

# Monitoring Effectiveness of Reptile Tunnels and Exclusion Fencing on Highway 69 in Ontario, Canada

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international



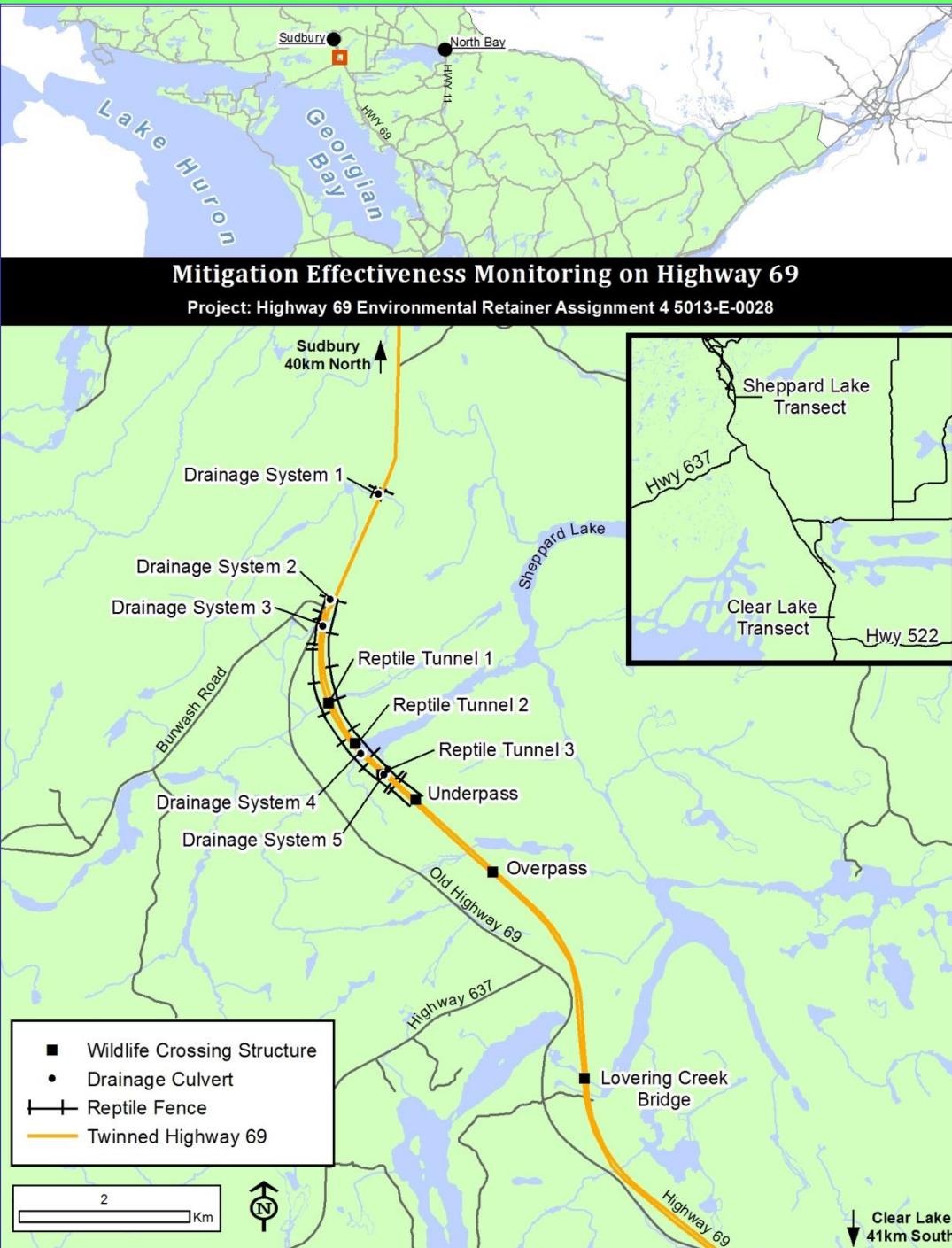
# Study Area:

➤ Ontario, Canada

➤ Highway 69

➤ 40 km south of Sudbury

➤ Blanding's Turtle Habitat





2011

- June
- Three reptile tu



201

201

2010



0 m

south on both sides of highway and 150 m north along the SB lanes







# Methods

## Walking Transects

- May-July in 2015 and 2016
- Two 3.5 km sections of highway; one mitigated (Sheppard Lake) and one not mitigated (Clear Lake)
- Transects bisected similar wetland habitat and were approximately 40 km apart
- Recorded turtle species, sex, nesting behaviour, plastron mid-line length and width, age (hatchling, juvenile, adult) and location (UTM)

