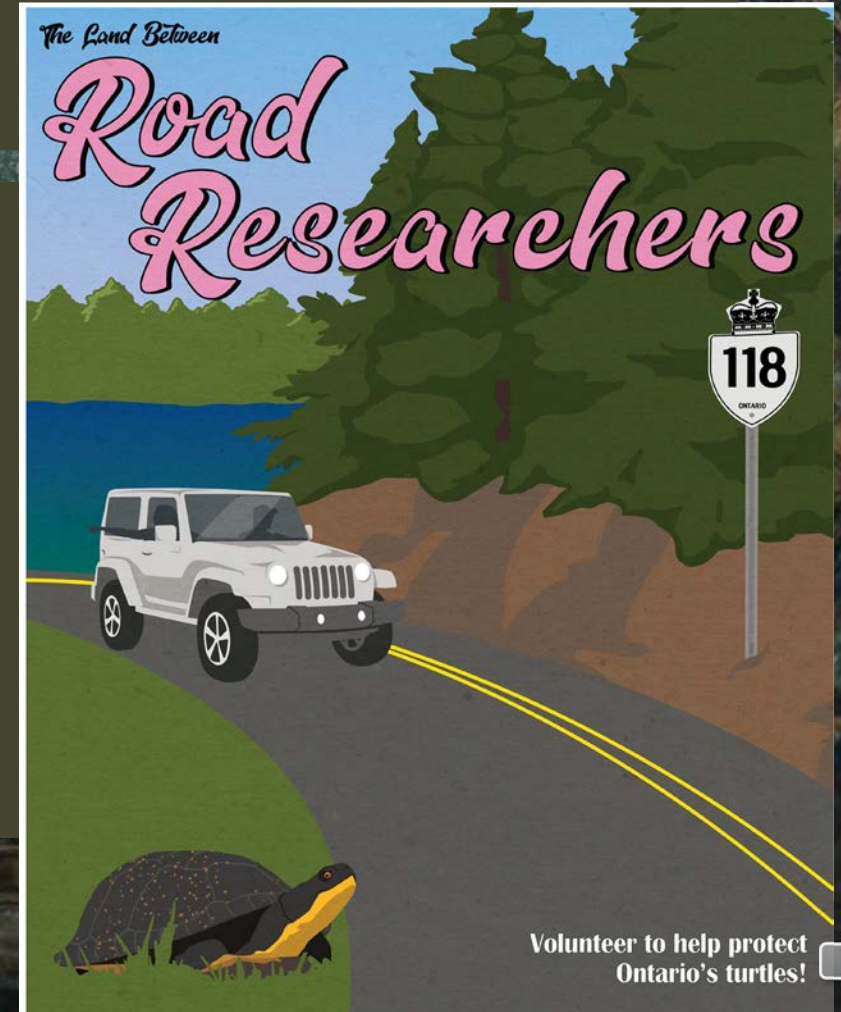
PUBLIC AWARENESS

TECHNICAL TRAINING FOR PRACTITIONERS- MARKETING UPTAKE



RECRUIT AND TRAIN VOLUNTEERS- COMMUNITY SCIENCE

- REDUCED ACTIVITY AND FOCUSED OUTSIDE OF GBB
- 9 VOLUNTEERS AND 4 STAFF ACROSS 11 ROADS



COMMUNITY SCIENCE AND RESEARCH

- 185 NEW TURTLE RECORDS (65 VOLUNTEERS)
- (26 BLTU, 3 MATU, 1 SPTU)
- 47 NESTS EXCAVATED
- 17 SNAKES



COMMUNITY SCIENCE AND RESEARCH

- WHICH ALSO SUPPORTED INCUBATION PROGRAM-
5618 EGGS AND 4988 RELEASES
- 94% SUCCESS RATE
- 829 IN THE WATERSHED

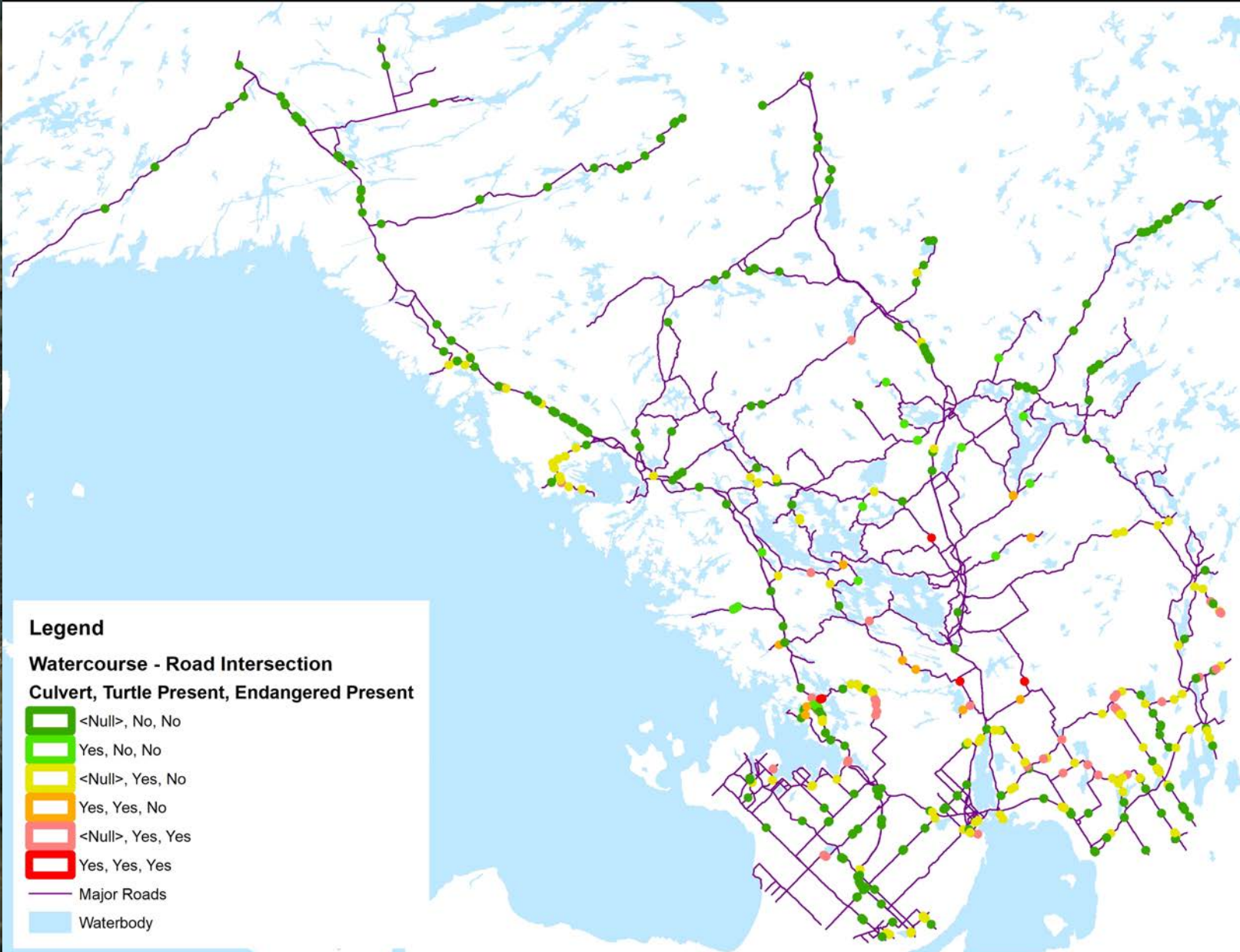


PRELIMINARY TARGET MAPPING- UNDERPASSES

- IDENTIFYING POTENTIAL UNDERPASS SITES
 - FLOW LAYERS- STREAM ORDER 3 / 9 TO ASSESS PRESENCE OF CULVERTS/BRIDGES AND INFRASTRUCTURE
 - PRESENCE- ABSENCE
- TRUTH USING REMOTE SENSING
- PRIORITIZATIONS
 - THR, END, # OF OBSERVATIONS # OF DOR







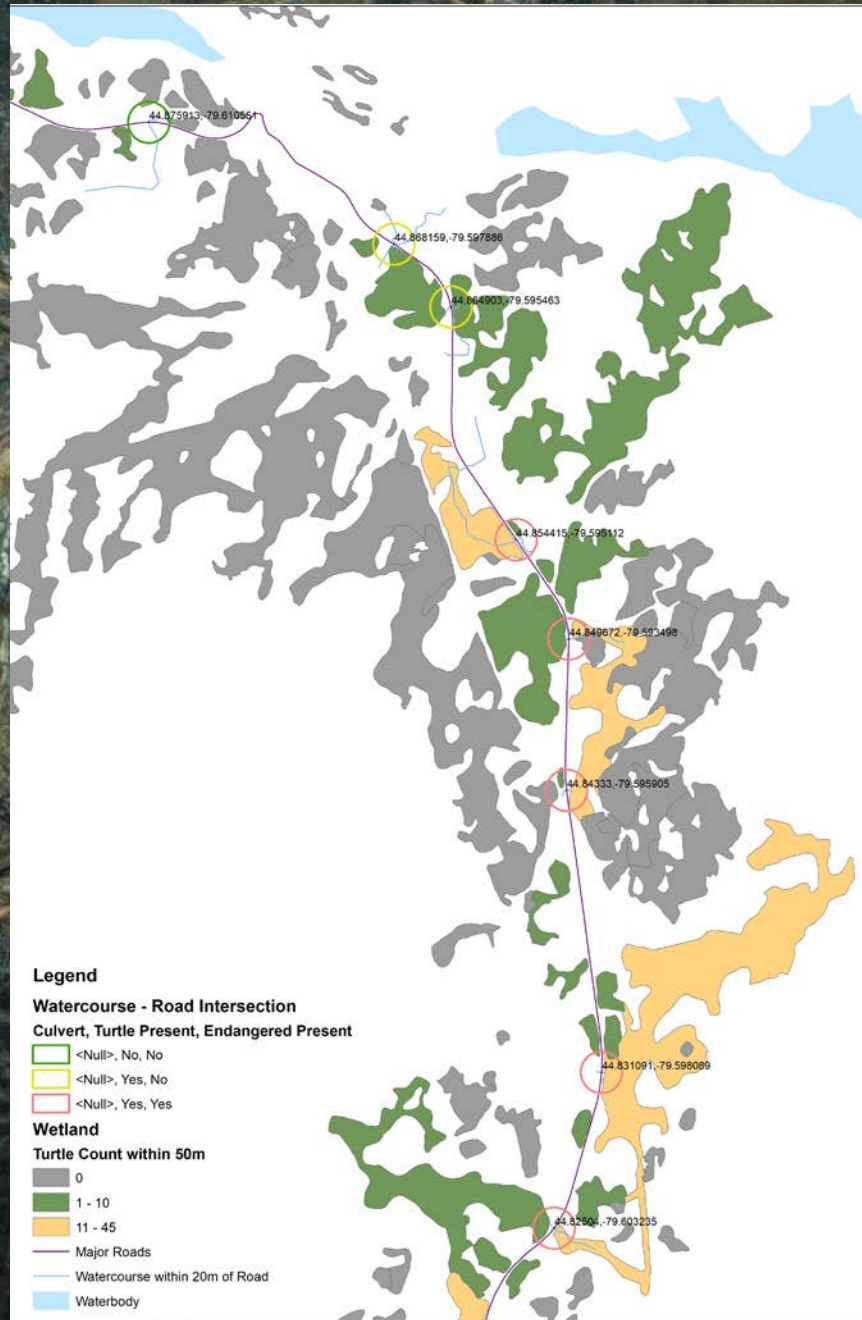
Legend

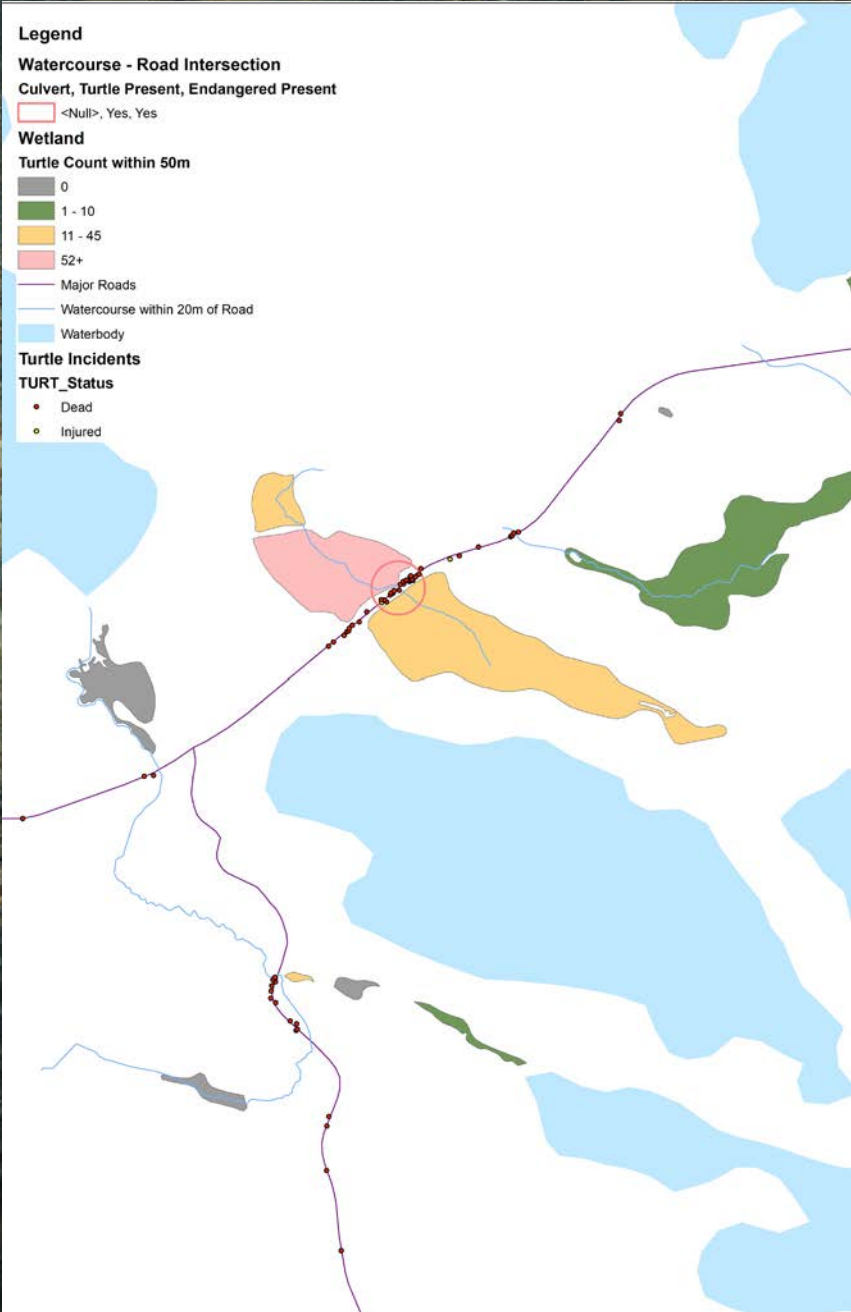
Watercourse - Road Intersection

Culvert, Turtle Present, Endangered Present

- White box: <Null>, No, No
- Green box: Yes, No, No
- Yellow box: <Null>, Yes, No
- Orange box: Yes, Yes, No
- Pink box: <Null>, Yes, Yes
- Red box: Yes, Yes, Yes
- Purple line: Major Roads
- Light blue area: Waterbody









NEXT STEPS – UNDERPASSES AND MITIGATION

- ALLOWS FOR GAP ANALYSIS (AREAS WHERE BOUNDED BY WETLANDS AND WITH SIGNIFICANT FLOW BUT NO OCCURRENCES)
- FIELD TRUTHING IN THESE AREAS FOR EVIDENCE OF MORTALITY
- PRIORITY SITES- SITE VISITS, ASSESS FEASIBILITY, RECALIBRATE PRIORITY
- DESIGN PLANS AND PRIORITIZATION FOR CANDIDATE SITES