## Camera Monitoring

- June-October in 2015 and 2016
- Camera systems: Remote passive infra-red trigger (Reconyx and Bushnell) and Active beam trigger (JTS)
- Camera set-up: Rock/dirt/wood ramps for funnel; camera placement at side or top of tunnel
- Camera settings: Time lapse and Motion

# Results:

2015

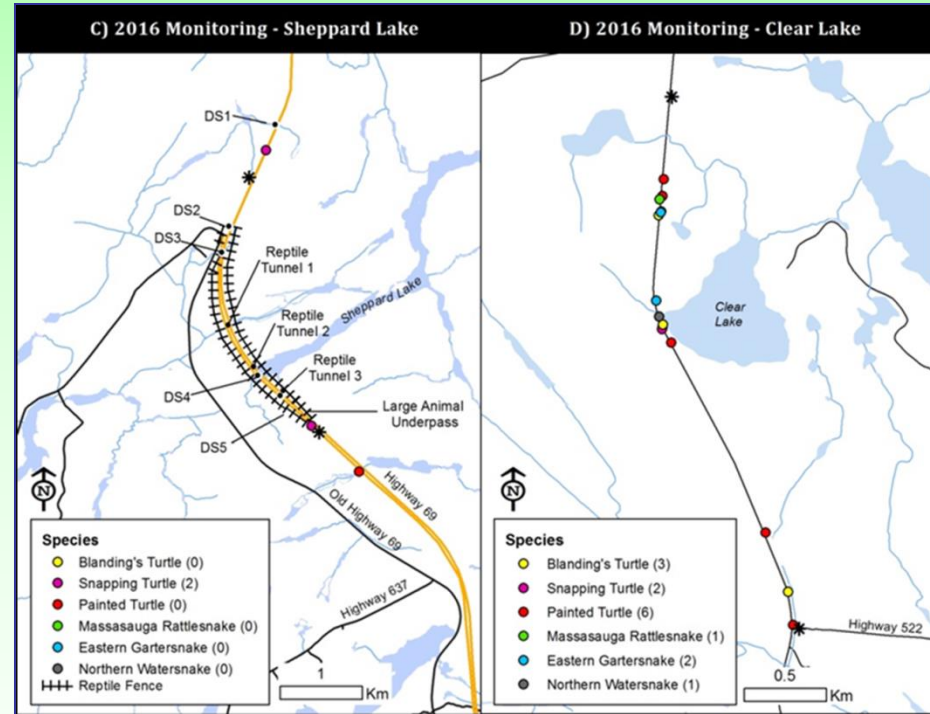
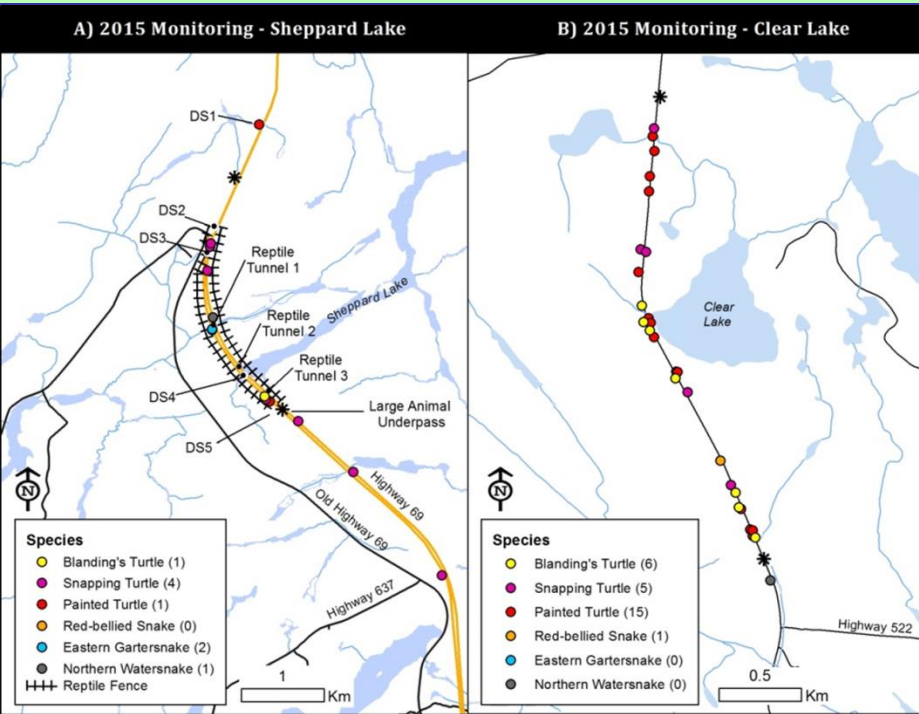
2016