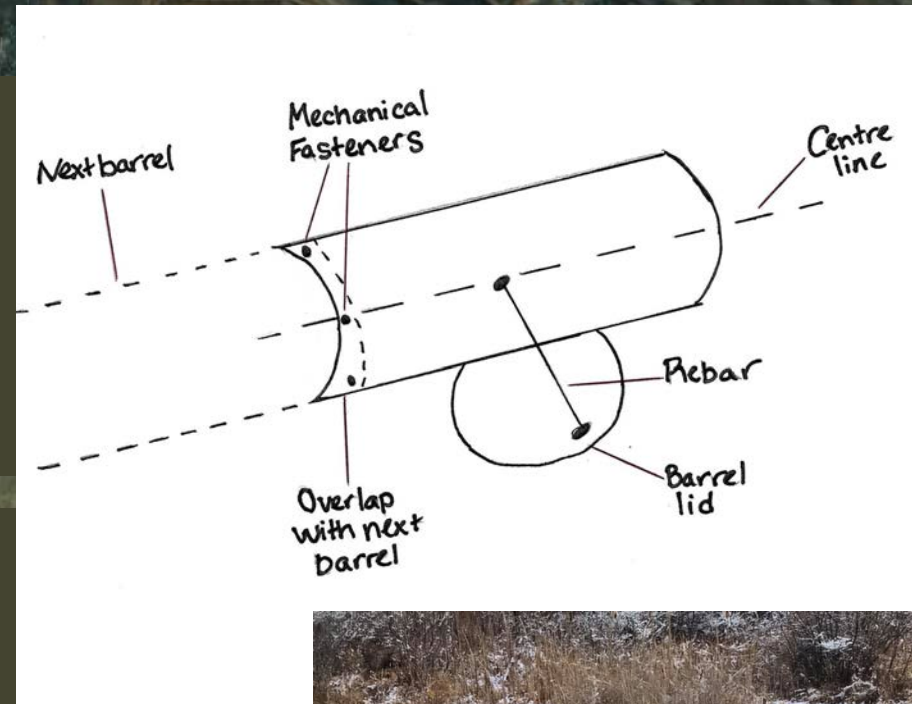
UNDERPASS DESIGN PILOT

- INEXPENSIVE
- EASIER TO MAINTAIN
- ALLOWS FOR JUMP OUT
- TRANSFERRABLE IN VARIOUS SCENARIOS



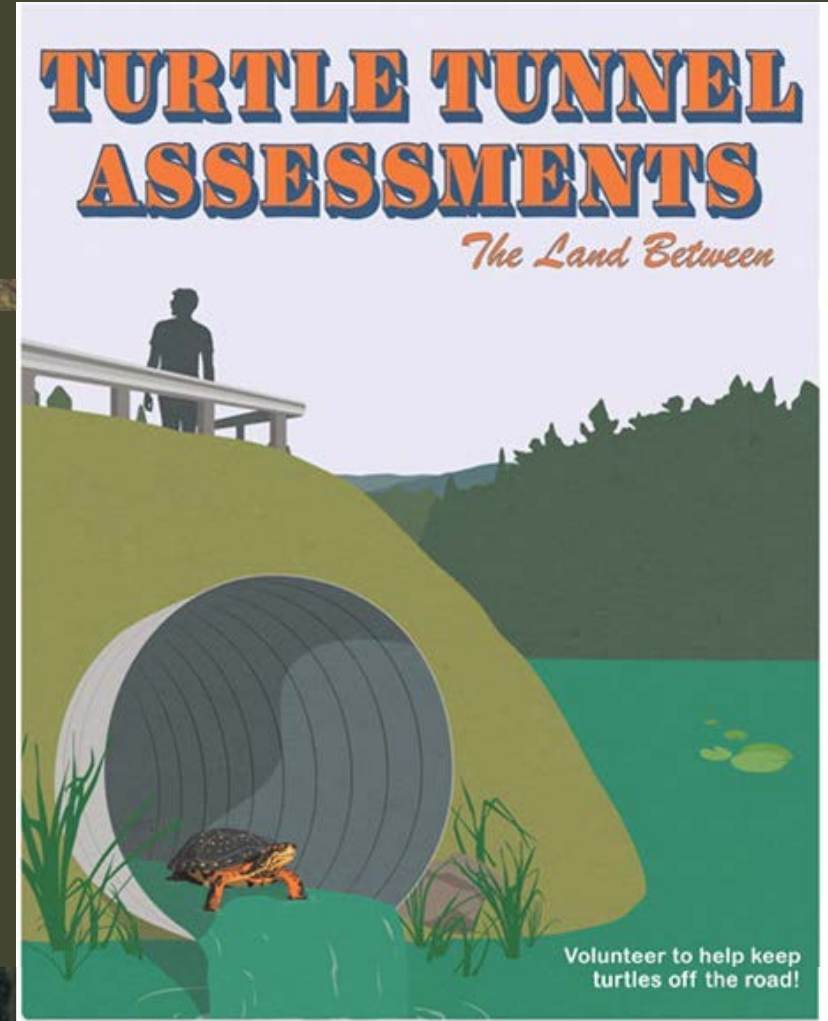
UNDERPASS DESIGN

- HAND DUG IN HIGH PRIORITY SITE
- WELDED
- CAN BE BLENDED WITH POST/BEAM STANDARD FENCING OR CONTINUED SECTIONS
- \$10/METRE
- SECTIONS FOR EASY MAINTENANCE AND REPLACEMENT



PILOT FENCING

- PILOT SITE
- 48 SITES IN HALIBURTON
- 72 FEASIBLE SITES IN EGB WATERSHED



NEXT STEPS - PILOT FENCING

- INSTALL COMPLETE EXCLUSION IN SPRING 2022
- MONITOR
- REPORT
- EXTEND MUNICIPAL PARTNERSHIPS
- TRANSFER INSTALL AT NEW SITES UNDER RO PERMITS



AWARENESS - BILLBOARD

- HIGH MORTALITY “COUNTY HIGHWAY”
- HIGHLY TRAVELLED SOUTHERN PART OF THE WATERSHED
- HIGH OCCURRENCES AND MORTALITY OF THR SPECIES
- FEEDBACK AND 11000 ON SM



AWARENESS- NEXT STEPS

- EXTEND COMMUNITY SCIENCE AS FIRST LINE OF DEFENSE
MOBILIZE MUNICIPALITIES
- ADDITIONAL BILLBOARDS- HIGHWAY SERIES
- AWARENESS CAMPAIGN — CORPORATE AND GRASSROOTS

Don't let the turtles
disappear.




It Takes 60 Years to Replace Just One



TECHNICAL SERIES

- TO INCREASE EXPERTISE FOR PRACTITIONERS
- TO INCREASE AWARENESS AND LEVERAGE NEW PROJECTS IN NEW AREAS- REFERRALS
- TO SHOWCASE THE NEED FOR BIOLOGISTS EXPERTISE IN DESIGN- HIGHLIGHT CURRENT ISSUES
- TO INCREASE CAPACITY FOR MAINTENANCE

FREE WORKSHOP SERIES
ROAD DEPARTMENTS - CONSERVATION GROUPS - PRACTITIONERS



KARI GUNSON - **ecokare**
international

WILDLIFE FENCING AND UNDERPASSES

A TECHNICAL SERIES

Session 1:
Maintenance Methods and Management
Considerations- Nobel Road Case Study


NOVEMBER 2- 1PM- ZOOM INTRODUCTION
NOVEMBER 4- 1-4PM- FIELD DAY, PARRY SOUND



TECHNICAL SERIES

- DESIGN, MATERIALS, COSTS, PROCUREMENT
- MAINTENANCE CONSIDERATIONS – PRACTICUM
- VIDEO TO PROMOTE ADOPTION AND REVIEW CONSIDERATIONS
- EACH ENDURING PRODUCTS