A) 2015 Monitoring - Sheppard Lake

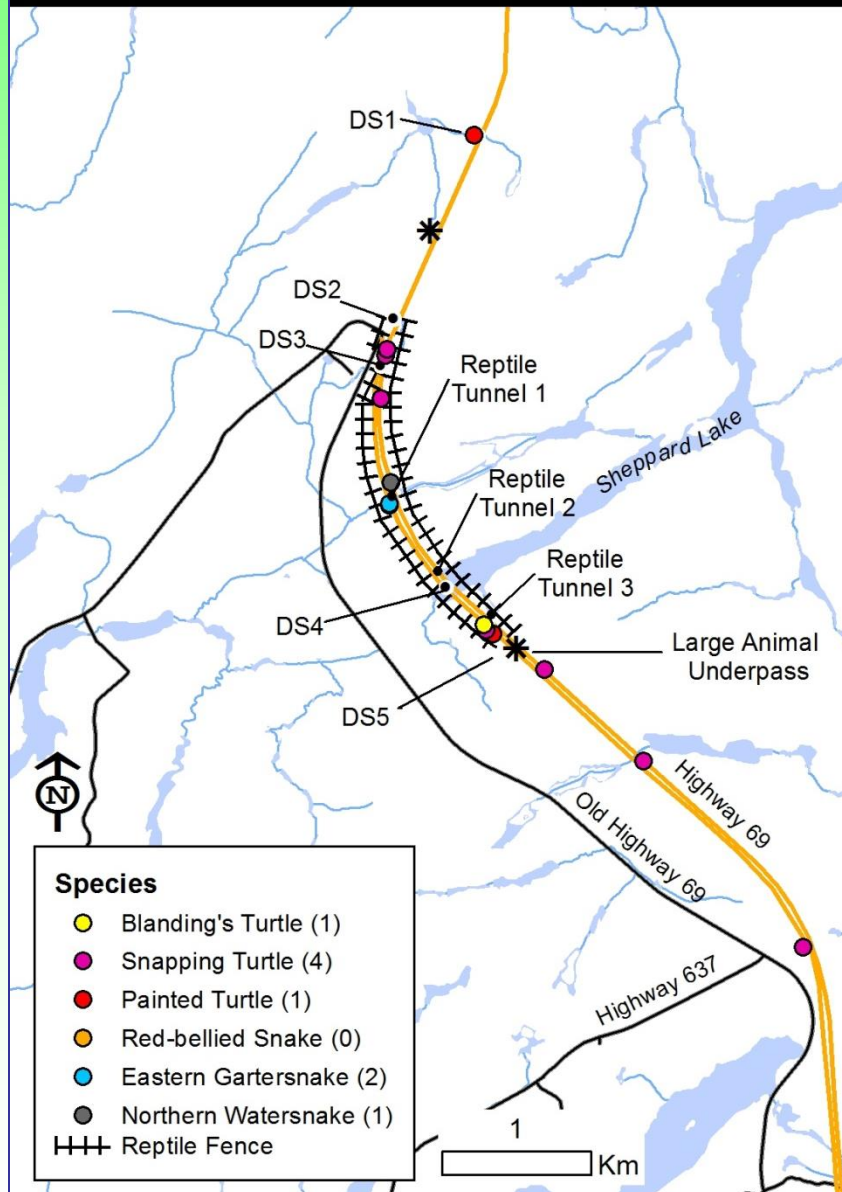
B) 2015 Monitoring - Clear Lake

C) 2016 Monitoring - Sheppard Lake

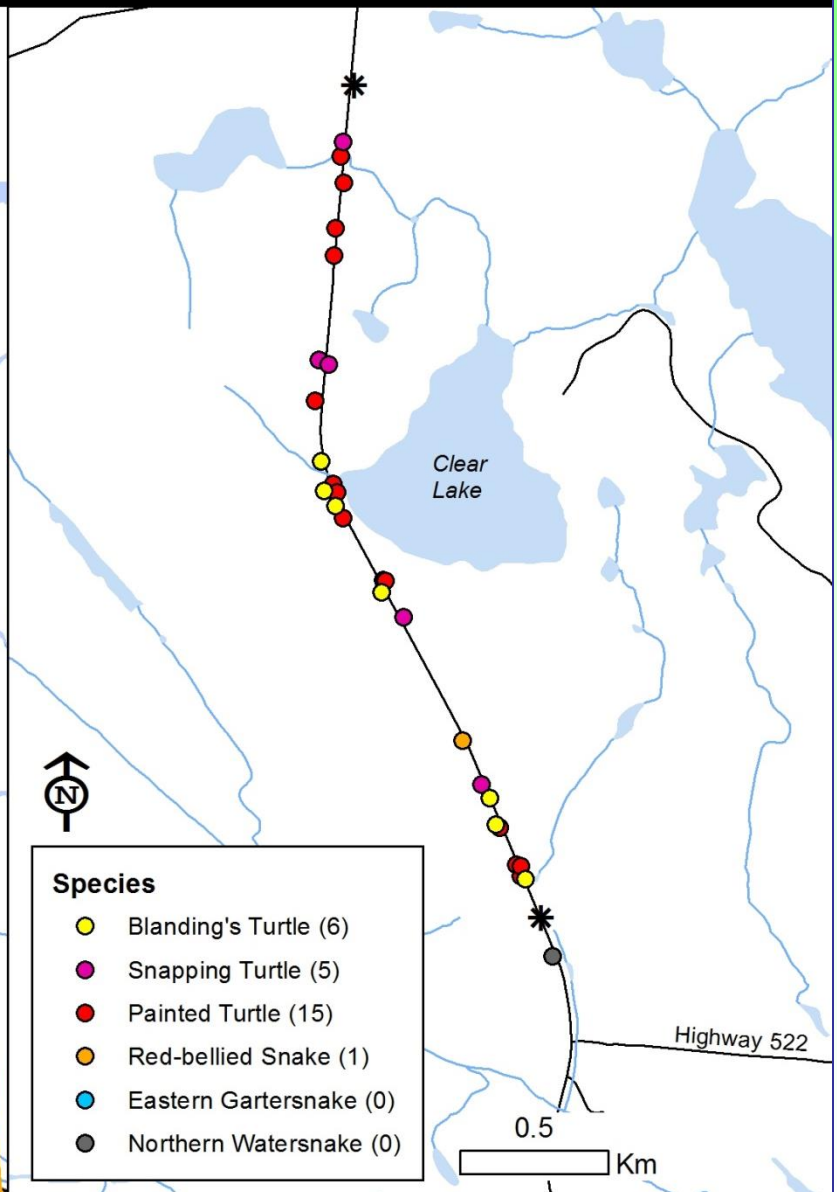