FREE WORKSHOP SERIES
ROAD DEPARTMENTS - CONSERVATION GROUPS - PRACTITIONERS



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TECHNICAL SERIES

- DESIGN

- 431 PEOPLE SIGNED UP
- 305 ATTENDED

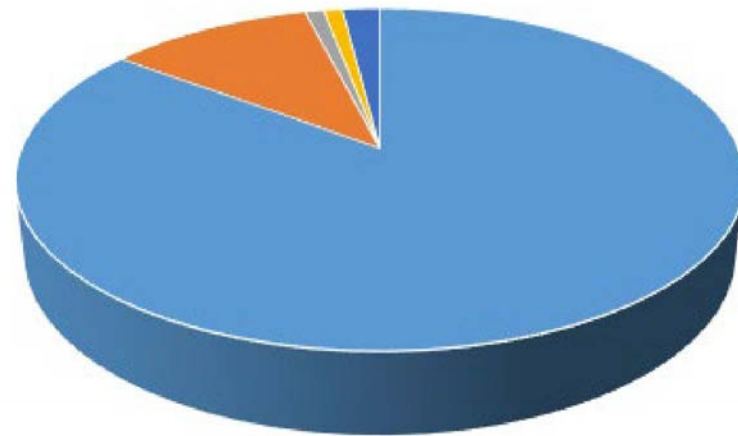
MAINTENANCE AND PRACTICUM

- 88 REGISTRANTS
- 58 ATTENDED ONLINE