D) 2016 Monitoring - Clear Lake



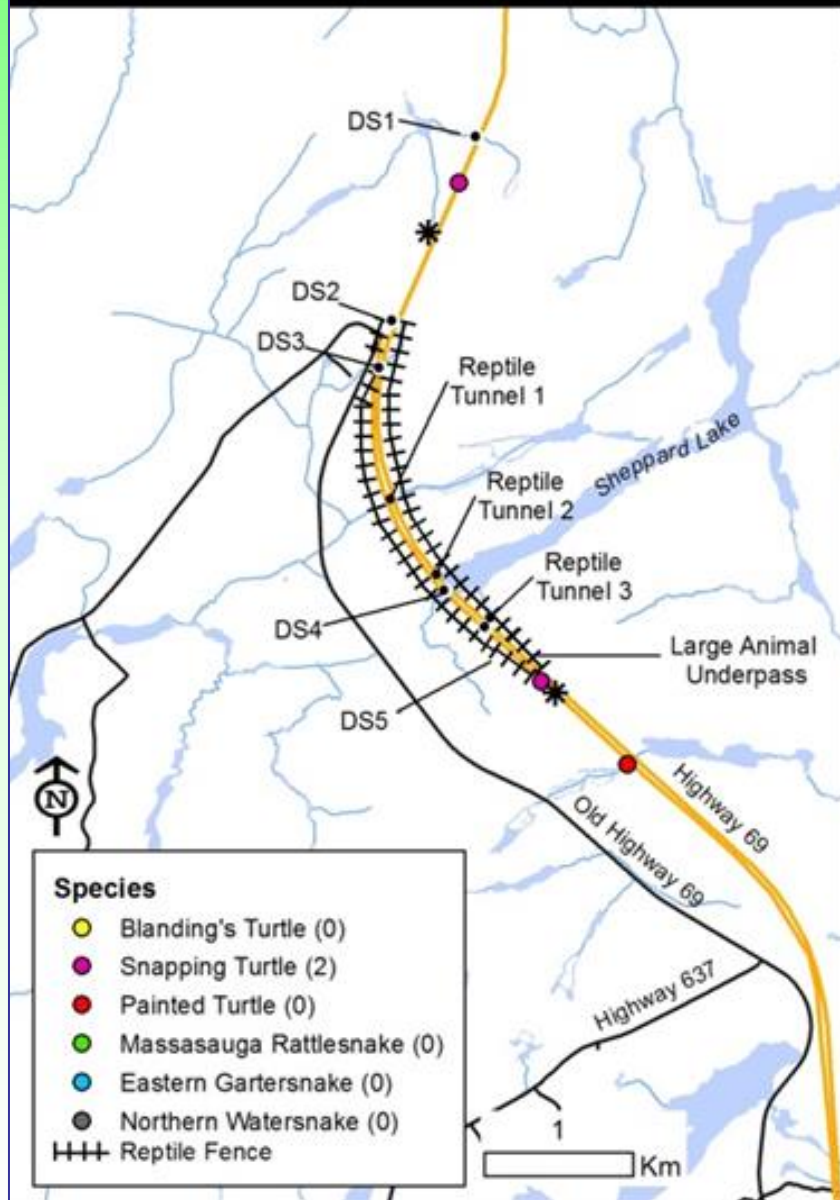
## A) 2015 Monitoring - Sheppard Lake



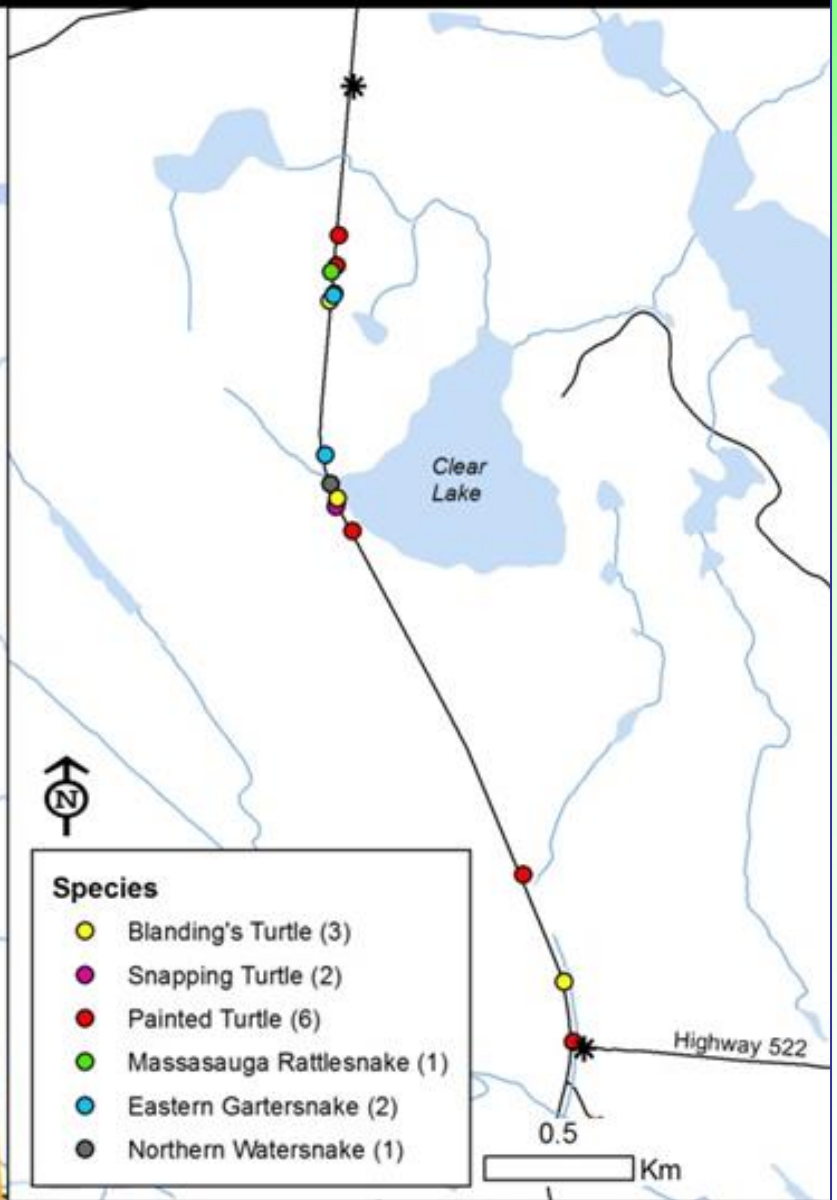
## B) 2015 Monitoring - Clear Lake



### C) 2016 