- 17 PRACTICUM



ATTENDEES

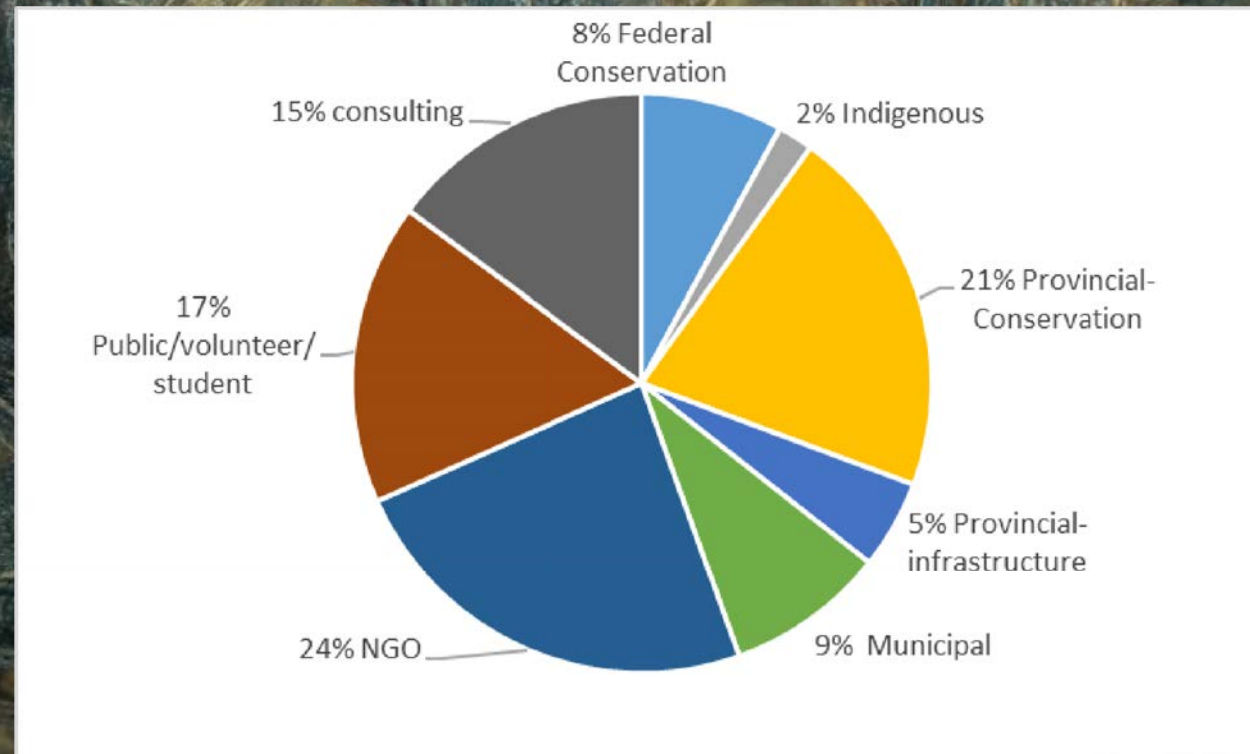
Reach



■ Canada ■ USA ■ Mexico ■ Europe ■ Other



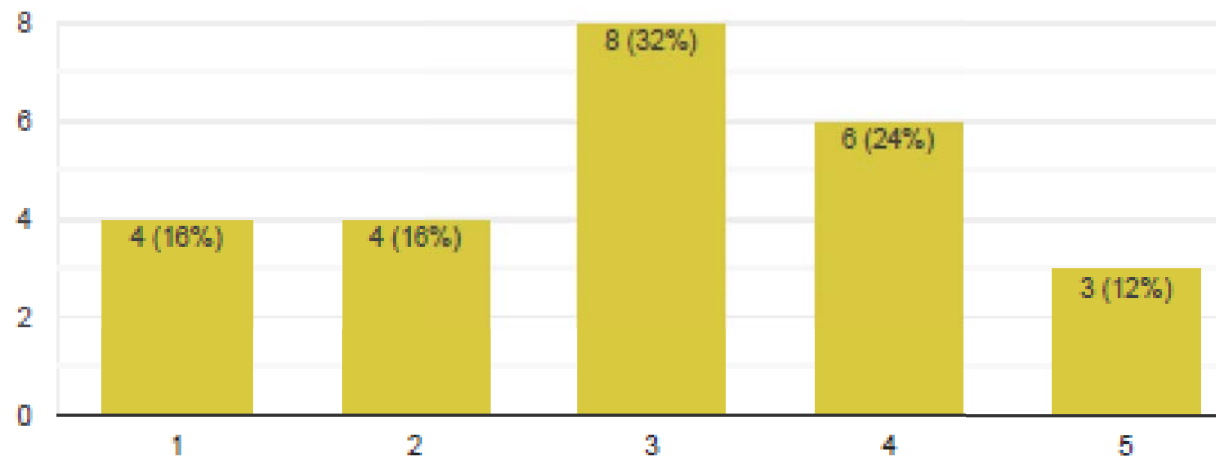
ATTENDEES



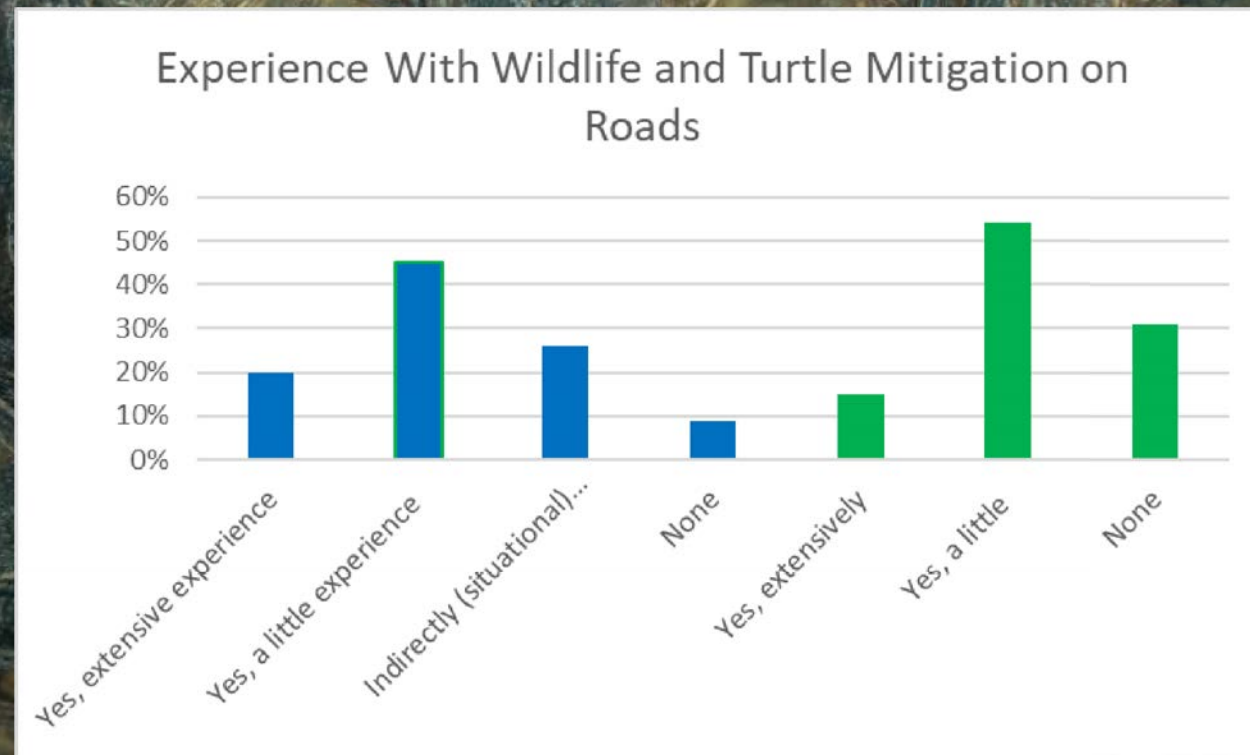
ATTENDEES

Do you formally or informally monitor roads for turtle activity?

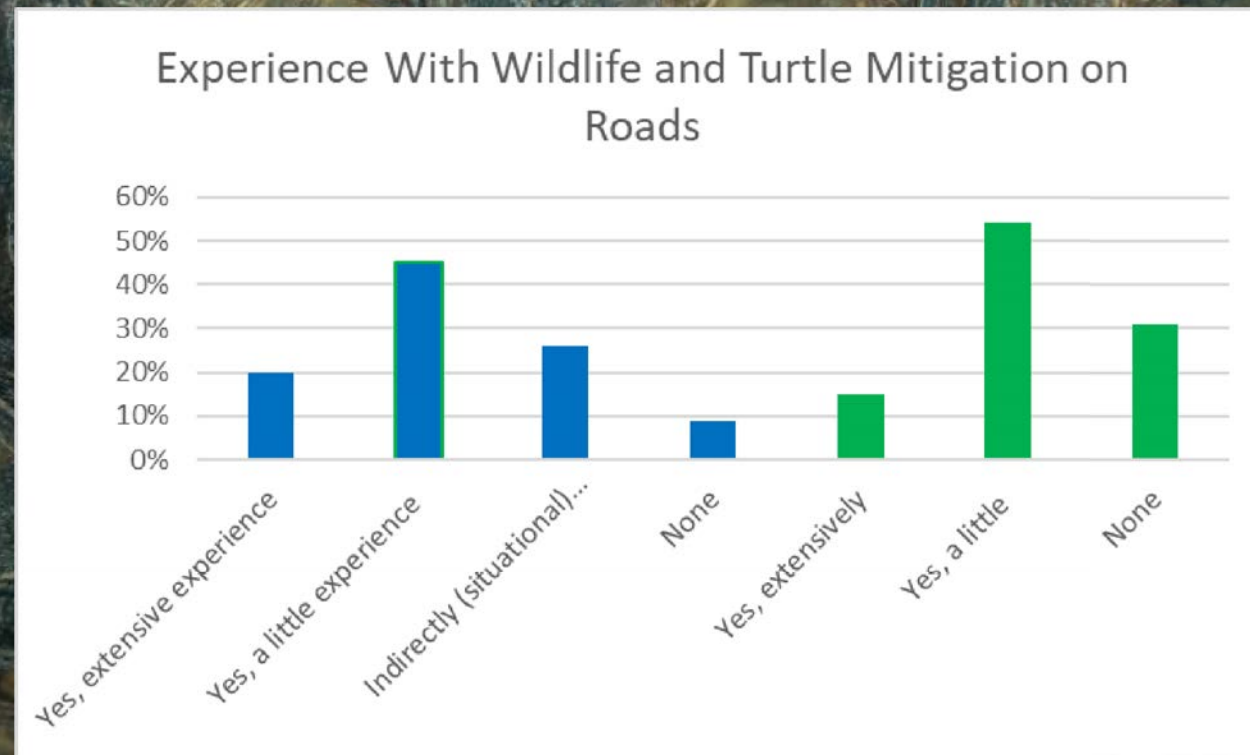
25 responses



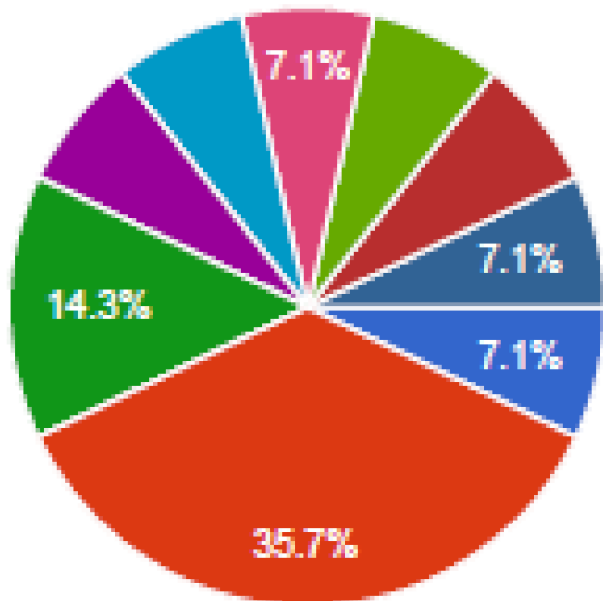
ATTENDEES