Monitoring - Sheppard Lake

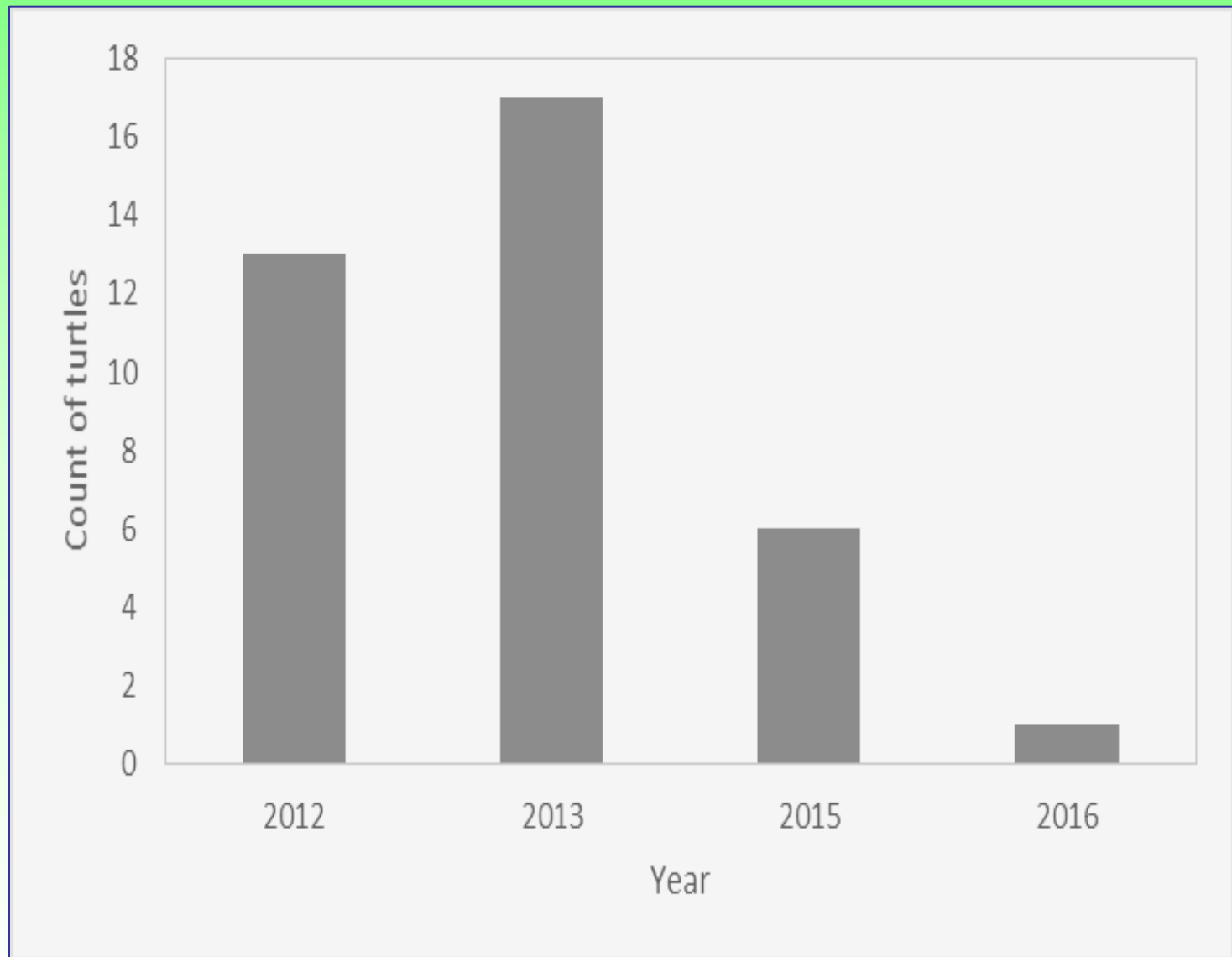


### D) 2016 Monitoring - Clear Lake





# Results



# Reconyx Camera System





# JTS Active Camera System



# Thank you!



# Ontario

This project was funded by the Ontario Ministry of Transportation, Project leads Andrew Healy and Terri Rogers, Northeastern Region

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