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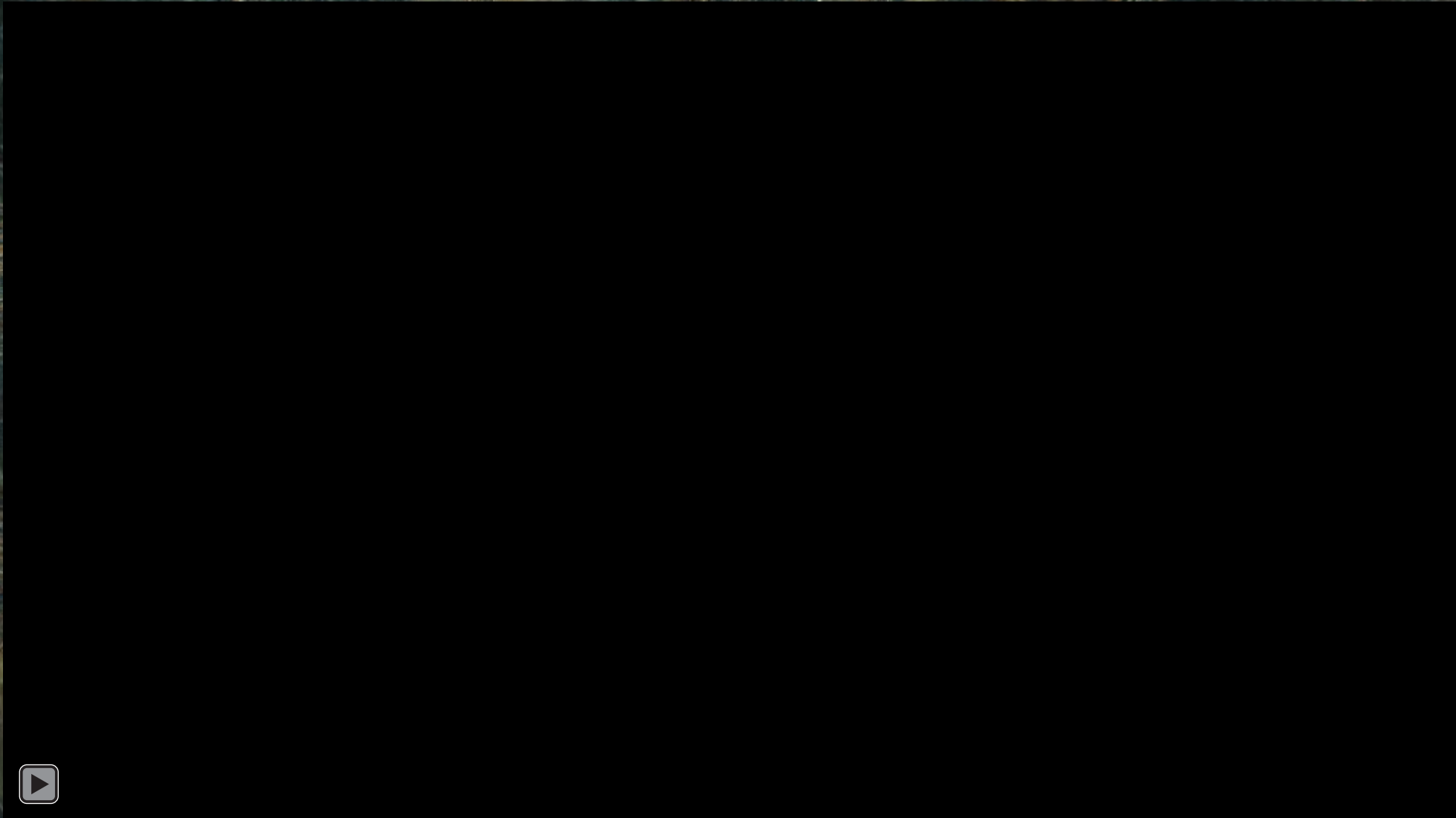
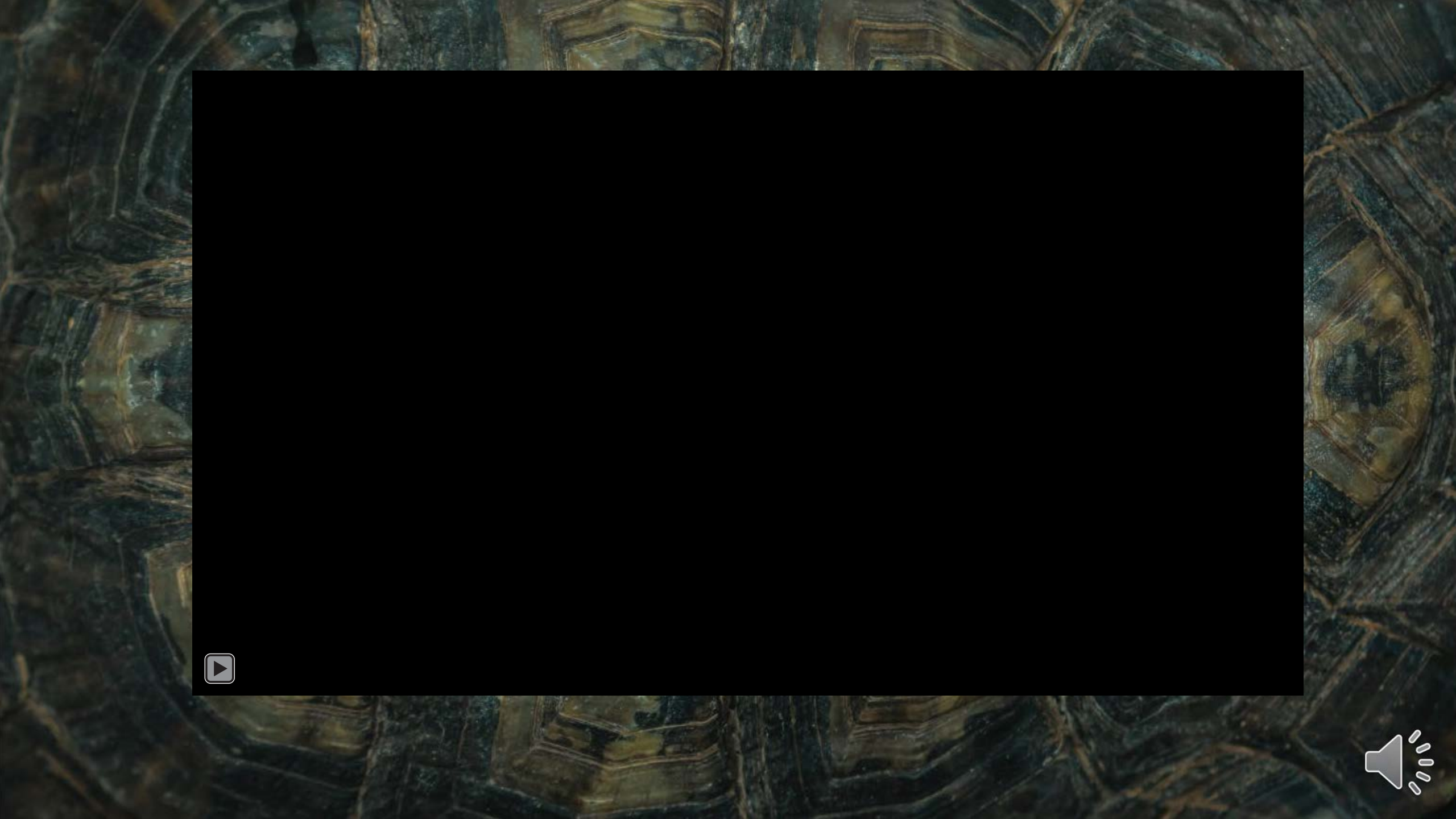


ATTENDEES



- Grassroots (public as a cataly...
- Government-led
- Conservation group/NGO
- Public and Private (Governm...
- All of the above.
- All of the above
- just individual interest
- First Nation Natural Resource...
- Grassroots and Environment...
- All of the above throughout m...







A SUMMARY OF OUR
FIELD DAY
AT NOBEL ROAD
NOVEMBER 2021



Notable gap between fence and culvert
Top priority
Brsn, Fox, Mass, Gasn

Holes in wire mesh, requires burying
In Phragmites
Wasn and Rbsn

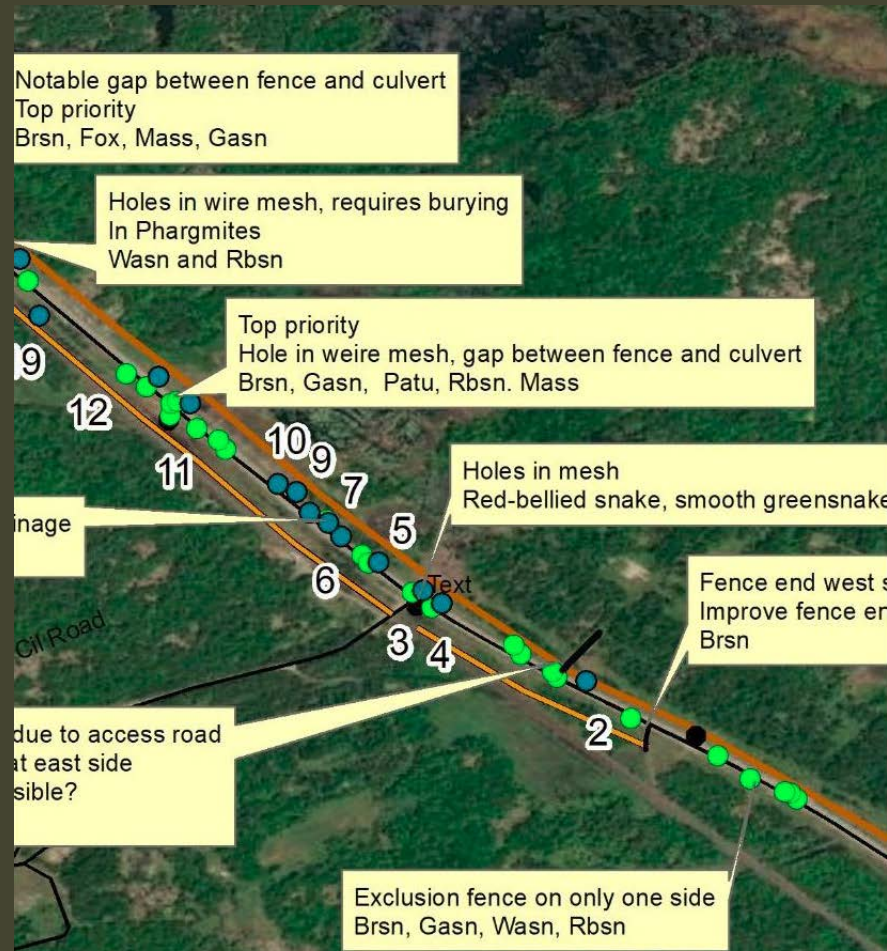
Top priority
Hole in weire mesh, gap between fence and culvert
Brsn, Gasn, Patu, Rbsn. Mass

Holes in mesh
Red-bellied snake, smooth greensnake

Fence end west s
Improve fence en
Brsn

due to access road
at east side
sible?

Exclusion fence on only one side
Brsn, Gasn, Wasn, Rbsn



**DRAFT map for road mitigation workshop -
Nobel Road Field Day 04-Nov-21
Map created by Kari Gunson, Eco-Kare International
to demonstrate where exclusion fence is effective**







TECHNICAL SERIES – NEXT STEPS

- VIDEO TO BE LAUNCHED THIS SPRING 2022
- KARI/ECO-KARE - NOBEL ROAD, CASE STUDIES, BACI
- TURTLE GUARDIANS- WORKSHOPS ON TURTLE BIOLOGY AND PREFERENCES





CHI MIGWETCH!
FROM TG AND THE TURTLES

